



# 20 *Anniversary* *ICSI-India*

Science for Public Health



**International Life Sciences Institute-India**  
**India & South Asian Region**

**20** *Anniversary*  
*ILSI-India*  
Science for Public Health



**International Life Sciences Institute-India**  
**India & South Asian Region**

## International Life Sciences Institute-India Science for Public Health

- **Food and Water Safety**
- **Toxicology and Risk Science**
- **Nutrition, Health and Well-Being**
- **Sustainable Agriculture and Nutrition Security**

### **Collaboration**

Scientists from different regions of the world can best address complex science and health issues by sharing their unique skills, insights, and perspectives.

### **Shared Values**

ILSI-India believes that **scientists** from industry, government, and academia and other sectors of society can and should work together to identify and address topics of public interest.

# Contents

S.No.	Items	Page No
1.	Introduction.....	3
2.	Preface.....	4
3.	Foreword.....	5
4.	Snapshot of ILSI-India Journey Over Last Two Decades for Improving Public Health.....	6
5.	Messages from Government Officials.....	13
6.	Messages from ILSI Headquarters / International Organizations.....	17
7.	Messages from Academia.....	22
8.	Messages from ILSI-India Board of Trustees and Presidents of Country Committees.....	23
9.	Messages from Former Trustees.....	28
	Appendices	
	I ILSI-India Scientific Initiatives.....	30
	II ILSI-India Partners in Activities.....	33
	III List of ILSI-India Publications.....	35



# Introduction

ILSI-India was launched as a full-fledged branch of International Life Sciences Institute (Washington DC) with the objective to improve public health in India. Located in New Delhi, ILSI-India reaches out to South Asian Region with Country Committees in Bangladesh, Nepal, Bhutan and Sri Lanka.

ILSI-India was set up after in-depth discussions with the concerned Ministries of Government of India, including Ministry of Food Processing Industries. It was appreciated that ILSI-India could help make up the scientific knowledge gap primarily in the area of Food and Water Safety, Nutrition, Risk Assessment, and Agricultural Sustainability.

The South Asian region had been facing many health challenges. On the one hand, a large section of population suffered from micronutrient malnutrition; on the other there was a rising threat of non-communicable diseases. At the same time there was the common need to address food and water safety issues using Codex as a reference point while taking note of best international practices. A reform of the food control system was vital as also adoption of new tools for food safety management with focus on risk assessment, risk communication and risk management.

Agricultural sustainability, particularly in the context of changing global environment, is required not only in ensuring food security but also nutrition security by taking advantage of developments in science and technology. Food fortification is one means to make up micronutrient deficiencies; bio-fortification is another.

To look at all these issues objectively, it was felt that a scientific organization, like ILSI-India, could play an important role in India and other South Asian countries. ILSI-India as an organization is built on tripartite basis with support from Government, Industry and Academia with access to the storehouse of knowledge at ILSI. This has facilitated understanding and resolution of a number of important public health issues.

Over the years, ILSI-India has emerged as a credible scientific institution. Through Conferences, Training Programs, and Research, ILSI-India has created awareness about balanced nutrition, physical activity and food safety for enhancing public health.

During its journey and its endeavors, ILSI-India received support and encouragement from concerned Ministries of Government of India, Government of Sri Lanka, Government of Bangladesh and Government of Nepal, as also a number of national, regional and international organizations like Food Safety and Standards Authority of India (FSSAI), National Institute of Nutrition (NIN), Indian Council of Medical Research (ICMR), Indian Council of Agricultural Research (ICAR), Indian Institute of Toxicology Research (IITR), Department of Biotechnology (DBT), Ministry of Science and Technology, GOI, National Institute of Health (NIH) USA, Wellcome Foundation, USAID, FAO, WHO, and WFP.



## Preface

ILSI-India is celebrating its twentieth anniversary in 2017. Twenty years is not long in the life of an institution. But built on a firm foundation, dedicated to resolving public health issues using science as the main tool, upholding its objectivity at all times, ILSI-India achieved much to be recognized as the most relevant institution in the areas of nutrition, food safety, risk assessment and nutrition security.

ILSI-India derives its strength from its parent organization, ILSI, headquartered in Washington DC, and its association with world-renowned scientists. Equally, ILSI-India brings together on a common platform Government, Academia and Industry to discuss issues in public interest. Science is objective and leaves no space for self-interest. That is what has established ILSI-India's credibility and what has provided the much needed support to pursue our mission.

In the past 20 years we have sponsored several training programs, research projects and surveys apart from 107 Conferences organized on different nutrition and food safety related subjects. This work has been recognized and the publications that we have brought out have been given due attention.

Science is not static and every day new discoveries and innovations are reported about nutrition and food safety. It is therefore important for institutions like ILSI-India to disseminate knowledge and encourage government organizations to continuously redesign policies and programs accordingly and keep in step with the rest of the world.

Food industry in India is growing at double digit and is already the fifth largest. It accounts for 31 per cent of the consumption basket. Processed food, as in other countries, will be the bulk of food consumption in future and will require more science and technology inputs. We have not only to anticipate the emerging issues but create capacities to handle these issues efficiently and effectively. This is what ILSI-India has been doing and will have do on an extended scale in future. With support from Government and Industry and association of Academia, ILSI-India will undoubtedly play its role with the same dedication it has done in the past.

D. H. Pai Panandiker  
Chairman, ILSI-India

## Foreword

ILSI-India is a scientific non-profit organization. It has been set up to cultivate new knowledge and seek solutions to important issues relating to nutrition, food and water safety, risk assessment and toxicology and the environment. It fosters and supports scientific research on nutrition and food safety issues for improving public health. It has succeeded in bringing scientists from Academia, Industry, Public Sector and Government on neutral platform to discuss critical issues in food and water safety, nutrition and public health issues including regulatory policies.

Over 2000 leading national and international scientists have been the resource persons for ILSI-India sponsored activities including Conferences, Workshops and Training Programs. ILSI-India maintains its neutrality and does not lobby for any group. Information generated at its meetings are widely distributed for information, capacity building and science based decision making.

I have been associated with ILSI-India since its formation. Leading Indian scientists are on the Board of Trustees and I am grateful that they have devoted time and attention to ensure that ILSI-India programs have good scientific content, address the current and emerging issues in the region, avoid conflict of interest and are organized following highest professional standards. The Board of Trustees which serves in honorary capacity has been our pillar of strength. We are fortunate to have received inputs from different Expert Committees, Country Committees in Bangladesh, Nepal, Sri Lanka and Focal Point in Bhutan as also inputs from ILSI Headquarter, ILSI Branches worldwide, leading international organizations and Government. I am grateful for the tremendous goodwill that we have received.

We have had a fruitful journey over two decades in the service of India and neighboring countries. We believe that we have contributed towards improving food safety scenario, science based decision making, improving nutrition, health and wellness and paving the way for providing food and nutrition security to the masses. We will further build on our efforts and devote our resources for the benefit of public health.



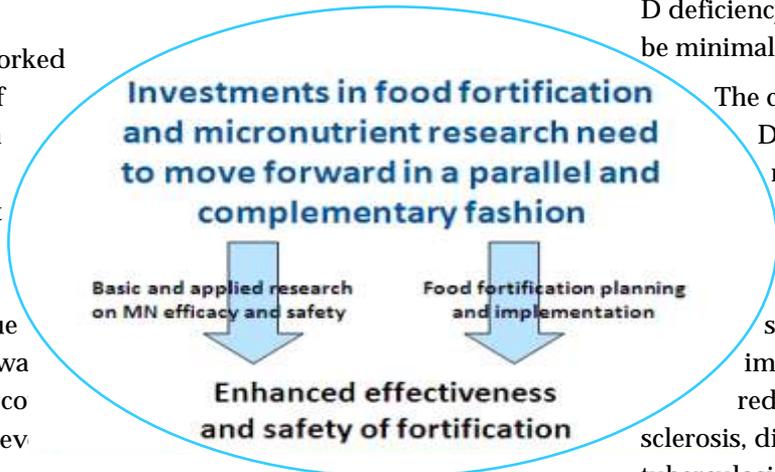
N M Kejriwal  
President, ILSI-India



# Nutrition & Health

## Food Fortification

Since 1999 ILSI-India has worked continuously on the issue of Micronutrients Fortification of Foods. 17 Conferences were organized in different parts of the country as also Bangladesh, Nepal and Sri Lanka to discuss the issue of Malnutrition. ILSI-India was the first organization in the country to address how foods and beverages could be fortified with micronutrients. It brought together Ministry of Health, Government of India, Ministry of Food Processing Industry, Government of India, Ministry of Women and Child Development, Government of India and National Institute of Nutrition (NIN), CFTRI and Industry to discuss the matter and promote food fortification. As the results of its efforts there is now awareness about the benefits of food fortification, a Committee was set up by Ministry of Food Processing Industries to facilitate fortification, regulatory landscape changed and Food Fortification (earlier equated with adulteration) was legalized and Industry began to fortify foods and beverages. ILSI-India Conferences created an understanding in the industry about the costs and benefits of Fortification. This issue which was not receiving anyone's attention became a major program being addressed by Government, FSSAI, Industry and NGOs. Late Prof. Abdul Kalam when he was President of India appreciated ILSI-India's efforts and requested it to



Prof. Michael Zimmermann, MD, Swiss Federal Institute of Technology (ETH) Zurich; Wageningen University, The Netherlands at ILSI-India Conference

organize a Conference on economic losses due to malnutrition. ILSI-India organized a Conference on "Eradication of Micronutrient Malnutrition for Better Health and Faster Economic Growth" with concerned ministries and prepared a monograph and circulated it to MPs and State Governments. This received keen attention of MPs, CMs, MLAs and facilitated allocation of larger budgets for ICDS and MDM.

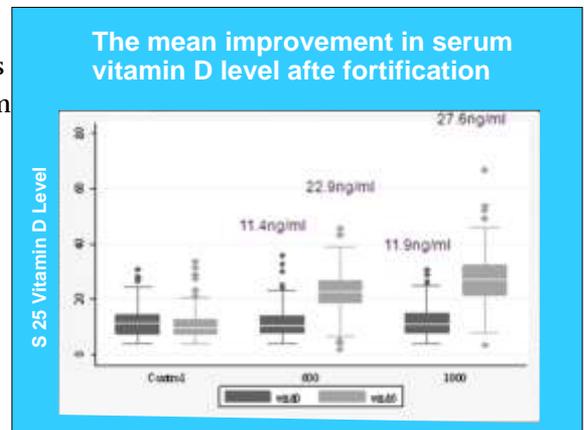
## Vitamin D Fortification

Vitamin D deficiency is a global issue. Many countries have recognized the problem of its adverse fallout and initiated measures to make up the deficiency as a national strategy. There was little appreciation of this problem and consequently no significant action was taken in India possibly in the belief that, being a sunshine country, Vitamin

D deficiency among the people may be minimal. That is not so.

The consequences of Vitamin D deficiency go beyond rickets among children and osteoporosis among adults. It is now accepted that Vitamin D strengthens the immune system and reduces the risk of multiple sclerosis, diabetes mellitus, tuberculosis, hypertension and common cancers.

To address the issue and find out the Vitamin D deficiency status in India, ILSI-India organized an international Conference on "Recent Scientific Developments in Vitamin D and Health" in 2009 in Hyderabad. It was organized with the support of Defense Food Research Laboratory (DFRL), Defense Institute of Physiology and Allied Sciences (DIPAS), Institute of Nuclear Medicine and Allied Sciences (INMAS), National Institute of Nutrition, and Office of



Effects of Vitamin D Fortified Milk on Serum Vitamin D Levels in School Children

# Nutrition & Health

Dietary Supplements, National Institute of Health, USA. Experts at the Conference pointed out that Vitamin D deficiency is prevalent in India across different age groups and all socio-economic groups. ILSI-India sponsored research on fortification of milk with Vitamin D and prepared a monograph that has been widely circulated. This was followed with research project on “Evaluation of UV Index”. At present research is under way on “Optimal Vitamin D Supplementation Strategies for Vitamin D Deficient Boys with Type 4 and 5 Skin” It is vital that measures are taken to eliminate or at least reduce Vitamin D deficiency in India as a public health mission.

## Safe Upper Levels For Nutrients

As in other countries it is necessary to lay down the safe upper levels of nutrients based on nutrient risk assessment approach. This would ensure that industry follows the prescribed guidelines for producing fortified foods, nutraceuticals and supplements. ILSI-India held an Expert Consultation on this subject in December 2015. It was addressed by national and international experts Dr. Soumya Swaminathan, DG, Indian Council of Medical Research (ICMR) addressed the Meeting has constituted a Committee to work on safe upper levels in January 2016. The Committee has prepared its Report.



## Role of Diet, Physical Activity and Lifestyle in Promoting Health

Changes in lifestyles along with excess energy intake and lack of physical activity in many developing countries have resulted in accelerated incidence of non-communicable diseases (NCDs) with an avoidable threat to health and consequently to economic development. It is therefore essential to identify the risk factors and initiate preventive action. ILSI-India organized an “International Conference on Role of Diet, Physical Activity and Lifestyle for Promoting Health” in Colombo jointly with Ministry of Health, Nutrition and Indigenous Medicine, Government of Sri Lanka. The Conference addressed the different implicit issues and the risk factors. An action plan was drawn up which if effectively implemented can make a huge improvement in public health and reduce early incidence of NCDs.

## Nutrition and Hydration Guidelines

Sports Nutrition is a very specialized field and the nutrition and hydration requirements are different for different categories of sports. It is as essential as physical training for achieving success. ILSI-

India has prepared “Nutrition and Hydration Guidelines for Excellence in Sports Performance” after consulting national and international experts and interaction with athletes and coaches. This has been used by Sports Authority of India in all its centers.

## Nutrition and HIV / AIDS

ILSI-India was the first organization in the world to organize a “Conference on Nutrition and HIV – AIDS”. The Conference was organized in collaboration with: National Aids Control Organization, National Aids Research Institute, National Institute of Nutrition, World Health Organization – Country Office for India, UN World Food Program, Global Alliance for Improved Nutrition, and AVERT Society, USAID/India. The report prepared by ILSI-India has been used by Ministry of Health and other stakeholders for giving nutrition advice to HIV patients.

HIV infection enhances the nutrient requirements including energy requirement by increasing the resting energy expenditure, reducing dietary intake, causing nutrient mal-absorption and loss, opportunistic infections and due to

# Nutrition & Health

various side effects of Anti Retroviral Drugs. HIV progressively weakens the immune system and results in malnutrition; in turn, malnutrition worsens the effect of HIV and contributes to more rapid progression to AIDS. There is clinical evidence to show that nutrition intervention can break this cycle, support therapy and help people living with HIV to manage symptoms and reduce susceptibility to opportunistic infections such as Tuberculosis (TB), Diarrhea, and Pneumonia etc.

## Nutrition Labeling & Health Claims

As an organization with a long term vision ILSI-India was the first organization in the country to organize an “International Conference on Nutrition Labeling and Claims”. This Conference had presentations from a number of countries and provided information on latest developments. This is a continuous activity and due attention is paid and papers prepared as and when necessary. ILSI-India has also undertaken a Survey on “Nutrition Labeling and Health Claims in India, Bangladesh, Nepal and Sri Lanka”.

## Research Projects and Surveys

ILSI-India has conducted the following surveys and research with the objective to facilitate further work in the respective areas:

- Exploratory study on need and feasibility of a food fortification intervention in the mid-day

school meal program in North Karnataka.

- Research Project on “Vitamin D Fortified Milk on Calcium Vitamin D Parathyroid Hormone Axis in School Children aged 11-14 Years”.
- Pilot Project on “The effect of a short term Lysine supplementation in improving muscle strength in pre-pubertal Indian girls”.
- Research Project on “Growth Velocity Reference Standards in Healthy School Going Children aged 5-16 years”.
- Research Project on “Evaluation of UV Index in Different Regions of India”.
- Model for successful Ageing – This is a review on ageing and the elderly and explains factors contributing to healthy vs. pathological ageing in India.

## Other Projects

- Study on “Multiple Nutrients Fortification of Rice”. A multi country consortium has been set up.
- Research Project on “Optimal Vitamin D Supplementation Strategies for Vitamin D

Deficient Boys with Type 4 and 5 Skin”.

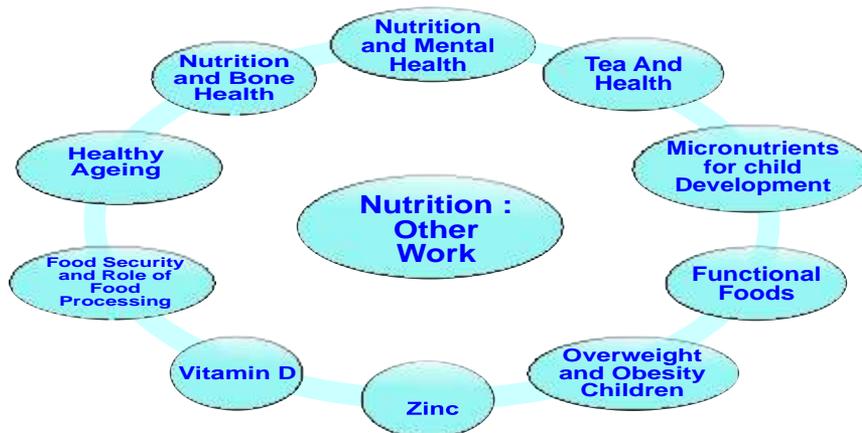
- Scientific Review Paper on Nutrition Labeling and Claims in Asia

## Following Surveys have been sponsored at NIN:

- Assessment of Sugar Consumption Levels Among Rural and Urban Population in India
- Assessment of Fat / Saturated Fat Consumption Levels Among Rural and Urban Population in India.

## Other Important Work

ILSI-India has also looked at Functional Foods, Food Security and Role of Food Processing”, Tea and Health, Micronutrients for Child Development, Overweight and Obesity in Children and has brought out Monographs which are being used by Government and Academic institutions in their programs. Nutrition and Bone Health, Zinc, Vitamin D, Healthy Aging, Nutrition and Mental Health are some other areas which have been addressed and continue to be on ILSI-India's Agenda of work.



# Food & Water Safety

## Harmonization of Food Regulations

ILSI-India has worked closely with Ministry of Food Processing Industries, Ministry of Health and FAO since 1997 to not only create an environment for undertaking harmonization of food regulations but also to specify the gaps in Indian Regulation vis-a-vis Codex that needed to be made up. A number of Conferences and works have been organized and Reports prepared. Apart from other experts the meetings also included the Codex contact points from Bangladesh, Nepal, Pakistan, Sri Lanka, Bhutan and Maldives and created an understanding about Codex and need for harmonization. Along with Conferences working groups of Governmental officials from these countries worked on harmonization of vertical and horizontal regulation within SAARC Countries and with Codex. It was through these meetings that the following steps were taken in India and other SAARC Countries:

- Revisions of Food Regulations were initiated.
- Efforts were made to setup a modern food control system. In India Food Safety Act replaced the earlier plethora of food regulation and Food Safety and Standards Authority of India

was set up. Bangladesh has also set up BFSA.

- FAO decided to setup FAO Trust Fund to support travel of participants from developing countries in Codex meetings.
- ILSI-India prepared a paper with inputs from national and international experts including FAO on “food safety surveillance mechanism” which became an input for FSSAI in 2007 in delivering systems for its operations.

“International Conference on Infrastructure Needs for a Food Control System: Roadmap for Regional Harmonization” with participation of SAARC countries and in collaboration with FSSAI and Export Inspection Council on December 8-9, 2014 in New Delhi. From FSSAI, Chairman, CEO, Advisor, Directors and other officers participated. Other countries were represented by heads of regulatory bodies.



ILSI-India has been continuously working on food safety with national and international organizations and has organized many Conferences and training programs on microbial and chemical risk assessment to create an understanding on modern tools for food safety and their use. The latest program was:

ILSI-India has also participated in “Global Innovation Support Project for Food Industry on Investigation of Food Regulations” coordinated by ILSI Japan and supported by Ministry of Agriculture, Food and Fisheries, Government of Japan. ILSI-India has compiled information on food regulations in Bangladesh, India, Nepal and Sri Lanka.

# Food & Water Safety

## Food Additives/ Ingredients

ILSI-India has facilitated the use of many food additives / ingredients by scientifically establishing their need and safety. These include:

- Food Colors: Keeping in view the need for and technological necessity of using colors ILSI-India studied the safety of food colors amidst the frequent proposals for ban on use of artificial/synthetic food colors., A Symposium was organized and ILSI Food Color Monographs were presented to the experts. The scientific data on food colors provided the proper perspective and led to adoption of appropriate action facilitating use of food colors.
- Low Calorie / Non Nutritive Sweeteners: Keeping in view the need to cut down sugar consumption in persons suffering from Type 2 Diabetes and those who want to control weight and at the same time satisfy the innate desire for sweetness, ILSI-India organized many conferences and seminars to look at safety of low calorie non nutritive sweeteners and their use in food and beverages. A monograph was bought out for information of consumer, industry and Government. The availability of information on science behind sweeteners and their safety was taken note of by the Government institutions and their use permitted for public benefit.
- Probiotics: Use of Probiotics has been facilitated by ILSI-India. A

Conference was organized and Monograph on Probiotics prepared and given to ICMR and FSSAI.

## Vision 2025 for Water Quality Management

Various chemical contaminants like heavy metals, lead, arsenic and fluoride as also microbial contaminants (viruses, bacteria) have adverse health effects. Gastroenteritis, typhoid, cholera, dysentery, diarrhea, infectious hepatitis, trachoma, fluorosis etc. can be checked if water quality is improved in India and other countries in South Asia. ILSI-India organized "International Conference on Water Quality Management: South Asian Perspective" in 2002 in Jaipur. The partners were: Department of Drinking Water Supply, Ministry

of Rural Development, GOI, Government of Rajasthan. Ministry of Urban Development, Ministry of Water Resources, GOI, United Nation Children's Fund (UNICEF), United States – Asia Environmental Partnership. (US –AEP) and ILSI Risk Sciences Institute, Washington DC. In-depth discussions on microbiological and chemical contamination of water, their impact on health and strategies for improving water quality management. Vision Document entitled "Water Quality Management: South Asian Perspective-Vision 2025" was developed and circulated widely by ILSI-India and WHO SEARO Office in south east Asian region to enable action by stakeholders. Many programs have been launched in India since then.



# Agriculture Sustainability & Food Security Including Biotechnology

Department of Biotechnology, Ministry of Science and Technology has been devoting attention to adoption of biotechnology in Indian agriculture to prevent losses and increase productivity to provide food security to the second largest population in the world. However, this technology can be adopted only if it is proved to be safe for human health and has no adverse impact on environment.

At the request of Department of Biotechnology, Ministry of Science and Technology, ILSI-India has been organizing international Conferences on agriculture biotech nology with presentations by international experts. Such Conferences have provided inputs to DBT on latest developments in agriculture biotech and facilitated introduction of BT Cotton in the country. ILSI-India is the preferred partner for DBT. ILSI-India has also organized expert consultations for scientists

associated with DBT on “Regulatory Science for Risk Based Approaches for Agriculture Biotech” as also training programs on Detection Method for GM foods/ Crops at NIN, ITRC, and CDFD.

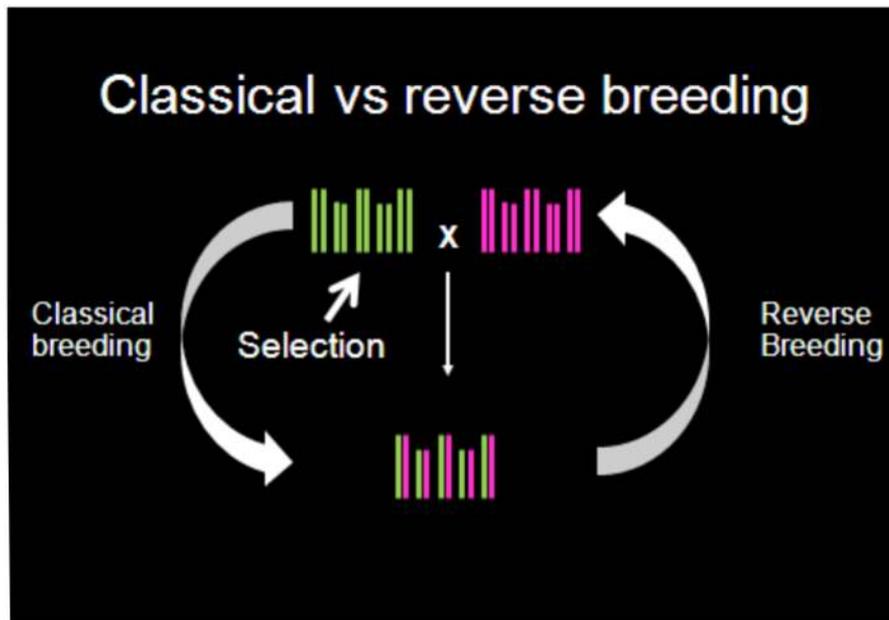
Another new activity undertaken

Africa, USA, and OECD etc. OECD considered this Conference to be better in terms of quality and focus than the Conference organized by OECD on this subject.

ILSI-India has also organized along with Ministry of

Environment, Ministry of Earth Sciences and ILSI Research Foundation Center for Integrated Modeling for Sustainable Agriculture and Nutrition Security an “International Conference on Impact of Climate Change on Agriculture and Water”. ILSI-India has undertaken this activity as climate change will have impact on agriculture

production, producti-vity, water availability as also emergence of new pathogens. All this will impact the food and water availability for direct consumption as also where they are used as key inputs such as food industry.



Source: Presentation on Reverse Breeding by Dr. T.G. (Erik Wijnker, Post-Doctoral Research Fellow, University of Hamburg, Biozentrum Klein Flottbek, Department of Developmental Biology, Hamburg, Germany at International Conference on New Plant Breeding Molecular Technologies – Technology Development and Regulation

at request of DBT was “New Plant Breeding Technologies”. The work was initiated with an international conference in October 2014 with presentations by regulatory authorities and experts from: Argentina, Australia, Canada, China, Europe, India, Japan, South

# Capacity Building

ILSI-India organizes training programs to impart knowledge and skills in concerned areas. These programs have two components (a) theoretical knowledge (b) practical hands on trainings in laboratory setting. Laboratories used for the training programs include: PTH, of EIC, NIN, CDFD and IITR. The lead trainers are international and national. Trainees are also evaluated by trainers and are provided certificates after completing the training program. The participants in the training programs are duly selected by Selection Committees according to prescribed qualifications. Trainees are scientists from Government, Regulatory Authorities, R&D institutions and Industry.

Training programs have been organized in the following areas recently:

- **Risk Assessment**
  - Microbiological Risk Assessment and Chemical Risk Assessment along with International Commission on Microbiological Specifications for Foods (ICMSF), Ministry of Food Processing Industries (MFPI), GOI, Agriculture and Processed Foods Products Export Development Authority (APEDA), Indian Council of Agricultural Research (ICAR), Indian Council of Medical Research (ICMR), National Horticulture Mission, Ministry of Agriculture, and The National Center for Food Safety and Technology (NCFST), Illinois Institute of Technology.



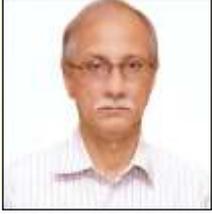
Trainees at ILSI-India Training Program on Detection Method for GM Foods / Plants at NIN

- Risk Based Approaches for Food Safety Management along with Ministry of Food Processing Industries and Export Inspection Council of India.
- **Detection Methods for GM Foods / Plants** jointly with Department of Biotechnology, (Ministry of Science and Technology, GOI), Food Safety and Standard Authority of India (Ministry of Health & Family Welfare, GOI), CDFD, ITRC, NIN and International Food Biotechnology Committee of ILSI, Washington DC.
- **Good Food Laboratory Practices** jointly with Food Safety and Standard Authority of India (Ministry of Health & Family Welfare, GOI) and Export Inspection Council (Ministry of Commerce and Industry, GOI).

## Elements of Quality Program



Source: Presentation on Analytical Challenges in Ensuring the Compliance in International Trade by Dr. Anne Bridges, Technical Director, AACC International, Melbourne at International Workshop & Training Program on Good Food Laboratory Practices



अध्यक्ष  
Chairperson  
Telefax : 011-23220991  
Email : chairperson@fssai.gov.in



सत्यमेव जयते

भारत सरकार  
भारतीय खाद्य संरक्षा एवं मानक प्राधिकरण  
स्वास्थ्य एवं परिवार कल्याण मंत्रालय  
एफडीए भवन, कोटला रोड, नई दिल्ली-110002  
Government of India  
Food Safety and Standards Authority of India  
Ministry of Health and Family Welfare  
FDA Bhawan, Kotla Road, New Delhi-110002  
Website : www.fssai.gov.in

अध्यक्ष

Chairperson

Telefax : 011-23220991

Email : chairperson@fssai.gov.in

#### MESSAGE

ILSI-India has been in the forefront of activities relating to food safety, nutrition, risk sciences and agricultural biotechnology in India and other countries of the SAARC region. It has taken the lead on many issues of crucial public health importance such as complementary food and food fortification by organizing conferences, sponsoring research projects, taking up capacity building programmes and bringing out publications.

ILSI-India is also a part of Food Safety Knowledge Assimilation Network (FSKAN) launched by FSSAI to establish a network of organizations to facilitate scientific cooperation by coordination of activities, exchange of expertise and best practices, etc. ILSI-India is doing commendable work by bringing together experts on one platform to promote collaboration in the area of food safety to advance the cause of public health.

I would like to congratulate ILSI-India on completion of 20 years in evolving solutions based on science and research to public health problems.

Ashish Bahuguna



**डा. सौम्या स्वामीनाथन**  
एमडी, स्वास्थ्य अनुसंधान विभाग, स्वास्थ्य एवं परिवार कल्याण मंत्रालय एवं महानिदेशक, आई सी एम आर  
**Dr. Soumya Swaminathan**  
MD, FASc, FNASc, FAMS  
**Secretary to the Government of India**  
Department of Health Research, Ministry of Health & Family Welfare & Director-General, ICMR



**भारतीय आयुर्विज्ञान अनुसंधान परिषद**  
स्वास्थ्य अनुसंधान विभाग, स्वास्थ्य एवं परिवार कल्याण मंत्रालय, रामलिंगस्वामी भवन, अंसारी नगर, नई दिल्ली-110 029 (भारत)  
**Indian Council of Medical Research**  
Department of Health Research, Ministry of Health & Family Welfare, V. Ramalingaswami Bhawan, Ansari Nagar, New Delhi-110 029 (INDIA)



**Dr. Soumya Swaminathan**  
 MD, FASc, FNASc, FAMS  
 Secretary, Department of Health Research  
 Ministry of Health and Family Welfare &  
 Director General, Indian Council of Medical Research, Government of India, New Delhi

**MESSAGE**

I congratulate ILSI-India at the occasion of its 20th Anniversary. My association with ILSI-India is recent but ICMR has been closely associated with ILSI-India for two decades.

ILSI-India has done commendable work on food and water safety and nutrition. It has done pioneering work on many issues affecting public health. ICMR has associated with many of these activities including risk assessment of pesticide residues, importance of Zinc in human health, recent scientific developments in Vitamin D and health, food fortification, nutrition and bone health, nutrition and physical activity for preventing and managing overweight and obesity, probiotics, nutrition and HIV AIDS, nutrient risk assessment etc.

Presentations by leading international scientists on recent developments in food safety and nutrition are not only interesting and informative but clear many myths. ILSI-India has been devoting attention to improving lifestyle and promoting balanced nutrition - critical for dealing with NCDs. I do appreciate ILSI-India's work on improving public health.

*Dr. Soumya Swaminathan*  
Secretary, Department of Health Research, Ministry of Health & Family Welfare, Government of India, New Delhi

Tele. : (Off.) +91-11-26588204, 26589620; Fax (Off.) : +91-11-26588662, E-mail: dq@icmr.org.in





**सचिव**  
 भवन सरकार  
 खाद्य प्रसंस्करण उद्योग संघालय  
**Secretary**  
 Ministry of Food Processing Industries  
 Government of India

**MESSAGE**

ILSI-India has been contributing significantly to the growth of Food Processing Industry apart from other sectors such as food safety, health, nutrition, etc. Ministry of Food Processing Industry has been closely working with ILSI-India towards uplifting the sector and keeping abreast with the latest developments in the field.

I am glad that ILSI-India is celebrating its 20<sup>th</sup> Anniversary this year. I congratulate everyone in the organization on this important occasion and convey my best wishes to their future endeavours.

*A. Srivastava*

Office : Panchsheel Bhawan, August Kranti Marg, New Delhi-110049 फोन/Phone : +91 11 26493225, 26492431  
 फैक्स/Fax : +91-11-26493012, E-mail : secy mo'pi@nic.in, avinash.srivastava@nic.in



Ouch! ILSI-India completes 20 years? If so first I congratulate Miss. Rekha Sinha Executive Director and Shri D H Pai Panandiker, Chairman of this key scientific institution in the country in the areas of Food Safety, Nutrition, Agriculture Sustainability and Risk Assessment. I am also happy to be part of this great journey of organizational partnership and knowledge sharing in such vital subject--The Food Safety- that everyone needs to know in everyday life! We in Department of Biotechnology, Ministry of Science and Technology have been proud partners of ILSI-India as early as 1999 to organize first ever "International Conference on Biotechnology for Sustained Productivity in Agriculture" in Hyderabad. A decade later there was an opportunity in 2009 to update the knowhow through another successful partnership activity "The International Conference on "Recent Scientific Developments in Agricultural Biotechnology: Sharing Experiences and Knowledge" Workshops and hands on training programmes on risk assessment of GM crops and foods, labeling and detection technologies were also some joint ventures with range of international experts accessible through ILSI-India hunting system. International Conference on New Plant Breeding Molecular Technologies – Technology Development and Regulation in the end of 2014 was yet another first ever endeavor in introducing genome editing technologies and their regulatory dilemma to Indian scientific community in private and public sectors. I can go on and on, praising ILSI-India's best practices, professionalism, discipline, dignity, format, protocol and facilitation to access best international and national expertise in conduct of these conferences and workshops. But let me finally say, the journey is on towards silver jubilee celebrations with more new ventures and partnerships for the growth of subject, specialists and organizations dealing with food safety in India.



**Dr. S. R. Rao**  
Advisor  
Department of  
Biotechnology,  
Ministry of Science  
& Technology,  
Government of India,  
New Delhi



**Dr. Pradeep Saxena**  
Additional Deputy  
Director General, Dte.  
General of Health  
Services, Ministry of  
Health & Family  
Welfare, Govt of  
India, New Delhi

I would like to congratulate ILSI-India for completing 20 years in India in 2017. During this time, the organisation has contributed significantly and consistently in the areas of Food Safety, Healthy Lifestyles, Nutrition, Food Fortification, Risk Assessment etc. by conducting various research and academic activities. From time to time, it brings together different experts on various forums for exchange of ideas, provide updates on the latest developments in these areas and bring about a scientific understanding on the issues. The areas selected for discussions tend to be very relevant to the present time. Looking forward to many more such activities undertaken by ILSI-India in the future. I send my good wishes to ILSI-India on the occasion.

This report sets out the many evidences, experiences and statistics needed to take more forceful actions to the epidemic increase of non-communicable diseases in India. As stated by World Health Organization, the NCDs are the number one killer in the world, with more than 63% of all global deaths due to cardiovascular and chronic lung diseases, cancers and diabetes. Globally, 90% of preventable, premature deaths are due to NCDs occurring in low-and middle-income countries. When NCDs rise by 10% annual economic growth falls 0.5%. NCDs kill more people of working age in low and middle-income countries (30%) than in high-income countries (13%). I am happy to note that the ILSI-India has been working towards reduction of salt intake, trans fat and high sugar consumption and carrying out risk assessment studies, which will be useful for policy making and development of intervention strategies for NCDs prevention and control. I am sure ILSI-India efforts in this direction will go a long way in mitigating NCDs in the world. I am happy to know that the Institute is celebrating 20 years of long successful journey with its credible scientific works.



**T. Longvah**  
Director I/C  
National Institute of  
Nutrition, Hyderabad

I wish all the very best in its all future endeavour and celebrate its decadal function.

I am glad to know that ILSI-India is completing 20 years of its illustrious work.

Food safety regulation in India is now at a critical juncture, the implementation of the integrated food law being constrained by absence of data critical to regulatory action and scarcity of independent analytical work outside the government on issues related to food safety. The food safety regulator is essentially a data centric organization which has to access, generate and validate a multitude of data related to food, health, agriculture etc. so that a reliable data base can be built as the base for food regulation. Training is another area in which the hands of the regulator need to be strengthened. In all these areas ILSI-India can contribute significantly. The international perspective also needs to be brought in so that the regulator does not try to reinvent the wheel and the country benefits from the experience of other developed countries in this complex sector with fast changing technology. It is only when the marketplace of ideas is vibrant and regulatory work transparent that intelligent food safety regulation can be undertaken.

I wish ILSI-India all success in this endeavour.



**Dr. P. I. Suvrathan**  
Previously  
Chairperson Food  
Safety and Standards  
Authority of India,  
New Delhi



**Dr. P. G. Mahipala**  
Former Director  
General of Health  
Services,  
Ministry of Health,  
Nutrition &  
Indigenous Medicine  
Colombo, Sri Lanka

It is with great pleasure and honor that I send a message to ILSI-India at the important occasion of completing 20 years of extra ordinary scientific contributions to serve the mankind in the areas of food safety, nutrition, agriculture sustainability and risk assessment which I consider as key areas for human development and to combat non-communicable diseases in this challenging environment. I personally witnessed the extent of scientific contributions made in this field when we had the Conference on nutrition & NCD in Sri Lanka in November, 2015 during my tenure as Director General Health Services, Government of Sri Lanka. I admire the achievements on behalf of the citizens of Sri Lanka.

Today we are facing major Public Health and development challenges due to non-communicable diseases which disrupt the socio economic fabric of countries in terms of productivity loss and demands on health systems. Research and innovations in the area of nutrition is extremely important to overcome this challenge. In view of that, while appreciating the excellent work done so far I hope that there will be more contributions from this great organization to the global community in the years to come.

I wish all the very best in all future endeavours.

## ILSI Headquarters / International Organizations

On behalf of the ILSI Board of Trustees and the organization more generally I warmly congratulate ILSI-India on the occasion of your 20th Anniversary. Throughout its existence, ILSI-India has taken the lead in providing a tripartite platform to bring together key scientists from the academic, government and private sectors to address regional concerns in the areas of food safety, nutrition, risk sciences and agricultural biotechnology. Such leadership is vital to the health and economic well-being of the population and the output of ILSI-India research has been invaluable to both government and industry. ILSI-India regularly organizes scientific conferences and workshops that play a very important role not only in disseminating their findings but in capacity building, ensuring scientific excellence is extended to the extent possible. ILSI-India has had a very successful first 20 years due to the hard work and dedication of all its staff, volunteers and experts and we join you in celebrating their achievements. We wish you every success for a most productive next 20 years for ILSI-India.



**Prof Alan R Boobis**  
Chairman,  
ILSI Washinton DC,  
(OBE, Imperial  
College London)

It is my pleasure to congratulate ILSI-India on its 20th Anniversary. It is a milestone I know the entire organization is proud to celebrate with you. ILSI-India makes significant contribution to the science in nutrition and food and water safety. Most importantly, you demonstrate how science can improve the health of people throughout South Asia. ILSI-India is especially adept in achieving ILSI-India's goal to work in partnership across public-private sectors. The level of participation in your programs from government, industry, and academia is to be commended. I am also encouraged to see your interactions with ILSI branches elsewhere in Asia. I believe international cooperation is key to ILSI-India's long-term success and I know ILSI-India can play a leading role in fostering coordination and collaboration among ILSI branches now and into the future. So, on behalf of the ILSI Board of Trustees, I wish you another 20 years – and more – of success.



**Prof. Peter van Bladeren**  
 President  
 ILSI Washinton DC,



**Dr. Suzanne Harris**  
 Executive Director  
 International Life  
 Sciences Institute,  
 Washington DC

What a wonderful accomplishment 20 years of success is, and I am pleased to celebrate this achievement with you. Each year at the ILSI Annual Meeting, I enjoy seeing the ILSI-India delegation. Over the years, you have provided thoughtful input on how to make ILSI better, both organizationally and on how we approach our scientific programs. You've also led by example in showing the ILSI family how to engage the public sector in your activities. In 2005, I was honored to give the keynote presentation at the conference "Nutrition and Self-Care for Healthy Aging." Not only was it a delight for me to see Hyderabad, the scientific program was thought-provoking and engaging, and on a topic still important to ILSI. The quality of that event is representative of ILSI-India's activities, then and now. Congratulations on your 20th Anniversary.

I look forward to many more decades of ILSI-India's success.

I was so pleased to receive your email announcing the 20th Anniversary of ILSI-India and I want to take this opportunity to sincerely congratulate your Branch and send my very warmest wishes for continued success.

I started visiting your lovely country in 1963 and I was always so impressed with its beauty and the warmth and hospitality of its people.

When the occasion arose 20 years ago that the conditions were ripe to form an ILSI-India Branch, I jumped at the chance to visit India again and select a small group of industry and government scientists to tell them all about ILSI and convince them to become the nucleus of a Branch formation. This idea was well accepted and since that time ILSI-India has grown to be the most important member of the ILSI family.

Many workshops and symposia on numerous areas such as food and water safety, healthy lifestyles, food fortification, the safety of genetically modified foods, food law harmonization and many others have followed on a national and sometimes international basis.

I have been so grateful for the devotion and hard work of Ms. Rekha Sinha, Executive Director, who has been the architect of your Branch from the very beginning and also for the wise leadership of Mr. Panandiker as the Chairman in developing ILSI-India. I am also very impressed that you have become a Regional Branch and have included in your operations 6 more countries.

I attended your meeting in Jaipur on nutrition and food safety and I continue to be very interested in food fortification. Your project to fortify rice with iron and lysine could be very valuable in improving the nutritional status of the Indian population

In closing I want to congratulate you again for your 20th Anniversary and give all my warmest wishes to all my friends in your wonderful Branch



**Dr. Alex Malaspina**  
 Founder President,  
 International Life  
 Sciences Institute,  
 Washington DC

Congratulations on the 20th Anniversary of ILSI India.

ILSI-India has been an excellent partner since we started working on any programs. ILSI-India has been keeping high quality of scientific achievements in food safety, nutrition and risk assessment. In past 3 years ILSI-India has been taking an active role in the ILSI Consortium of Food Fortification which was established to promote scientific research in food fortification in Asia from basic research to introduction of fortified product in market. We expect that ILSI-India will keep significant scientific contributions not only in food fortification but other critical food safety and nutrition issues.



**Dr. Takashi Togami**  
 Director  
 ILSI Japan CHP



**Dr. Debra Kibbe**  
 Senior Research  
 Associate Georgia  
 Health Policy Center,  
 Atlanta

Millions of children globally suffer from stunted growth, cognitive delays, weakened immunity and chronic disease as a result of micronutrient deficiencies, lack of safe food and drink, and excess weight. The collaborative work of ILSI-India, both in-country and the Asia region, over the past 20 years in the areas of malnutrition, fortification, food safety, obesity and chronic disease prevention and management have contributed greatly to improving the region's understanding of how healthy foods and beverages can be used as a vehicle for improving health status across the lifespan. Congratulations to ILSI-India on 20 years of scientific excellence and best wishes for many more years of contributing to the region's understanding of the link between nutrition and health.

Best wishes and kind regards to all my friends at ILSI-India!

It is indeed heartening to note that ILSI-India has successfully completed 20 years of great contribution to food safety, nutrition and sustainable agriculture for the benefit of mankind. I have known ILSI-India since the time it started its operations in India and my interactions with their officials has always kept them in high esteem. Their contribution to food safety and nutrition at the international level has been phenomenal and the food regulatory system has recognized the support provided by ILSI-India. The capacity building initiatives on food safety and nutrition taken by them in the South Asian region have been very productive. I am quite confident that the ILSI-India will continue to play this important role in the region and inspire all with their leadership in the field of food safety, nutrition and sustainable agriculture.

I wish ILSI-India greater success in its endeavours.



**Mr. S Dave**  
 Former Chairman,  
 Codex Alimentarius  
 Commission, C C  
 Asia Chair Advisor  
 FSSAI, New Delhi

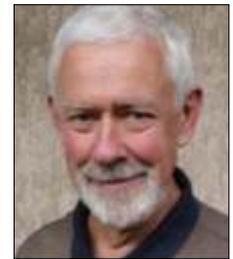


**Ms. Shashi Sareen**  
 Senior Advisor, Food  
 Safety and Quality,  
 FAO Regional Office  
 for Asia and the  
 Pacific, Bangkok

On this 20th anniversary of ILSI-India, I would like to congratulate the organization for emerging as a key institution providing coordination, support and scientific inputs in the areas of food safety, food controls, nutrition, agriculture sustainability and risk assessment to the South Asian Region. With its focus on local and regional issues and through the involvement of leading national and international experts in the interactions and deliberations, ILSI-India has given special and close attention to critical food safety and public health issues and helped create an understanding and relevance of these subjects in the region. ILSI-India has also supported the work of standards by creating an understanding about Codex and need for harmonization with the same in the countries of the region. The latest international conference on “Infrastructure Needs for a Food Control System: Roadmap for Regional Harmonization” with participation of SAARC countries would also serve as a useful direction for countries in the region.

My heartfelt good wishes to ILSI-India for success in their future activities so that they continue to make a difference to food safety and public health in the region

Congratulations to ILSI-India on its 20th anniversary. Over the past twenty years ILSI-India has played a crucial role in India and neighboring countries in assuring that science-based food rules and food supplies meet the needs of one of the world's largest population groups. Good quality and safe foods are critical in programmes to assure access to food and proper nutrition for all. ILSI-India activities to organize and promote conferences, seminars, training and discussion groups have been essential to policies and programs to promote the use of scientific consensus for activities related to rules for and production and marketing of good quality and safe foods. It has been my pleasure to be able to participate in some of the ILSI-India conferences and to see first-hand the positive effect that such work can have on government, industry and academia food and nutrition related policies and programmes. As Director of the Food and Agriculture Organization of the United Nations (FAO) Food and Nutrition Division at the time of the founding of ILSI-India cooperating with ILSI-India and its early conferences and other activities was important to India and to FAO desires to strengthen food quality, safety and nutrition activities in India.



**Dr. John R. Lupien**  
 Adjunct Professor of Food Science, Univ. of Massachusetts, USA, Former Director, Food & Nutrition Division, FAO, UN, Rome

With best wishes to ILSI-India to continue its important work over the next 20 years!!

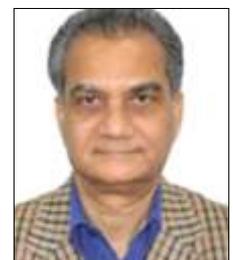


**Mr. Ezzeddine Boutrif**  
 Former Director, Nutrition and Consumer Protection Division, Food and Agriculture Organization of the United Nations, Rome

I wish to express my sincere admiration and appreciation for the tremendous work carried out by ILSI-India during the last two decades of existence in the areas of food safety and nutrition and its valuable contribution to the improvement of the capabilities in these fields not only in India, but throughout the South-Asia region. Its pioneer work on the up-dating and harmonization of food safety systems and requirements among the SAARC member countries has paved the ground for increased cooperation and food trade among these countries. ILSI-India's work on the importance of the active participation of SAARC member states in the work of the Codex Alimentarius Commission, including the establishment of well-functioning national Codex committees, has had a far reaching impact on the participation of these countries in Codex meetings. I feel particularly proud of having been associated, on behalf of FAO, with some of these activities, and sincerely hope that ILSI-India will continue to provide its invaluable support to food safety and nutrition improvement throughout South Asia.

It is indeed heartening to note that ILSI-India is celebrating its glorious journey of 20 years. On this special day of ILSI-India, I feel very happy as I was closely involved when the institution was in the process of being established in New Delhi in the year 1997. I was then working for UN FAO and was posted in Bangkok, Thailand at its Regional Office for Asia and the Pacific. FAO has always been a unique productive partner of ILSI-India. The dedicated service being provided by ILSI-India is commendable. In my honest assessment and candid opinion, over the last 20 years ILSI-India has been instrumental in providing exemplary services to the community through their thorough professionalism. Its contribution in India and abroad is noteworthy. It has proved beyond doubt that ILSI-India is one of the leading scientific institutions in the disciplines of their engagement.

I wish ILSI-India a bright future and smoother journey ahead.



**Dr. Biplab K. Nandi,**  
 Senior Food And Nutrition Officer (Retd.) Food and Agriculture Organization of the United Nations (FAO) Regional office for Asia and the Pacific, Bangkok, Thailand

Congratulations to you and your colleagues at ILSI-India on the 20th Anniversary Celebration. You have earned your scientific reputation with programs covering a range of subjects that are acknowledged and respected by all.

As I scanned the list of your programs over 20 years I recalled the first invitation that AACC International received. To deliver the program, the AACC Intl – ILSI NA team traveled from New Delhi to Lucknow, and then onto Hyderabad. At each location we found a different type of laboratory venue, new hosts and trainees from different scientific backgrounds and at each stop we were pleased by the success of the programs. After that experience, we are always ready to accept an invitation and return to participate with you in new programs. The key for us, the ILSI-India professional program planning and support efforts allow the visiting scientists to focus and succeed in the delivery of first-class scientific programs.

Thank you for including us on this occasion and I wish you many successful years ahead.



**Dr. Anne Bridges**  
Ph.D.  
Technical Director,  
AACC International,  
Melbourne, Australia



**Dr. Richard Hurrell**  
Professor Emeritus  
Institute of Food  
Nutrition and Health,  
ETH Zurich, Switzerland

I would like to congratulate ILSI-India on their 20<sup>th</sup> anniversary. During that time, they have played a major role in guiding food fortification practice and policy in India and have helped set the scene for increasing iron intake and decreasing iron deficiency at the national level. My first contact with them was in Jaipur in February 1999 for the ILSI-India's first National Conference on "Micronutrient Fortification of Foods". This was a pioneering conference instigated by Alex Malaspina from ILSI Global and repeated subsequently in several other Asian countries. The message was three fold. Firstly that iron deficiency is the most widespread nutrient deficiency in women and children, secondly that the science needed for efficacious iron fortification of foods is mostly known; and thirdly we should make iron fortification happen at the national level. These conferences were the catalyst for a renewed interest in food fortification globally.

ILSI-India remain a major force in the food fortification landscape in India as they continue to advocate for food fortification policy and legislation and continue to promote the most up-to-date food fortification technologies and practices. For their perseverance and far sightedness relation to the potential of food fortification for improving the health of a nation, they are greatly appreciated and admired.

It is my honor to congratulate ILSI-India for successful 20 years of operations! It is always a pleasure to be connected to ILSI-India and work with the chairman D H Pai Panandiker and the team on the role of nutrition for health and well-being.

A safe, healthy, balanced and sustainable nutrition for all in a growing, ageing, more and more urbanized world is one of the most pressing challenges and opportunities of the 21<sup>st</sup> century. It is imperative that we act and science is providing solutions. The task is complex, as nutrition is complex, so the solutions are anything but simple.

ILSI-India has taken up the burning questions and engaged for solutions for people today and generations to come.

I congratulate ILSI-India for 20 years of a highly-committed engagement in developing answers and solutions for healthy nutrition. I wish for the future a lot of successful interactions with the different stakeholders to achieve further progress in a healthy nutrition for all!



**Dr. Manfred Eggersdorfer**  
Professor for Healthy  
Ageing, University  
Medical Center Groningen  
Sen. Vice President  
Nutrition Science &  
Advocacy DSM  
Nutritional Products  
Switzerland

## Academia



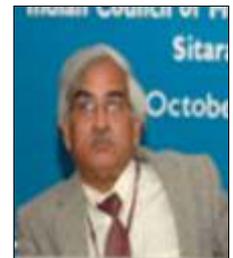
**Dr. A Kurpad**  
Professor & Head,  
Physiology & Nutrition,  
St John's Medical  
College, Bengaluru

It is with pleasure that one notes the passage of 2 decades of good work by ILSI- India, and I congratulate Mr. Panandiker and Ms. Sinha for their continuous and sincere efforts. Their leadership in the area of Food Safety, Nutrition, Food Production and the Environment is commendable, and many workshops and symposia have been organized on these subjects. ILSI-India brings together a diverse array of professionals for their meetings, and these are always followed by sober assessments of the state of the art. It is impressive to see the list of partners that has been developed in the public, private and international sectors. I wish them the best for the next 2 decades.

I congratulate ILSI-India on completion of two decades of fruitful existence and emerging as one of the most powerful organization in India with a mission to provide science to improve human health and safeguard environment. The scientific knowledge acquired through inputs from industry and researchers from different academic institutes in the field of nutrition, health and well-being and toxicology have been successfully disseminated to the Govt. and public at large.

I have had the good fortune of being associated with ILSI-India since 2005 to carry out research projects in the field of nutrition, vitamin D deficiency and bone mineral metabolic disorders. The results of these applied research projects have provided important scientific inputs which have been disseminated to the scientific community and the Govt. of India. Studies on prevalence of vitamin D deficiency disorders, supplementation and randomized control trials on fortification of milk with vitamin D propelled the Govt. authorities to consider voluntary fortification of milk with vitamin D.

I convey my best wishes to ILSI-India for the good work done over the years and sincerely hope it will keep up the momentum in the years to come.



**Major Gen. (Retd.)  
Dr. Raman K Marwaha**  
Former Additional  
Director, Institute of  
Nuclear Medicine &  
Allied Sciences,  
DRDO, Ministry of  
Defence, GOI



**Mrs. Rekha Sharma**  
MSc, PGDM, RD  
President and  
Director, Nutrition  
and Dietetics,  
Diabetes Foundation,  
New Delhi

My heartiest congratulations to ILSI-India for completing its 20 years as a key scientific institution in the country. ILSI-India pioneering work and seminars in Nutrition, child health, food safety, agriculture biology and many more health aspects, on regular basis with eminent national and international experts are a scientific feast for nutritionists, doctors, scientists and administrators heading scientific bodies from private sector and Government. Seminars on Diet, physical activity and life style, bone health, micronutrient deficiency, food fortification, early child hood health and complementary foods, whole grains and their benefits, hydration benefits, probiotics in health, sweeteners and on non-communicable diseases have imparted the necessary skills to the participants and scientists to form the national guidelines for the public. Seminars in the different areas of food safety and water management, sustainable agriculture and nutrition security have been of great relevance to the participants.

I wish ILSI-India great success in the coming years and am confident that they will continue to be pioneers in many issues pertaining to the health of Indian population.

I am indeed delighted that ILSI-India is completing 20 years this year. I have actively participated in most of their deliberations in last 15 years and eagerly tracked their endeavor in other cities of India and South Asia. Their selection of topical topics, organizing specialized sessions and workshops with international speakers in India to center stage national and international priorities is noteworthy. They have provided platform of discussion between government policy makers, ministries, industry and academia to discuss gaps, ascertain need and harmonizing Public Health initiatives and provide a publication after the deliberations.



**Dr. Anupa Siddhu**  
 Director  
 Lady Irwin College,  
 University of Delhi,  
 New Delhi

I congratulate ILSI-India in particular for their focused endeavor in the right direction in discussion with stakeholders on key emerging issues like Food Safety, Food Security, Nutrition, Agriculture Sustainability and Risk Assessment and in recent past Physical activity, Anthropometry and Health for All.

I wish them all the best for future endeavours.



**Dr. Seema Puri**  
 Associate Professor,  
 Institute of Home  
 Economics & National  
 Vice President, Indian  
 Dietetic Association,  
 New Delhi

I am happy to learn that ILSI-India is completing 20 years of existence this year. It is today a premier scientific institution in the country working in the areas of food safety, nutrition, agriculture sustainability and risk assessment.

ILSI-India works with multiple stakeholders – government, research institutes, international organizations, industry, academia to holistically examine pertinent issues and subsequently undertake advocacy initiatives. It has been successful in bringing together national and international experts in deliberations on several key concerns in the public health domain.

Coupled with the advancements in food technology, India is presently undergoing a rapid transition in the social, economic, health and nutrition domains. In this scenario, ILSI-India's role becomes more and more strategic to ensure healthy and safe practices in the food and nutrition arena.

I congratulate ILSI-India for completing 20 years and wish their future endeavors my very best.

## ILSI-India Board of Trustees and Presidents of Country Committees

I am delighted to know that International Life Science Institute-India (ILSI-India) is celebrating its 20 years of fruitful success.

The enormous contributions made by ILSI-India and ILSI South Asia Regional Office in the field of Food and Water Safety, Risk Science and Toxicology, Sustainable Agriculture and Nutrition Security along with Nutrition and Health will be glorified further in the days to come.

I recall here my cherished moments with ILSI-India and ILSI South Asia Regional Office while we were hosting a scientific conference in Kathmandu, Nepal.

I am sure the knowledge imparted and the standards laid down by ILSI-India will not be restricted to Indian subcontinent, but will be spread out across the globe and will be valuable to the mankind immensely.

My best wishes to ILSI-India for their future endeavors.



**Mr. Basant K. Chaudhary**  
 President  
 ILSI South Asia –  
 Nepal Country  
 Committee  
 (Managing Director,  
 Instant Meal  
 Laboratory, Pvt. Ltd.,  
 Chaudhary Group,  
 Nepal)

It is a pleasure to write a Message for ILSI-India on the auspicious occasion of celebration of 20th Anniversary of successful completion of scientific work in the South Asian Region that also includes Bangladesh. We are always proud of being the active part of ILSI-India that focuses, as well as, devotes resources on critical areas in food and water safety, nutrition, risk assessment, harmonization of food regulations, improvement in the health profile of malnourished children and women and agriculture sustainability including biotechnology with certain emphasis on importance of complementary foods and food fortification in the entire India by fostering socio-economic, as well as, overall nutrition and food security improvement.



**Mr. Abdul Awal Mintoo**  
President  
ILSI South Asia -  
Bangladesh Country  
Committee  
Dhaka

ILSI South Asia - Bangladesh Country Committee wishes success alongwith outstanding achievement for ILSI-India as a pioneer partner of ILSI-South Asia Region. We also hope ILSI-India will flourish rapidly in achieving the targets in the days to come. Our support for ILSI-India will always be continued as we did before.

I personally wish successful celebration of 20th ILSI-India Anniversary.



**Mrs Nirmali Samaratunga**  
President  
ILSI South Asia -  
Sri Lanka Country  
Committee, Sri Lanka

As President of ILSI Sri Lanka Committee I have great pleasure in sending this congratulatory message to ILSI-India, South Asia Regional Office on reaching this milestone of 20 years as a leading scientific Institution.

Through its pioneering activities over the last 20 years in the areas of food and water safety, nutrition, agriculture sustainability and risk science and toxicology, ILSI-India has made an invaluable contribution towards the work of governments, industry and academia, aimed at improving the health and well-being of the people of South Asia.

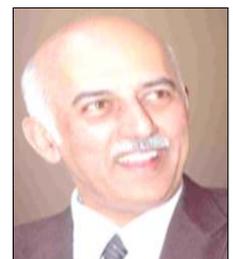
I am privileged to have been associated with some of these initiatives, and happy to have contributed in a small way towards their valuable work. Whilst congratulating ILSI-India, headed by Chairman Mr. Pai Panandiker, on these noteworthy achievements, I wish them continued success in their future endeavours in facilitating scientific dialogue, debate and research in these critical areas.

It is a great pleasure to write this message for ILSI-India on its completion of two decades in this Region since its inception. During the last 20 years since inception of ILSI-India of my close association as Honorary Trustee of ILSI-India what I have seen is the commitment of ILSI-India towards converging into ILSI global strong mission of improving public health and well-being by engaging academia, government and industry scientists at a national forum level to advance Scientific understanding in the area of Nutrition, Food Safety, Risk assessment and Environment.

ILSI-India is one of the leaders in conducting large number of workshops globally for the South Asia's Region covering the seven countries and has addressed contemporary issues as relevant to countries in this region and also the regional agenda along with several International workshops to synergies this agenda.

ILSI-India is unique in fostering a common platform by its networking approach in bringing many professionals with all-inclusiveness with NGO's and NPO's and the policy makers and regulators. It is this common and neutral platform which leverages ILSI-India as one of the most active ILSI bodies globally and without mincing any words it needs to be documented this would not have happened without the untiring efforts of the Chairman of ILSI-India Mr. D.H. Pai Panandiker and the Executive Director of ILSI-India Ms. Rekha Sinha who have made all the difference in these two decades for ILSI-India and ILSI (Global).

It is just another five years away from the Silver Jubilee Celebrations of ILSI-India and the preparations can start now as one celebrates the two decades completion of its Scientific service to the Scientists at large with knowledge empowerment and Networking.



**Dr. V. Prakash**  
Vice President, IUNS,  
Chairman, India Region  
of European Hygienic  
Engineering Design  
Group, Germany  
Former Director of  
CFTRI & Distinguished  
Scientist of CSIR – India

Congratulations to ILSI-India and EC members on reaching the memorable 20th anniversary milestone. The able leadership, dedication and commitment evinced by ILSI-India in scientific knowledge dissemination and capacity building have been commendable. ILSI-India creates a unique platform for academicians from research institutes, universities from multiple disciplines, concerned administrators from nodal ministries and the private sectors to enrich each other's knowledge and arrive at a consensus on issues of National concerns.

ILSI-India emphasis has been on seminal issues of public health significance in nutrition, food security and safety, risk science/risk assessments, fortification, healthy life styles, processed foods, food labelling, sustainable agriculture - all impacting health and well-being of the population. International, national and regional seminars/workshops have been academically stimulating and rewarding experiences. Monographs published are very succinct and well referenced.

Your continued commitment to provide support with unbiased professional ethos is highly appreciated. ILSI-India is a visible scientific organization and my best wishes for its continued success.

With deep appreciation for the great job over the past two decades and looking forward to further progress,



**Dr. Kamala Krishnaswamy**  
Emeritus Medical Scientist, Indian Council of Medical Research, Hyderabad  
Former Director, National Institute Nutrition



**Dr. P K Seth**  
NASI Platinum Jubilee Fellow, Former Director, IITR and Advisor, Biotech Park, Lucknow

It is a matter of great pleasure that ILSI-India is completing twenty years and at this important milestone, a monograph is being brought out to highlight its activities. A constituent of ILSI Global, ILSI-India has been playing an important role in dealing with critical public health issues. These are complimentary towards food fortification and food safety. The ILSI-India has been closely working with government, research institutions, international research organizations and food related industries on scientific basis. It has been holding regular workshops, seminars and conferences on timely relevant topics which provide a platform for all stakeholders to interact. Recently it organized a Conference on "Whole Gains for Promoting Health" on February 10, 2017 and on "Role of Packaging in Promoting Food Security and Safety" from February 27-28, 2017. It also undertakes research projects related to nutrition. After each such event it brings out the recommendations which are extremely useful for policymakers and other stakeholders. The conferences and workshops also find wide coverage through print and electronic media.

During the ILSI Annual Meeting held at different places in USA, at ILSI-India breakfast meetings, besides reporting the branch activities, a scientific presentation on a topic of current relevance is also arranged by ILSI-India. These breakfast meetings are attended by officials and members of ILSI Global and branches in large numbers.

I have been associated as Trustee with ILSI Global for six years and as trustee of ILSI-India for past several years. The working of ILSI-India is very transparent and it has emerged as key institution in country in area of Food Safety, Agriculture and Risk Assessment and is serving the society in a great way.

I convey my congratulations and join in celebration of twenty successful years of ILSI-India.

ILSI-India has been working with leading scientists from India and abroad from Government, Academia and Industry by providing a common platform. This partnership has yielded rich dividends on many areas of public health importance.

It has given focused attention to improving the nutrition status of the population in general and nutrition status of children, adolescent girls, women and elderly in particular.

ILSI-India has helped a great deal in promoting understanding of nutritional deficiencies in India and it has also conducted relevant and important research to develop strategies to combat Vitamin D deficiencies. These include studies on supplementation and fortification. Such work has direct impact on public health outcomes in India. I appreciate their selfless effort, commitment and sincerity to the cause. I have benefited a great deal by my association with ILSI-India over the last few years.



**Dr. Ambrish Mithal**  
MD, DM  
Chairman, Division of Endocrinology and Diabetes  
Medanta Medicity, Gurgaon (Delhi NCR), Haryana

I am pleased to note that ILSI-India has completed 20 years since its inception. I had the good fortune to be associated with the activities for the past 15 years. The work done is commendable in areas of Nutrition, Food and water safety, foods derived from modern Biotechnology, Fortification and regulation etc. This has led to a quantum jump in the knowledge base of nutritionists, toxicologists, medical professional and regulatory scientists. But for ILSI-India's regular updates and seminars this would not have happened. The benefits to the scientists cannot be quantified. These activities have been followed up with publications, which are a cherished possession for most nutritionists and food scientists. ILSI-India has brought in expertise from various countries to facilitate a direct interaction with the best in the field. ILSI-India activities have contributed to national policy too. The new knowledge has benefitted the industry and helped them understand the national needs and how new knowledge needs to translate into better products.



**Dr. B Sesikeran**  
Former Director  
National Institute of  
Nutrition (ICMR)  
Hyderabad

Over all ILSI-India activities have always stood out when compared with other branches. Now through ONE ILSI concept we look forward to joint research proposals from other countries which have problems similar to India.

I wish ILSI-India many more years of productive work and seek their inputs in solving several issues in regulation, nutrition and food safety.

My good wishes



**Dr. S K Saxena**  
Director  
Export Inspection  
Council of India  
Ministry of Commerce  
& Industry,  
Government of India,  
New Delhi

I am very delighted to learn that International Life Sciences Institute-India is completing 20 years and a Monograph is being brought out on the occasion to showcase the work since 1997.

ILSI-India has been the pioneer in providing a platform for collaboration among the scientists, academicians and government bodies in the interest of the country. This monograph will provide the platform for expert group to share latest research and development at the national and international level for the benefits of consumers, eventually to the nation. It will also be contributory in providing scientific inputs in understandable and approachable way not only to all the stakeholders and members but to also to the common man.

The endeavor of the members, employees, office bearers and stakeholders of ILSI-India in bringing the organization to this level deserves deep appreciation. I am sure ILSI-India will continue to strive hard to achieve its objective and meet the expectations of stakeholders and partners.

I extend my warmest wishes to ILSI-India for the success of their new initiative and future endeavor.

As a proud and grateful member of ILSI India Board of Trustees, I congratulate this wonderful organization on its 20th Anniversary!

As we celebrate the glorious legacy that continues to inspire us, I share great enthusiasm and optimism in our continued impact and relevance in shaping and enriching the science in field of Nutrition, Food and Water Safety, Biotechnology in India and the South Asian Region.

ILSI India continues to remain on the forefront of providing insights in scientific topics that are of contemporary relevance to public health by drawing from the wisdom of national as well as international experts, eminent scientists, researchers, professionals and academia.

It is indeed gratifying for ILSI India Chairman Mr. Pai Panandiker and Executive Director Ms. Rekha Sinha to see the growth of organization they helped found 20 years ago and nurtured it with untiring and passionate efforts. Kudos to your Leadership and all the ILSI India past and current functionaries!!!

Heartfelt Gratitude and Best Wishes



**Mr. Sunil Adsule**  
Treasurer, ILSI-India  
New Delhi  
Director Scientific  
and Regulatory  
Affairs Coca Cola  
India Pvt. Ltd.,  
Gurugram

I would like to convey my best wishes to ILSI-India on completion of two successful decades in the country. I feel privileged and fortunate to be a part of this highly respected and trusted organization. ILSI-India has been doing a commendable job by engaging effectively with prominent experts from government, academia and industry by providing scientific platforms for high quality discussions, dialogues and well researched scientific papers. ILSI-India has always been at the forefront of critical discussions in the areas of food and water safety, nutrition, risk assessment, harmonization of food regulations among others.

We look forward to continue collaborative engagement with ILSI in its endeavor to provide fact based, research based, scientific knowledge which positively contributes to Public Health.



**Mr. Sanjay Khajuria**  
Senior Vice President,  
Corporate Affairs  
Nestle India Ltd.,  
Gurugram



**Mr. Nimish Shah**  
Director, Safety &  
Environmental  
Assurance Centre  
(Bangalore)  
Unilever R&D,  
Bangaluru

Hearty congratulations ILSI-India on reaching the 20 year milestone! Over the last two decades ILSI-India has made strong contributions to capacity building on food safety and nutrition in the country. Enhanced awareness of risk based approaches for food safety management among regulators and opinion leaders in India, is very much due to pioneering efforts of ILSI-India. It has been a great privilege to be associated with ILSI-India along this great journey.

I remember my first ILSI-India presentation on integrating food safety across the value chain (farm to fork) back in the late 90s. Over the two decades, ILSI-India's impact has grown leaps and bounds. Leadership for the region and enabling capability build in neighboring countries is another feather in its cap.

Uncompromising values, thought leaders among its trustees and members, and relentless pursuit of excellence makes ILSI-India a great organization.

My best wishes for very successful future and rising scientific impact of ILSI-India.

ILSI-India has been providing a great platform to bring together Scientists, Academic Institutes, and Regulatory Authorities to share current state of scientific developments. Such deliberations hold immense values are particularly relevant for making risk management decisions which are anchored in science. Such partnerships are becoming increasingly important in the new world order, where events and their impacts no longer remain localized but spread to faraway places far too quickly.

ILSI-India's ability to bring together experts of extremely high caliber speaks volumes about the credibility which the organization has generated for itself, mainly because of the unrelenting focus on independence and excellence as its core values.

I heartily congratulate ILSI-India for the journey taken so far, and wish them all success in reaching much greater heights in the days to come.



**Dr. Jasvir Singh**  
Head-Regulatory &  
Scientific Affairs  
Mondelez India Foods  
Pvt. Ltd. Gurugram

ILSI-India, as a scientific organization, has been investing in improving nutrition and promoting food security in the interest of public health. It has been giving attention to sustainable agriculture for nutrition security. ILSI-India has been engaging with the scientific community and government for more effective public health approach.



**Dr. Vaibhav Kulkarni**  
Director  
Abbott Nutrition  
Regulatory Affairs  
Abbott Nutrition  
International Abbott  
Healthcare Pvt. Ltd.  
Mumbai

### Former Trustees



**Dr. G M Tewari**  
Former President  
ILSI-India  
NABL Assessor  
Mumbai

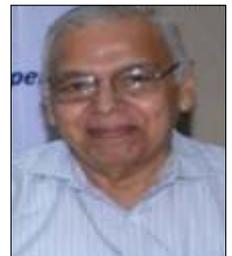
A thing is right when it enhances the stability and beauty of total ecosystem. It is wrong when it damages it. The sustainability of a larger system comes first. Everything else must fit itself within that frame. Truly sustainable development is based on the recognition that we are an inseparable part of the human and nonhuman communities, and that enhancing the dignity and sustainability of any one of them will enhance all the others. Promoting scientific understanding and culture therefore becomes one of the vital elements in this complex situation. Organizations and institutions working selflessly on these lines have been playing vital role for the welfare of society and population and thereby enhancing the dignity and sustainability of life science understanding and bio diversity concerns.

ILSI-India in its 20 years of journey has been echoing these thoughts and ideas through various forums, dialogue, seminars and workshop. In life science scenario, ILSI-India has not only enlightened the local regulators, consumers and technocrats on sustainable growth and maintenance of eco system, but also carrying forward scientific temper to the regional countries in South Asia and South east Asia. Programs on agricultural practices, human nutrition, micronutrient fortification programs, water conservation and utilization, human and animal health issues, chronic disease concerns, food sustainability, security and safety management, regulations and harmonization have been the focus points for ILSI-India.

I wish ILSI-India more such successes and memorable milestones in years to come.

ILSI is a non-profit organization aiming to provide science for betterment of health while safeguarding environment. It has been doing this globally and when ILSI India was formed, fortunately, I was associated with for many years. They have taken up many issues of food science and nutrition as well as safety and biotechnology etc. They have organized conferences, workshops, and other forms of scientific communication bringing all stakeholders together to discuss and come up with recommendations for achieving the above goals. They have publishes a large number of reports and monographs based on these so this information gathered from interactions among eminent scientists, industry and regulators could be accessed easily. They have been doing remarkable work all these years with diligence that everyone associated with them is appreciative of their excellent work.

Wishing ILSI-India's team the very best for continuing the great work.



**Prof. Jagadish Pai**  
Head, Food  
Technology from  
UDCT (retd.),  
Mumbai

ILSI-India has travelled long 20 years to arrive where they are today. It has been a pleasure to see ILSI grow and take a leading role in several valuable decision making consultations.

As a member of the first ILSI – India Board of Trustees, I had taken on active part in several of its programmes in the first few years.

ILSI-India initial programmes were mostly related to food laws; food safety; dietary issues including guidelines; food fortification etc. It has now expanded a great deal touching upon several other important issues.

I wish ILSI-India a most successful future and its continued support to Government and other agencies in formulating new plans and actions, relevant to the progress of our great nation.



**Prof (Dr.) Indira Chakravarty**

Padmashri Awardee  
 Chief Advisor, PHED,  
 GOWB  
 Former, Additional  
 DGHS, MOHFW, GOI  
 Former, Director, and  
 Dean, AIIHPH,  
 MOHFW, GOI



**Prof. K. C. Bansal**  
 Officer on Special  
 Duty, Indian Council  
 of Agricultural  
 Research, New Delhi

It is quite understandable that continuous increase in food production is so vital that all national efforts take the major share towards this goal. However, I have been constantly witnessing the various strategies that have been promoted by ILSI-India through roping in international experts for addressing primarily the public health issues and nutritional security in the region. ILSI-India has played a key role in advocating science-based decisions on several key issues including risk assessment and safety of GM foods. Further, as we know that the agenda of increased food production is coupled with meeting the demands of ever increasing population, but it needs to be achieved in a sustainable manner. ILSI-India has always geared up its activities superbly for sensitizing the governments in India including its neighbors on sustainable agriculture. I congratulate ILSI-India for the service to humanity for 20 long years and wish the best in its future endeavors.

On behalf of Ajinomoto Company, we are sincerely delighted to convey our warmest congratulations on the 20th anniversary of the ILSI-India.

Over the past two decades, ILSI-India has energetically organized workshops and conferences accompanied by publications to provide science for resolving regional issues on food safety, nutrition and health. I believe that these all-out efforts have contributed greatly to the acceleration of scientific advancement and academia-government-industry partnerships in the region.

My most unforgettable event was the “International Conference on Infrastructure Needs for a Food Control System” organized in December, 2014. In this conference, SAARC countries developed a lively discussion and drew up a roadmap for regional harmonization. These accomplishments were realized under ILSI-India's leadership. It's been a great pleasure and honor for me that I could get involved since the early planning stage of the event.

We would like to extend our best wishes to ILSI-India for many more years of continued success.



**Dr. Yoko Ogiwara,**  
 Associate General  
 Manager  
 Quality Assurance  
 Department  
 Ajinomoto Co., Inc.  
 Japan

ILSI-India has been in the forefront of activities relating to food safety, nutrition, risk sciences and agricultural biotechnology in India and other countries in the SAARC region. The high quality of the scientific information generated at its Workshops and Conferences have provided guidance to the scientists from Government, Industry and Academia on the actions to be undertaken in their areas of work. Capacity building activities laid down by national and international experts have been imparted the necessary skills to the participants. Some of the key programs initiated by ILSI-India have been grouped by the four thematic areas of ILSI in the following paragraphs.

#### FOOD AND WATER SAFETY

- Conference on Role of Packaging in Ensuring Food Security and Safety, New Delhi (2017)
- International Workshop and Training Program on Good Food Laboratory Practices, Mumbai (2016Z)
- Scientific Conference on Low Calorie / Non Nutritive Sweeteners: Uses and Safety, New Delhi (2015).
- Conference on Food Additives: Safety and Benefits, New Delhi (2015).
- International Conference on Infrastructure Needs For A Food Control System: Roadmap For Regional Harmonization, New Delhi (2014).
- Project on Global Innovation Support Project for Food Industry on Investigation of Food Regulations (2014)
- Symposium on Roadmap for Harmonization of Food Regulations in India, New Delhi (2013).
- Conference on Food & Food Additives in India, Bangladesh, Nepal and Sri Lanka, Tokyo (2013).
- Conference on Food Safety: Science, Evidence and Regulations, Colombo (2011).
- Symposium on Emerging Issues in Food Safety and Nutrition (2009).
- First International Conference on Current and Innovative Approaches to Microbiological Food Safety Management (2008).
- Second Conference on New Developments in Food Processing: Next Generation Technologies for Healthy Foods (2007).
- National Conference on Packaging for Safety of Foods (2006).
- International Conference on Water Quality Management. (2002)
- Meetings/Workshops/Conferences on harmonization of food regulations and quality control systems in SAARC countries with Codex as reference point to facilitate food trade (ongoing project since 1997).
- Conference on SPS and TBT Agreements and Codex in India(1997).
- First International Conference on New Technologies in Food Processing, Goa (1997).

#### RISK SCIENCE AND TOXICOLOGY

- Expert Consultation on Nutrient Risk Assessment for Determination of Safe Upper Levels for Nutrients (2015).
- Expert Consultation on Regulatory Science for Risk Assessment in Agriculture Biotech, New Delhi (2014).
- Workshop on Biotech Safety Assessment, New Delhi (2013).
- Workshop and Training Program on Risk Based Approaches For Food Safety Management, New Delhi (2012).
- Seminar on Regulatory Systems for Risk Assessment for Public Health (2007).
- Training program for Detection Methods for GM Foods and Plants (2003 and 2011).
- Symposium on Risk Assessment of Pesticide Residues in Water and Food(2003).

# ILSI-India Scientific Initiatives

## SUSTAINABLE AGRICULTURE AND NUTRITION SECURITY

- Scientific Workshop on Safety Assessment of GM Food, New Delhi (2015).
- International Conference on New Plant Breeding Molecular Technologies – Technology Development and Regulation, Jaipur (2014).
- International Conference on Climate Change and Implication for Water Resources and Nutrition, Bangalore (2013).
- International Conference on Biotechnology Based Sustainable Agriculture, New Delhi (2009).
- International Conference on Recent Scientific Developments in Agricultural Biotechnology: Sharing Knowledge and Experience, New Delhi (2006).
- Seminar Series on Benefits and Safety of GM Plants and Foods (ongoing since 2003).
- First International Seminar on Genetically Modified Plants / Foods, Hyderabad (1999).

## NUTRITION AND HEALTH

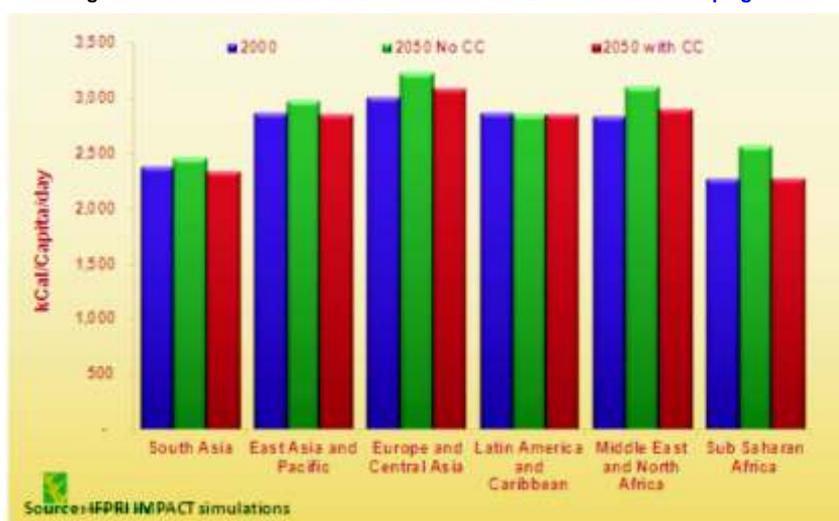
- Conference on Whole Grain & Health Benefits, New Delhi (2017)
- Recent Developments in Food Control System & Microbiome & Health, New Delhi (2016)
- Seminar on Diet, Nutrition and Physical Activity for Health with special reference to Microbiome and Metabolism, New Delhi (2016)
- Workshop on Food Consumption, Anthropometry and Physical Activity in India, New Delhi (2015).
- International Conference on Role of Diet, Physical Activity and Lifestyle for Promoting Health, Colombo (2015).
- 11th International Food Data Conference: Food Composition and Public Health Nutrition – Cosponsored by ILSI-India (2015).
- Study on Multiple Nutrients Fortification of Rice (ongoing)
- Research Project on Evaluation of UV Index in Different Regions of India (2015).
- Survey on Nutrition Labeling and Health Claims in India, Bangladesh, Nepal and Sri Lanka (2014)
- Research Project on Growth Velocity Reference Standards in Healthy School Going Children aged 5-16 years (2014)
- Conference on Processed Foods for Nutrition Security, New Delhi (2014).
- Workshop on Milk Fortification as a Strategy to Address Vitamin D Deficiency, New Delhi (2013).
- Pilot Project on The effect of a short term lysine supplementation in improving muscle strength in pre-pubertal Indian girls (2013)
- Research Project on Vitamin D Fortified Milk on Calcium Vitamin D Parathyroid hormone axis in School Children aged 11-14 Years (2012)
- Brainstorming Session on Proteins, New Delhi (2012).
- Seminar on Nutrition and Lifestyle For Emerging NCD Challenges, New Delhi (2012).
- National Conference on Health & Longevity Through Chai: The Wonder Beverage, New Delhi (2011).
- National Conference on functional foods entitled Processed Foods & Beverages for Health: Beyond Basic Nutrition, Surajkund (2011).
- Conference on Micronutrient Fortification of Foods: Science, Application & Management (2011).
- Symposium on Eat Smart for Health and Wellness: Importance of Breakfast (2010).

## ILSI-India Scientific Initiatives

- Brainstorming Session on Labeling and Health Claims, New Delhi (2010).
- Scientific Conference on Understanding and Managing Sweetness, New Delhi (2009).
- Symposium on Probiotics for Health – An Indian Perspective, New Delhi (2009).
- First National Conference on Nutrition and HIV/AIDS: From Knowledge to Action, Nagpur (2008).
- Conference on The Role of Micronutrients in Child Development: Give Kids a Good Start, New Delhi (2007).
- Conference on Healthy Childhood for Healthy Adulthood: Role of Nutrition, New Delhi (2006).
- Conference on Management and Prevention of Childhood Obesity through Nutrition Strategies and Physical Activity, New Delhi (2006).
- National Seminar on Importance of Nutrition for Bone Health, New Delhi (2006).
- National Conference on Nutrition & Hydration for Excellence in Sports Performance (2005).
- National Conference on Eradicating Micronutrient Malnutrition for Better Health and Higher Economic Growth, New Delhi (2005).
- Indo-US Conference on Recent Scientific Developments in Vitamin D and Health, Hyderabad (2009).
- Conference on Nutrition and Self Care for Healthy Aging, Hyderabad (2005).
- Conferences on Micronutrient Fortification of Foods in Nepal, Dhaka and Sri Lanka (2000, 2003 and 2004).
- National Seminar on Importance of Zinc in Human Health, New Delhi (2004).
- Seminar on Early Child Nutrition, Hyderabad (2003).
- International Seminar on Nutritional Labeling and Health Claims, Mumbai (2001).
- Seminar on Diabetes and Nutrition, Goa (2000).
- 17 international/national/ regional conferences to create awareness on technologies / costs / benefits of micronutrient fortification of foods and encouraged production and research on fortified foods (ongoing project since 1999).

### Impact of Climate Change on Calorie Consumption

Average of 4 Global Climate Model and 4 scenarios = 12% decline in developing countries



Source: From Presentation by Dr Mark W. Rosegrant, Director, Environment and Production Technology Division, IFPRI At International Conference on Climate Change and Implications for Water Resources & Nutrition Security organized by ILSI-India and ILSI RF CIMSANS



### Government

- Ministry of Agriculture, Forestry and Fisheries, Government of Japan (MAFF)
- Ministry of Agriculture and Forests, Bhutan
- Agriculture and Processed Food Products Export Development Authority
- Department of Biotechnology, Ministry of Science and Technology, Government of India
- Tea Board, Ministry of Commerce
- Department of Drinking Water Supply, Government of India
- Ministry of Earth Sciences, Government of India
- Ministry of Environment and Forest, Government of India
- Export Inspection Council, Ministry of Commerce and Industry, Government of India
- Ministry of Food Processing Industries, Government of India
- Food Safety & Standards Authority of India (Ministry of Health and Family Welfare), Government of India
- Ministry of Food, Bangladesh
- Department of Food Technology and Quality Control, Kathmandu, Nepal
- Ministry of Health and Family Welfare, Government of India
- Ministry of Health, Nutrition and Indigenous Medicine, Government of Sri Lanka
- National Horticulture Mission (NHM), Ministry of Agriculture, Government of India
- Ministry of Rural Development, Government of India
- Ministry of Science & Technology, Government of India
- Ministry of Technology and Research, Government of Sri Lanka
- Ministry of Water Resources, Government of India
- Ministry of Women and Child Development, Government of India

### Research Institutes

- Ministry of Agriculture Government of India
- All India Institute of Medical Science, New Delhi
- Indian Academy of Pediatrics – Nutri Chapter, New Delhi
- Defense Food Research Laboratory, Mysore
- Center for DNA Fingerprinting and Diagnostics, Hyderabad
- Department of Food Technology and Quality Control, Kathmandu
- Indian Council of Agricultural Research Institute
- Indian Council of Medical Research, New Delhi
- Indian Institute of Toxicology Research, Lucknow
- Institute of Nuclear Medicine and Allied Sciences (INMAS), New Delhi
- Industrial Technology Institute, Colombo
- Medical Research Institute, Colombo
- National AIDS Control Organization, New Delhi
- National AIDS Research Institute, Pune
- National Dairy Research Institute, Karnal
- National Institute of Nutrition, Hyderabad
- National Tea Research Foundation, Kolkata
- Post Graduate Institute of Medical Education and Research, Chandigarh
- St. John Research Institute, Bangalore
- Sri Lanka Standards Institutions, Colombo



## International Organizations

- Food & Agriculture Organization
- Global Alliance for Improved Nutrition
- International Commission for Microbiological Specifications for Foods
- National Institute of Health (NIH), USA
- OLDWAYS, USA
- United Nations International Children's Emergency Fund
- United States -Asia Environmental Partnership
- USAID India
- World Food Program
- WHO India Office and SEARO
- Welcome Trust

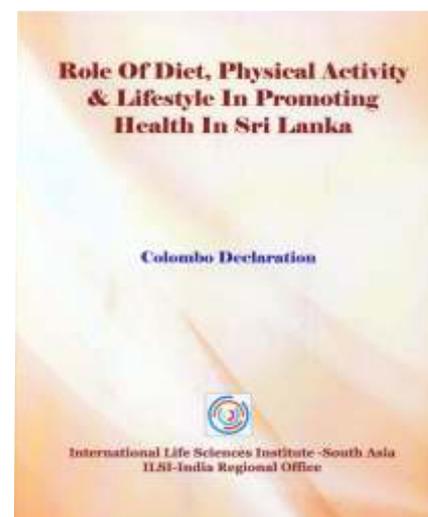
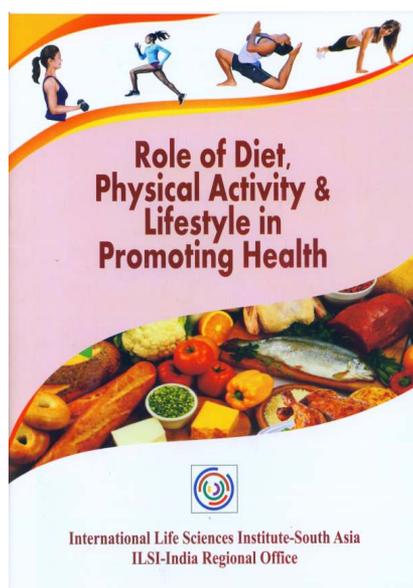
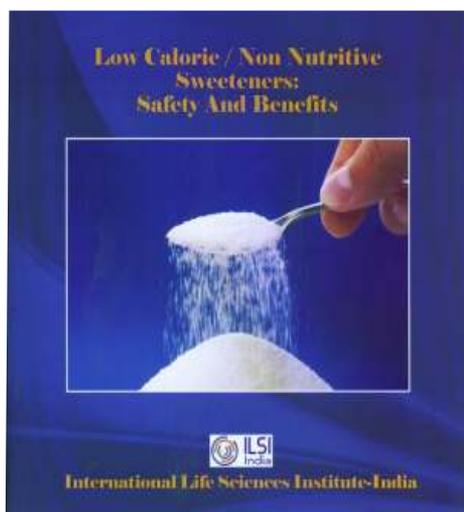
## ILSI Entities

- ILSI GC
- ILSI Research Foundation
- ILSI Branches in 17 Regions / Countries

## Industry

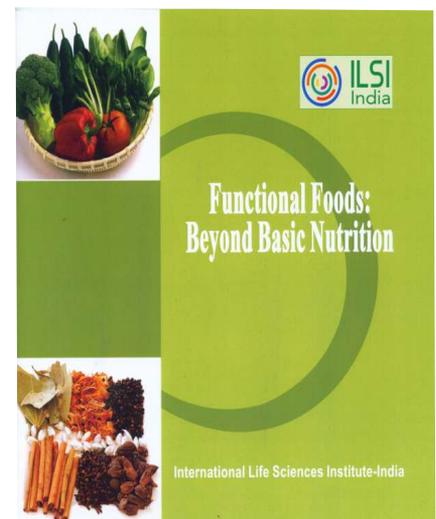
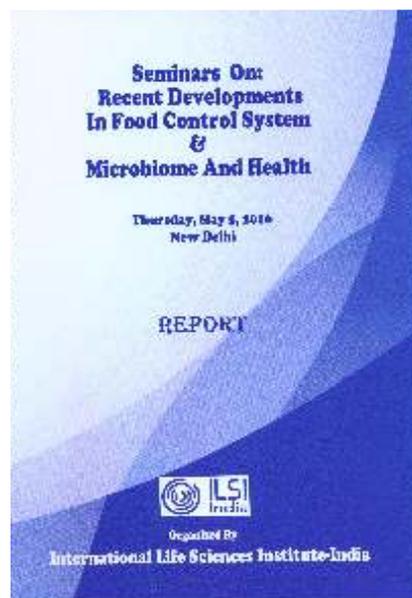
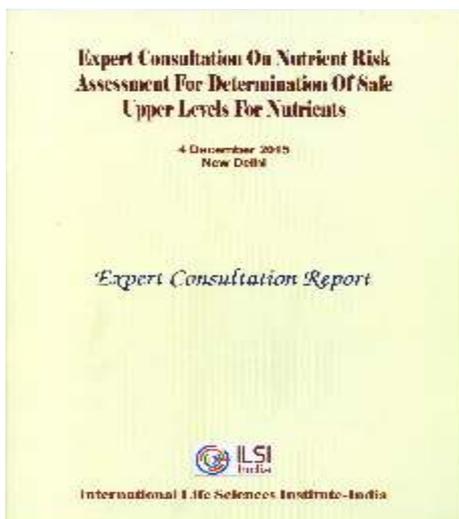
- • Agri - Business Companies
- • Food & Beverage Companies
- • Food Ingredient Manufacturers
- • Nutraceutical Companies
- • Packaging Material Manufacturers

- Report on Seminars on Recent Developments in Food Control System & Microbiome & Health
- Monograph on Role of Diet, Physical Activity & Lifestyle in Promoting Health
- Report of Workshop on Food Consumption, Anthropometry & Physical Activity Survey
- Report of Expert Consultation on Nutrient Risk Assessment for Determination of Safe Upper Levels for Nutrients
- Colombo Declaration on Role of Diet, Physical Activity and Lifestyle for Preventing NCDs and Promoting Health in Sri Lanka
- Expert Consultation on Nutrient Risk Assessment for Determination of Safe Upper Levels for Nutrients
- Monograph on Low Calorie / Non Nutritive Sweeteners: Uses & Safety
- Report on Food Additives: Safety And Benefits
- Report on New Plant Breeding Molecular Technologies –Technology Development and Regulation
- Report of International Conference on Infrastructure Needs for a Food Control System: Roadmap for Regional Harmonization
- Report of International Conference on Climate Change and Implications for Water Resources & Nutrition Security
- Report on Regulatory Science for Risk Assessment in Agriculture Biotech
- Report on Conference on Processed Foods for Nutrition Security
- Monograph on Functional Foods Beyond Basic Nutrition
- Monograph on Health & Longevity through Chai, the Wonder Beverage
- Report of Conference on Micronutrient Fortification of Foods: Science, Application & Management
- Nutrition and Hydration Guidelines for Excellence in Sports Performance
- Guidelines and Criteria for Evaluation of Efficacy, Safety and Health Claim of Probiotic in Food Products in India
- Monograph on Fortification of Milk with Vitamin D: Strategy To Eliminate Vitamin D Deficiency In India.
- Report on Climate Change and Implications for Water Resources and Nutrition Security
- Proceedings of Seminar on Scientific Criteria for Harmonization of Food Control System
- Report of Seminar on SPS/TBT Agreements and Codex - Implications for Indian Food Industry
- Report of Conference on New Technologies in Food Processing



# ILSI-India Publications

- Report of Workshop on Science Based Approaches to Harmonization of Regulatory Food Quality and Safety Measures in SAARC Region
- Report of Conference on Elimination of Micronutrient Deficiencies through Fortification of Food
- Report of International Conference on Biotechnology for Sustained Productivity in Agriculture - Hyderabad
- Executive Summary of South Asian Conference on Micronutrient Fortification of Foods: Nepal Perspective, Kathmandu, Nepal
- Report of South Asian Conference on Food Safety, Manesar, Gurgaon
- ILSI-INDIA Series on Diabetes Mellitus (Type 2 Diabetes)
  - Series No.1 - Epidemiology and Determinants of Type 2 Diabetes in South Asian Countries
  - Series No.2 - Prevention and Management of Type 2 Diabetes
- Report of International Conference on Water Quality Management : Vision 2025, Jaipur
- Status Papers on Pesticide Residues in Water, Milk and Milk products, Cereals, Meat, Fish, Poultry, Vegetable oils and Oilseeds, Soil and Human Tissues
- Report of Regional Meeting on Modernizing Food Control System in SAARC Countries, Kathmandu, Nepal
- Report of Southern Regional Conference on Fortification of Processed Foods
- Report of North-Eastern Regional Conference on Fortification of Processed Foods
- Monograph on Eradication of Micronutrient Malnutrition for Better Health and Faster Economic Growth
- Compendium of Presentations made at National Conference on Nutrition and Hydration for Excellence in Sports Performance
- Monograph on Nutrition and Hydration Guidelines for Excellence in Sports Performance
- Paper on Surveillance and Monitoring System for Food Safety for India
- Special Reports on Biotechnology, Micronutrient Fortification of Foods, Diabetes and Nutrition, and Food Safety, Risk Assessment in Pesticide Residues in Water and Foods
- Monograph on Micronutrient for Child Development
- Report of National Conference on Nutrition and HIV / AIDS
- Monograph on Be Fit Not Fat – Fitness Mantra for Children
- Monograph in Regional Languages on “Get the Best from Your Food” prepared by FAO and published by ILSI-India





## International Life Sciences Institute-India

New Delhi, India

Email: [info@ilsi-india.org](mailto:info@ilsi-india.org) Website: <http://www.ilsi-india.org>