Under the slogan of "Let’s extend healthy lifespan aiming for active lifetime", the 1st session of Locomotive Syndrome prevention seminar hosted by Meïwa Junior College was held in Maebashi City on May 27, 2017. (Sponsor: Ajinomoto Co., Ltd. Partners: Jomo Shimbun, ILSI Japan). “Locomotive Syndrome” refers to a state of physical function decline, and was introduced by the Japan Orthopedic Society in 2007.

This seminar, which is the first of a three-part series, is an attempt to promote university-industry-media-ILSI collaboration.

At the beginning of this 1st session, Ms. Yumiko Sugano of the Ajinomoto Public Relations & Promotion Team provided an outline of Locomotive Syndrome. Next, the staff of ILSI Japan introduced the TAKE10! program as a practical method to be able to “live long well”. About 50 participants, mainly in their 60s, have used the TAKE10! eating habits check sheet to check their daily diet. They also participated in the TAKE10! exercise program. At the end of the seminar, a tasting session, sponsored by Ajinomoto Co., Ltd., featuring a sample well-balanced meal was conducted in the kitchen. The smiles of participants showed that this seminar had been a fulfilling event.

The second seminar is scheduled to be held in September 2017. An article about this seminar was published in Jomo Shinbun “Genki Plus Life” June 2017 (vol.15).

TAKE10! Kiyora Project Leader exchange meeting held

ILSI Japan has trained some residents who are interested in the program to become TAKE10! Leaders in Shimane and Yamaguchi prefectures, and five local TAKE10! groups have started their activities: Masuda TAKE10!, Tuwano TAKE10!, Yoshika TAKE10!, Nishiki TAKE10! and Iwakuni TAKE10!.

In order for these 5 districts spanning the area from the Sea of Japan to the Seto Inland Sea to cooperate and work together on long-term care prevention, the TAKE10! Kiyora Project was established in October 2016.

The first leader exchange meeting was held on March 2017 at Yoshika Town Welfare Center. About 40 representatives of TAKE10! Leaders of each districts gathered. At this meeting, they...
exchanged information and held discussions about future activities. In addition, the TAKE10! Kiyora Project’s new logo was unveiled. In this project, we plan to support activities throughout the region by activities such as distributing posters with logos explaining TAKE10! to all households and providing original recipes to TAKE10! class participants.

An article about this meeting was published in the Cyugoku Shinbun (March 16, 2017+) with the heading "A gathering of leaders for long-term care prevention".

**TAKE 10! check sheet was featured in the information magazine of Kobayashi Pharmaceutical Co., Ltd.**

The TAKE10! check sheet was introduced in the June 2017 issue "Aoitori Hiroba“ published by Kobayashi Pharmaceutical Co., Ltd. "Aoitori Hiroba“ has a circulation of 150,000 copies which are mailed to subscribers monthly. TAKE10! was featured in a column that provides information on health because most readers are in their 60s, 70s or 80s. It was also posted on the related website "Aoitori Hiroba.”

In addition, the TAKE10! check sheet was also featured in East Japan Bank’s newsletter "East Japan Yu Yu Club”.

**TAKE10’s Progress to Date**

The first intervention study was conducted with 1,418 elderly in Nangai village, Akita Prefecture from July 2002 for a one year period. This study showed 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 2004. Three national newspapers and eight local newspapers covered the study. More than 9,000 inquiries have been received, including inquiries from local government offices and organizations, and more than 25,000 copies of the booklets have been sold. DVDs and cooking booklets (both in Japanese only) also are available from the TAKE10!® website, [http://take10.jp/chapter5.html#item01](http://take10.jp/chapter5.html#item01).

The “Sumida TAKE10!®” program for elderly long-term care prevention was started by Sumida Ward Government of Tokyo in October 2004, and more than 1,200 elderly people have taken part in the program over twelve years. The program was conducted at four to six sites and included lecture sessions on the program and physical exercise practices. This is designed to be an intervention study and the results have regularly been reported at the annual meeting of Japanese Society of Public Health. Particularly, the results of the 2005 Sumida TAKE10!® intervention study was published in the international journal "BMC Geriatrics". [http://www.biomedcentral.com/1471-2318/13/8](http://www.biomedcentral.com/1471-2318/13/8). In addition, the results of 2008-2013 Sumida TAKE10! Program were published in the Japanese Journal of Public Health, [http://www.jsph.jp/member/docs/magazine/2016/11/63-11_682.pdf](http://www.jsph.jp/member/docs/magazine/2016/11/63-11_682.pdf).

Having received mandates from local governments all over Japan, social welfare corporation, Silver Human Resources Centers, and some volunteer groups, we have trained TAKE10!® peer leaders, supporters and instructors. There are always several TAKE10!® programs concurrently being implemented in different regions across Japan. Details can be found at [http://take10.jp/chapter6.html](http://take10.jp/chapter6.html). Also, please take a look at the video on the TAKE10! activities [https://youtu.be/v45tm8hjvBk](https://youtu.be/v45tm8hjvBk).

**Project SWAN**

**“Project to support educational activities for mothers to improve the quality of complementary food in rural Vietnam” comes to a successful conclusion**

Since 2014, ILSI Japan CHP and National Institute of Nutrition (NIN, Vietnam) have been implementing the “Project to support educational activities for mothers to improve the quality of complementary food in rural Vietnam.” This project was completed in March 2017. Prior to the end of the project, each province organized a completion workshop by inviting the representatives of project communes and relevant people at the provincial level. In the completion workshops, the participants shared the outcomes of the project and their experiences. As
a next step, we plan to utilize NIN’s website in order to disseminate the project outcomes as well as to introduce SWAN’s activities to other provinces in Vietnam. In addition to a pdf version of the flip charts, we are going to upload video clips which explain the content of the flip charts.

The results and an evaluation of the project will be presented during a poster session at the IUNS 21st International Congress of Nutrition (ICN) which will be held in Argentina in October 2017.

**Feasibility Study has been completed in Indonesia**

A feasibility study for Project SWAN in Indonesia was completed in March 2017 which was supported partially by the Japanese Ministry of Foreign Affairs (NGO Project Subsidies) since August 2016. This study consisted of the following 3 main components: i) interviews with stakeholders in health and water sectors (qualitative study), ii) water quality analysis, and iii) survey on the knowledge and practices of mothers who have children 6-23 months about water, hand and food hygiene and complementary feeding (quantitative study). The interviews i) confirmed the water and nutrition policies in Indonesia, the roles of stakeholders and the on-going water and nutrition activities. The water quality analyses ii) showed that water quality of the tested sites was relatively good so that slow sand technology can be used to improve the water quality to levels of clean water (domestic use) or drinking water. Finally, the surveys iii) quantified the prevalence of stunting, the prevalence of diarrhea, minimum dietary diversity, drinking water sources of children 6-23 months, and information sources of nutrition and hand and food hygiene. Based on this information, we are going to formulate a project by which we can engage and activate the existing health system and personnel such as Integrated Health Posts and village health workers. Furthermore, we plan to upgrade behavior change communication materials that will be used by village health workers when providing water, hand and food hygiene and nutrition messages to mothers in the communities.

**Achievements of Project SWAN to Date**

**Vietnam:** With an emphasis on rural areas in developing countries in Asia, where public water works are lacking, ILSI Japan CHP has been working on the Project SWAN in collaboration with the National Institute of Nutrition since 2001. Project SWAN features a unique concept, combining a water technological program and an IEC (Information, Education and Communication) program into one project, taking a cross-sector approach. Based on the preliminary investigations, the projects “Participatory approach for improving safe water supply, nutrition and health environment: SWAN1 (2005-2008)” and SWAN2 (2010-2013) in Hanoi and Nam Dinh Province were supported by JICA (Japanese International Cooperation Agency) as a grassroots technical assistance project.

SWAN1 was completed in 3 villages with great successes at the community level such as ensuring safe water supplies by water management unions, and improvements of nutrition and health conditions. Phase 2 enhanced cross-sectional cooperation and improved community-support by creating a Working Team at the national government level and Support Teams at the provincial/district level. Almost 120,000 people across 16 villages benefited from SWAN2. Since 2013, SWAN3 has been carried out in Hanoi and Nam Dinh Province, where we expect the Vietnamese provincial authorities to adopt SWAN’s programs for their water and health related programs. Since 2014, with a focus on nutritional aspects, we have been implementing the 3 year “Project to support educational activities for mothers to improve the quality of complementary food in rural Vietnam” in Thai Nguyen and Bac Giang Provinces. This project is supported by AIN (Ajinomoto International Cooperation Network for Nutrition and Health).

**Indonesia:** Since 2013, in collaboration with ILSI SEAR (Southeast Asia Region), we have been developing project components in Indonesia.
What are 3 projects of CHP?

**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 enhance the QOL of the elderly. Project PAN develops scientific evidence based programs to promote physical exercise and to improve the nutritional status of people by improving their lifestyles. ILSI Japan CHP is pursuing two programs named “TAKE10®” and “LiSM10®”.

**TAKE10® for the elderly**
Aiming to support “Healthier longevity” among the elderly and care prevention and reducing costs of the national health care program, ILSI Japan CHP developed TAKE10® for the elderly. Because the program is features effective and unique combination of appropriate physical activity, proper dieting habits, and oral health care. Because it is a combined program of exercise, nutrition, and oral health care, it is suitable for implementation as a population approach in communities.

**LiSM10®**
ILSI Japan CHP developed “LiSM10®” (Lifestyle Modification) that supports improvements of risk factors for lifestyle-related diseases of employees in workplaces. This program focuses on health promotion through physical activity and dieting after medical check-ups in workplaces. "LiSM10® consists of 1) individual objective setting and recording implementation, 2) individual and periodical counseling by professionals for  individual support for 6 months, and 3) support programs for workplaces and the families of participants.

**Project SWAN (Safe Water and Nutrition)**
WHO has reported that 780 million people do not have access to safe water, 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 promoting knowledge of drinking water, nutrition, food hygiene and sanitation at the household level, improving 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.

**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 function, and learning abilities 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.

**Achievements of Project IDEA to Date**
In the Philippines, ILSI Japan 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 is the most stable and has 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 metropolitan Manila. The intervention program demonstrated that both of the fortification alternatives significantly reduced anemia prevalence. A market trial started in April 2008 and confirmed the effectiveness in the 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 future research on and development of complementary feeding.

In Vietnam, in collaboration with National Institute of Nutrition (NIN), ILSI Japan 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 outcome of this research. The plan calls for 10 large production plants to produce fortified fish sauce by 2009. With financial support from GAIN, a 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, an iron fortified soy sauce program has been in place since it was launched in 2004 and forms the basis of a national policy to prevent anemia overseen by ILSI Focal Point in China and CDC China.