

First National Seminar on Personalized / Precision Nutrition for Sustainable Health: From Theory to Practice

Date

Tuesday, 12 September, 2023

Time

3.30 – 6.30 PM IST

Camp: New Delhi

Web Platform: CISCO WEBEX

**The CISCO Webex Link for
joining the Seminar is:**

<https://ilsi-india.webex.com/ilsi-india/j.php?MTID=m81652dad9c488e5247a0b48dbb338213>



International Life Sciences Institute India

Introduction

Nutrition and Health are intimately linked and the scientific evidence that underpins the relationship forms the basis for nutrition recommendations. Dietary guidelines evolved in different countries provide guidance on dietary recommendations for general population according to age, activity, pregnancy and lactation.

Traditionally, nutrition science assumed that all people absorb and metabolize nutrients in a similar manner and that differences in daily requirements are based primarily on age, sex, pregnancy, and breastfeeding status. However, current evidence has shown that people's metabolisms respond differently to dietary components and diets due to the differences in genetics, lifestyle, gut microbiome, epigenetics, environmental exposure, and current nutritional status (Martin et al., 2017). This has led to the beginning of the era of Personalized or Precision Nutrition and the concept of “Food is Medicine” for better health.

Precision or Personalized Nutrition addresses the large heterogeneity in individual's responses to diet on the basis of their metabolic profile, background, dietary habits, eating pattern, phenotype, genetic mapping or background, biochemical parameters or blood biomarkers, anthropometrics, sleeping pattern (circadian rhythm) , physical activity, microbiome, food environment, health status, socio-economic, psychosocial characteristics, and environmental factors. It involves tailoring of nutrition based on the specific requirements of each person i.e., it can be general wellbeing or specific conditions.

The goal for the future of nutrition, and personalized nutrition in particular, should be to provide recommendations that are complete solutions in terms of whole foods, including fortified foods, and supplements that meet the needs and goals of the individual. The Personalized / Precision Nutrition recommendations have to form part of public health strategies and require supportive evidence built on biological mechanisms, observational studies, and nutrition and dietary interventions. They have to be built on scientifically validated rules according to established criteria.

There may be various ways to impart advice such as decision tree approach, crowd coaching, diet/nutrition recommendation, algorithm, individual advice, apps. The industry will have to take the initiative to produce products according to general trends catering to Personalized / Precision Nutrition. Such products have to be easy to use as, high quality, affordable , accessible and tasty.

An effective, efficient and productive regime of Personalized / Precision Nutrition has to be built by effective public private partnership involving research institutes, government, industry, medical professionals, dieticians, nutritionists, experts on Artificial Intelligence and requires good infrastructure in the form of laboratories and trained manpower.

Objectives

The Seminar will look at:

- The need for Personalized or Precision Nutrition.
- Personalized/ Precision Nutrition in Indian traditional knowledge.
- Current status of personalized or precision nutrition in India as well as global.
- Development of scientifically sound, practical, clinically relevant Personalized Nutrition solutions to address health issues.
- The diagnostics technologies or tools that have been used for personalized or precision nutrition.
- Best research practices for benefits and risk associated with personalized nutrition and Identify research needs. How the challenges of infrastructure, expensive technology, trained manpower, resource constraints (Laboratory for Genetic Testing), gaps in research can be overcome.
- Whether personalized nutrition or precision nutrition will be able to check non-communicable diseases such as cardiovascular diseases, type 2 diabetes and cancer etc.
- Roles of different stakeholders in implementing personalized or precision nutrition.
- How the science can be applied to develop products.

- Value of personalized nutrition approach for nutrition care process.
- Look at the issues about privacy of data - protecting consumer privacy in the use of precision nutrition, technologies and tests, data management, prevention of misuse (insurance and others).

—==== Output —====

A monograph on Personalized or Precision Nutrition providing Best Practices, Principles/Guidelines.

—==== AGENDA —====

CHAIR

Dr. B. K. Nandi, Chairman, ILSI India

Dr. B. Sesikaran, Chairman, K-FFIG

3.30 PM IST Opening of Meeting Room, Assembly and Announcements
Ms. Rekha Sinha, Executive Director, ILSI India

4.00 PM-4.10 PM Welcome by
Dr. B. K. Nandi, Chairman, ILSI India

4.10 PM-4.20 PM Observations by
Dr. B. Sesikaran, Chairman, K-FFIG

PRESENTATIONS

4.20 PM- 4.40 PM Personalized Nutrition: Nutrigenomics as a tool in Dietetic Practice - Current Approach and Challenges in India
Dr. Geeta Dharmatti, Director Geeta Nutri Heal Consultancy, Chief Nutrigenomic Counsellor: Gene Support, Pune

4.40 PM-4.55 PM Personalized / Precision Nutrition and Indian Traditional Knowledge
Dr. Shobha Udipi, Research Head and Director & Hon. Director, Integrative Nutrition and Ayurceuticals, Medical Research Centre-Kasturba Health Society, Mumbai and
Dr Ashish Phadke, Hon Dy Director, Division of Endocrine & Metabolic Disorders, Life Style Modifications and Yoga

4.55 PM-5.15 PM Food is Medicine – Role of Precision Nutrition in Non-Communicable Diseases (NCDs)
Dr. Saroja Voruganti, Associate Professor, Department of Nutrition, Associate Director for Clinical Research Services, Nutrition Research Institute, University of North Carolina, Chapel Hill

5.15 PM-5.35PM Food is Medicine and Role of Personalized Nutrition in Maternal and Child Health
Dr. Samantha Huey, Maternal and Child Nutrition Postdoc Fellow, Division of Nutritional Sciences, Cornell University, New York

5.35 PM-5.50 PM Use of Artificial Intelligence in Personalized / Precision Nutrition and Data Protection
Dr. Shaji Krsihnan, Mathematical Modelling/AI Expert, The Netherlands

5.50 PM-6.05 PM Personalized / Precision Nutrition for Improving Public Health - Industry Perspective
Dr. Sangeetha Sirinivasan, Vice president Health & Wellness, Camline Fine Sciences (CFS), Mumbai

05 PM- 6.25 PM Discussion on: Research Needs, Infrastructure, Capacity Building, Next Steps

6.25 PM -6.30 PM Vote of Thanks

Speakers



Dr. Biplab K. Nandi



Dr. B. Sesikeran



Dr. Geeta Dharmatti



Dr. Shobha Udipi



Dr. Saroja Voruganti



Dr. Samantha Huey



Dr. Shaji Krsihnan



Dr. Sangeetha Sirinivasan

Who Should Participate

The Seminar will be of interest to medical professionals, researchers, scientists and experts from Government, Academia, International Organizations, the Industries manufacturing processed foods, food ingredients, functional foods, bioactives and nutraceuticals, NGOs and R&D organizations and Life Sciences organizations / laboratories working on Nutrition and Health.

Free Registration

There is **no registration fee** however it is important to register by **Friday, September 8, 2023**. To register click the following link:

<https://forms.gle/QCvgxtgKrzX92Z9m8>

ILSI India will send Registration Confirmation and the Participation Link.

If the link does not open please copy to the browser to open or contact ILSI India for Soft Copy Registration Form at vbisht@ilsi-india.org, Tel: 011-41654760 / 29848752 / 29843478.

About ILSI India

ILSI India is an entity of the International Life Sciences Institute (ILSI), headquartered in Washington DC., USA. ILSI India provides scientific inputs and secretariat assistance to the South Asian Region. It has headquarters in New Delhi. It is a scientific, non-profit organization.

ILSI India designs programs to foster multi-sector collaboration for conducting, summarizing, and disseminating science related to most pressing health issues in the region. ILSI strategy encourages global action on identifying and then resolving outstanding scientific questions in the four thematic areas that capture the core of ILSI / ILSI India's work: Food Safety, Risk Science and Toxicology, Nutrition and Health, Sustainable Agriculture and Nutrition Security. They also help elucidate new opportunities for driving scientific progress. All activities follow Principles of Scientific Integrity which are part of ILSI Mandatory Policies. More information can be downloaded from: <http://www.ilsi-india.org>.



For Further Information please contact:

Mrs. Swati Dogra, Deputy Director, ILSI India at: sdogra@ilsi-india.org

Mrs. Varsha Bisht, Manager, ILSI India at: vbisht@ilsi-india.org,

Phone: 91-11-41654760