# POSITIONING WOMEN'S NUTRITION AT THE CENTRE OF SUSTAINABLE DEVELOPMENT



MICRONUTRIENT FORUM GLOBAL CONFERENCE / 24-28 OCTOBER, 2016 CANCÚN, MEXICO



# ABOUT THE MICRONUTRIENT FORUM

The Micronutrient Forum (MN Forum) serves as a global catalyst and convener for sharing expertise, insights and experience relevant to micronutrients in all aspects of health promotion and disease prevention, with special emphasis on the integration with relevant sectors.

The primary objective of the MN Forum is to foster dialogue among the research, policy, clinical, program and private sector communities to facilitate the translation of evidence for policy and program planning, and to inform research needs and priorities based on evidence gaps to support programs.

Our vision is a world in which all people have access to essential micronutrients at levels needed to promote health and prevent disease. First established in 2006, the Forum has produced three highly successful global conferences: in Istanbul (2007), Beijing (2009) and Addis Ababa (2014).

Presently the Micronutrient Forum is built on a broad foundation of technical and financial support. Leadership is provided by the International Steering Committee of about 15 individuals actively involved in issues related to micronutrients from academia and diverse normative, policy and implementing organizations across the globe. Coordination is provided by a Secretariat currently hosted by the Micronutrient Initiative in Ottawa, Canada.

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# HOLD UP HALF THE SKY

in women and girls' nutrition, communities and countries do better. Simply put, women and girls deliver! Improving nutrition is only possible when girls and women are leading the charge, making it not just the right thing to do, but also the smart thing to do. To obtain the world we want, we have to recognize that the virtuous circle of a better future starts with the girl child. This is why the SUN Movement Strategy and Roadmap 2016-2020, as well as many countries, agencies and communities, put girls and women at the heart of all action, everywhere.

GERDA VERBURG

United Nations Assistant Secretary-General, Coordinator of the Scaling up Nutrition (SUN) Movement and Keynote Speaker at the Micronutrient Forum Global Conference 2016



#### DEAR COLLEAGUES,

On behalf of the Micronutrient Forum's International Steering Committee, I am honoured to welcome you to the 4th Micronutrient Forum Global Conference.

In Cancún, we anticipate the participation of over 700 delegates from 73 countries, representing 336 organizations covering a wide range of sectors involved in research, program delivery, policy, advocacy, business and philanthropy.

The 2016 conference marks the Forum's first visit to Latin America. Mexico was the chosen location in recognition of its achievements in addressing micronutrient deficiencies at the population level, and because of its commitment to the design and implementation of evidence-based public health policies and programs. At the same time, Mexico, like many countries around the world, continues to strive to eliminate micronutrient malnutrition, while simultaneously addressing the growing challenge of obesity and related non-communicable disease.

While maintaining the broad interest in all aspects of micronutrients, the theme for this year's gathering will focus on women's nutrition.

Women, often the gatekeepers of food choice and preparation in the home, are a focus for many nutrition interventions, and key partners in the delivery of programs—for children, families and communities. The health and well-being of women and girls are, consequently, critical to achieving several of the Sustainable Development Goals.

The time has come to better understand the burden, the context and the most innovative and effective solutions to improve policy, and the design and delivery of programs, for the increased equity, survival, health and well-being of women and girls.

We have worked hard to build a relevant and engaging program that continues the Micronutrient Forum's mandate to bridge scientific discovery and program delivery. We look forward to your active engagement, and to meeting many of you over the next week!

DR. LYNNETTE NEUFELD Chair, Micronutrient Forum International Steering Committee



#### WELCOME,

I am delighted to welcome you to Cancún, Mexico to participate in the Micronutrient Forum Global Conference 2016.

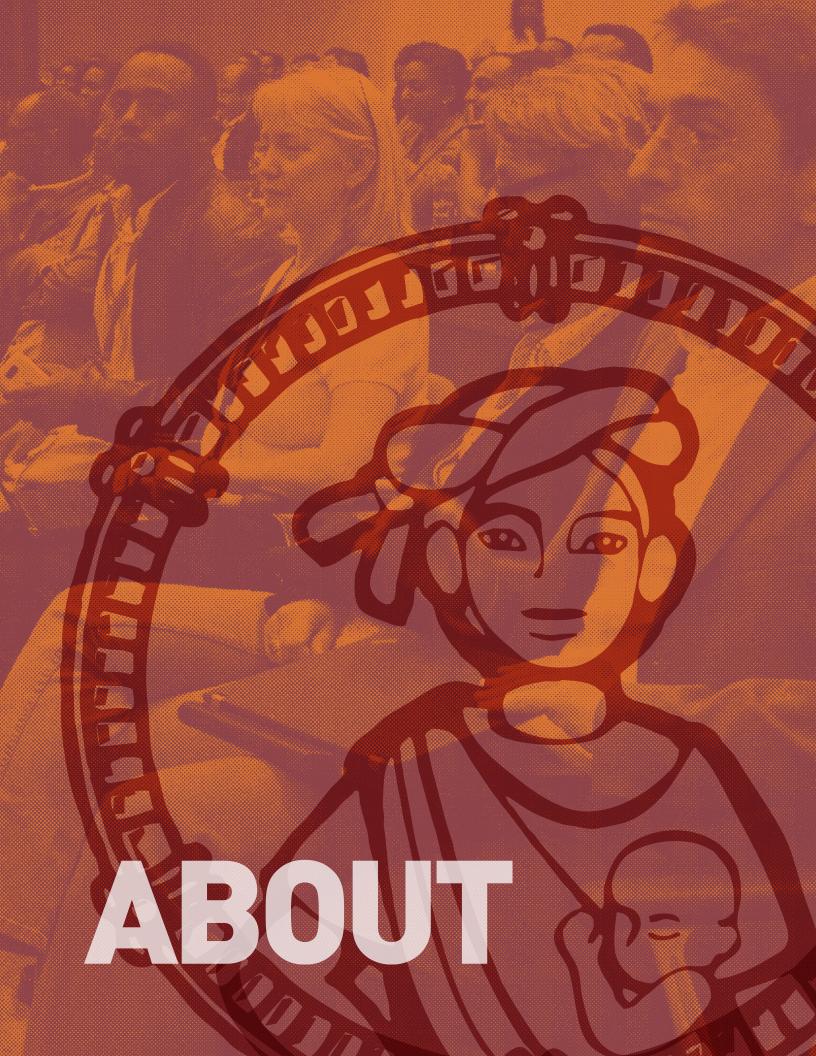
Being the first time that the Global Conference takes place in Latin America, Mexico was chosen as the host country because it has had signficant achievements in combating micronutrient deficiencies in children and women through government-sponsored programs such as PROSPERA (formerly Oportunidades) and Liconsa, with participation from different government and non-government organizations. Despite advances achieved as a result of these programs, Mexico continues to have an unacceptably high prevalence of micronutrient deficiencies. Therefore, this conference is very pertinent for the improvement of the mission-oriented research that informs the programs focused on reducing micronutrient deficiencies in the country.

It's gratifying to see that many of you have traveled long distances to join us this week to share your experiences.

On behalf of the Local Organizing Committee, thank you for coming. It's a pleasure to have you here! ¡Saludos!

DR. JUAN ANGEL RIVERA DOMMARCO Chair, Micronutrient Forum Global Conference 2016 Local Organizing Committee





#### October 24-28, 2016 Cancún, Mexico

## **ORGANIZERS**

# MICRONUTRIENT FORUM INTERNATIONAL STEERING COMMITTEE

#### Dr. Lynnette Neufeld (Chair)

Global Alliance for Improved Nutrition (GAIN)

#### Dr. Rafael Flores-Ayala (Co-Chair)

U.S. Centers for Disease Control and Prevention (CDC)

#### Dr. Luz Maria De-Regil (Co-Chair)

Micronutrient Initiative (MI)

#### Dr. Lindsay Allen

UDSA-ARS Western Human Nutrition Research Center (WHNRC)

#### Dr. Howarth Bouis

HarvestPlus, International Food Policy Research Institute (IFPRI)

#### Dr. Kenneth Brown

Bill & Melinda Gates Foundation (BMGF)

#### Dr. Ian Darnton-Hill

University of Sydney/Tufts University

#### Dr. Juan Angel Rivera Dommarco

National Institute of Public Health (INSP), Mexico

#### Dr. Klaus Kraemer

Sight and Life

#### Dr. Katharine Kreis

**PATH** 

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United Nations Children's Fund (UNICEF)

#### Dr. Daniel Raiten

National Institutes of Health (NiH)

#### Dr. Marie Ruel

International Food Policy Research Institute (IFPRI)

#### Dr. Emorn Udomkesmalee

Mahidol University, Thailand

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We would like to thank the following individuals who helped develop the Cancún 2016 Micronutrient Forum Conference Program:

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Program Co-ordinator

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#### Dr. Lindsay Allen

USDA-ARS Western Human Nutrition Research Center (WHNRC) Track 2 Chair

#### Dr. Rolf Klemm

Helen Keller International (HKI) and Johns Hopkins University (JHU) *Track 3 Chair* 

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Sight and Life Track 4 Chair

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Food Fortification Initiative (FFI)

#### October 24-28, 2016 Cancún, Mexico

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Cornell University (CU) & Society for Implementation Science in Nutrition (SISN)

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Inter-American Development Bank (IDB)

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#### Ms. Katie Tripp

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Global Alliance for Improved Nutrition (GAIN)

# LOCAL STEERING COMMITTEE

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National Institute of Public Health (INSP), Mexico, Chair

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Infantil de México Federico Gómez

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PROSPERA Program

#### Dr. Daniel Aceves Villagrán

PROSPERA Program

#### Dr. Salvador Villalpando

National Institute of Public Health (INSP), Mexico

#### Mr. Hugo Zertuche

PROSPERA Program

# **ABOUT THE CONFERENCE**

#### **OVERVIEW**

The Micronutrient Forum Global Conference to be held in Cancún, Mexico, from October 24-28, 2016 (with one additional day of Symposia on October 23) is the fourth gathering of the international community since the Forum's founding in 2006. We are welcoming over 700 participants from 73 countries and 336 organizations around the world.

This year's event will take place at the Cancún International Convention Center, Boulevard Kukulcán KM. 9 1er Piso, Zona Hotelera, 77500 Cancún, Q. Roo.

#### SCIENTIFIC PROGRAM

The conference has organized 46 sessions on a wide range of topics relevant to micronutrient research, program delivery, policy-making and resourcing, featuring over 200 speakers.

The sessions are divided into four tracks:

Track 1: Measuring and interpreting information on micronutrient status and program coverage

Track 2: Effects of micronutrient interventions on indicators and functional outcomes

Track 3: Scaling up micronutrient interventions in vulnerable populations: bridging the gaps between evidence and implementations

Track 4: Transforming the enabling environment to forge a future for micronutrients — what will it take?

#### POSTER PRESENTATIONS

Over 500 posters will be presented—half on Tuesday and Wednesday and the other half on Thursday and Friday — in the exhibition area outside the Gran Cancún plenary room on the third floor of the Convention Center. The presenters will be attending their posters and available for guestions between 1:00 – 2:00 pm each day (Tuesday – Friday). There will be a reception for poster presenters on Tuesday evening at 7:00 pm.

#### LEARNING CENTRES

The learning centres offer a unique opportunity for a one-on-one guided experience. Each session will be led by a multi-disciplinary team of experts. These sessions take place throughout the duration of the conference. Please refer to the program schedule starting on page 15 for more information.

Organizations leading the learning centres include:

Cornell University

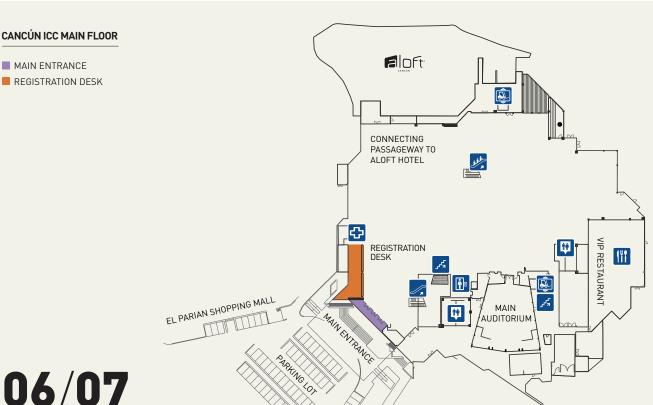
Global Alliance for Vitamin A (GAVA)

Global Alliance for Improved Nutrition (GAIN)

Global Alliance for Improved Nutrition (GAIN) Canada and Amway

The Home Fortification Technical Advisory Group (HF-TAG)

Micronutrient Initiative (MI)



#### **ABOUT THE CONFERENCE**

National Institute of Public Health (INSP), Mexico PATH

United Nations Children's Fund (UNICEF)

U.S. Centers for Disease Control and Prevention (CDC)

World Health Organization (WHO)

#### **EDUCATIONAL VISITS**

Attendees at the conference will have the opportunity to visit local primary health care centres where the world-renowned PROSPERA program takes place, witnessing face-to-face interactions between the health care staff and the program's beneficiaries. Translation from Spanish into English will be provided.

The visits are three hours in length, taking place on Tuesday and Thursday from 10:00 am to 1:00 pm. Five groups of nine individuals will be taken to five different centres. Participants are asked to meet in the lobby of the Convention Center at 9:00 am, and will be directed to the transportation waiting outside. Wear comfortable clothing, bearing in mind the cultural norms of Mexico, and bring water. Specific instructions regarding photography will be given on-site.

The Micronutrient Forum is grateful to the Government of Mexico, which runs the PROSPERA program, for providing this opportunity.

The PROSPERA program develops and coordinates social policy initiatives to improve education, health, nutrition, productivity, income generation and economic wellbeing for citizens existing in a state of extreme poverty.

#### SYMPOSIA SPONSORS

In addition to the scientific program, the Micronutrient Forum has invited organizations to offer their own sessions, enriching and diversifying the Conference experience for all attendees. Consult the full schedule for more details about the topics, times and locations of the sponsored symposia.

The following organizations will be participating in these sessions:

Bill & Melinda Gates Foundation

DSM

Food Fortification Initiative (FFI)

GIZ GmbH

Global Alliance for Improved Nutrition (GAIN)

Global Nutrition Report (GNR)

#### **CANCÚN ICC LEVEL 2**

- COZUMEL (C)
- 1 & 5 Session Room
- 2 Session Room
- 3 Session Room
- 4 Session Room
- TULUM (T)

1 & 2 Session Room: Sponsored Symposia, Learning Centres and Private Meetings

3 Media Room

- XCARET (X)
- 2 Business Centre 3 Lactation Room
- 4 Micronutrient Forum
- Office
- CONTOY SPEAKERS ROOM



#### **ABOUT THE CONFERENCE**

#### SYMPOSIA SPONSORS CONTINUED

The Home Fortification Technical Advisory Group (HF-TAG)

HarvestPlus

Iodine Global Network (IGN)

International Atomic Energy Agency (IAEA)

International Food Policy Research Institute (IFPRI)

Micronutrient Initiative (MI)

Rainer Gross Award

Scaling Up Nutrition Movement (SUN)

Sight and Life

Sociedad Latinoamericana de Nutrición (SLAN) and Instituto de Nutrición de Centro América y Panamá (INCAP)

Society for Implementation in Nutrition (SISN)

Strengthening Partnerships, Results, and Innovation in Nutrition Clobal Policy (SPRING)

in Nutrition Global Policy (SPRING)

**Tufts University** 

Nutrition Leadership Programmes

United Nations Children's Fund (UNICEF)

University of California, Davis

Vitamin Angels

World Food Programme (WFP)

World Health Organization (WHO)

#### **EXHIBITORS**

The exhibitors' booths are located in the exhibition area outside the Gran Cancún plenary room on the third floor of the Convention Center. We value the support of the exhibitors and encourage you to visit them and take advantage of their activities and resources.

#### **EXHIBITORS INCLUDE:**

Sight and Life

BioAnalyt GmbH

Global Alliance for Improved Nutrition (GAIN)

Quansys Biosciences

HarvestPlus

Nutriset

BASF SE

DSM Brazil

The Hospital for Sick Children (Sick Kids)

Micronutrient Forum

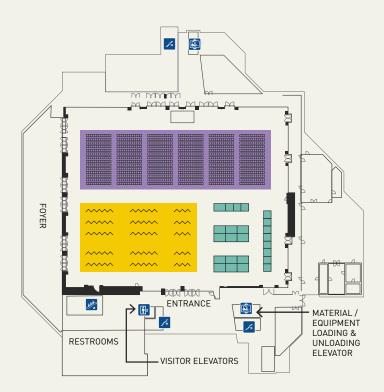
Micronutrient Initiative (MI)

#### **CANCÚN ICC LEVEL 3**

GRAN CANCÚN PLENARY ROOM

POSTER DISPLAY AREA

EXHIBITOR BOOTHS



#### **ABOUT THE CONFERENCE**

#### **AWARDS AND CONTESTS**

The Micronutrient Forum will present three awards during the conference:

- Career Achievement in Evidence Translation Award (sponsored by the Mathile Institute for the Advancement of Human Nutrition)
- Hidden Hero of Hidden Hunger Award: Dr. Guillermo Arroyave (sponsored by the Inter-American Development Bank)
- Early Career Awards (2)
   (sponsored by the International Life Sciences Institute)

In addition, two other organizations will be presenting awards:

The Hildegard Grunow Foundation (HGF) will announce the winner of the Rainer Gross Prize to one whose work in developing societies probes outside the mainstream of conventional thought, and innovates our understanding in applied nutrition.

Sight and Life will announce the winner of the Elevator Pitch Contest: The Future of Micronutrient Innovation. This individual will share their idea with the conference attendees in a one-minute presentation.

#### **SOCIAL EVENTS AND RECEPTIONS**

Conference participants will be offered a number of opportunities to gather socially. Highlights include the welcome reception on Monday evening at 7:00 pm and the Poster Presenters' reception Tuesday evening at 7:00 pm

The Gala Dinner will be held on Wednesday night starting at 7:00 pm at the Iberostar Hotel. Dress is smart casual. Shuttles will depart from the Convention Center between 6:30 pm and 7:30 pm. The journey to the hotel will take 15 minutes. Shuttles will return participants from the hotel to the Convention Center between 9:30 pm and 11:30 pm.

#### PRACTICAL INFORMATION

#### **BADGE PICKUP/ON-SITE REGISTRATION**

Check-in and day registrations take place between 8:00 am and 7:00 pm from October 23 – 28 at the registration desk on the main floor of the Cancún International Convention Center, Boulevard Kukulcán KM. 9 1er Piso, Zona Hotelera, 77500 Cancún, Q. Roo.

#### MICRONUTRIENT FORUM INFORMATION BOOTH

For information and assistance please visit us at the Forum booth in the exhibitors' area outside the Gran Cancún plenary room on the third floor of the Convention Center.

#### **LACTATION FACILITIES**

A lactation room will be available in Xcaret 3 on the second floor of the Convention Center.

#### SOCIAL MEDIA

Reach out to the international community by sharing your experience at the Micronutrient Forum Global Conference in social media.

Tweet your "aha!" moments in your own channels, re-tweet from @MNForum and share on Facebook and LinkedIn

Twitter: @MNForum
Hashtag: #mnforum2016
Facebook: Micronutrient Forum

#### **MEDIA INQUIRIES**

EN ESPAÑOL: Dr. Homero Martinez, Senior Advisor, Micronutrient Forum hmartinez@micronutrient.org

**ENGLISH:** Ms. Susanne Ure, Communications Officer sure@micronutrient.org

#### TRAVELER PROTECTION GUIDELINES FOR THE ZIKA VIRUS

The U.S. Centers for Disease Control and Protection has provided guidance here: https://wwwnc.cdc.gov/travel/notices/alert/zika-virus-mexico

#### IN CASE OF EMERGENCY

In the event of an emergency, safety instructions for conference participants will be provided at the Micronutrient Forum booth on the third floor of the Convention Center, as well as in the following channels:

Twitter: @MNForum

Facebook: Micronutrient Forum

Emails updates will also be sent to all Conference participants.

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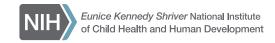
# DONORS AND SPONSORS

THE MICRONUTRIENT FORUM WOULD LIKE TO GRATEFULLY ACKNOWLEDGE THE GENEROSITY OF THE FOLLOWING ORGANIZATIONS:

MICRONUTRIENT FORUM CORE DONORS







MICRONUTRIENT FORUM GLOBAL CONFERENCE 2016 SPONSORS

**GOLD** 





#### **SILVER**





#### **AWARD SPONSORS**







The Micronutrient Forum would like to thank the Government of Mexico for its generous assistance, especially: Programa Inclusión Social — PROSPERO; Secretaria de Desarrollo Social (SEDESOL); Secretaria de Salud (SSA); Gobierno de Quintana Roo.



## **OVERVIEW**

### **SUNDAY 23**

#### SPONSORED SYMPOSIA

#### 8:30 TO 12:30

Initiatives to address data gaps in nutrition/Micronutrient Initiative (MI-TAN), Scaling Up Nutrition Movement (SUN) Secretariat, and the Bill & Melinda Gates Foundation (BMGF)

#### 10:30 TO 12:00

- Nutrition-sensitive programming: addressing the underlying determinants of malnutrition in Ecuador, Honduras and the Dominican Republic. Key examples of the WFP work in the region/World Food Programme (WFP)
- The responsibility of industry in public health nutrition/DSM

#### 2:00 TO 3:30

- Use of economic optimization modeling to design and manage micronutrient intervention strategies: recent model and policy engagement results/University of California, Davis
- Stories of change in nutrition/International Food Policy Research Institute (IFPRI)

#### 4:00 TO 5:30

- Stable isotope techniques help optimal formulation and impact assessment of food fortification programs/International Atomic Energy Agency (IAEA)
- A new global repository for food fortification: helping to map and track food fortification efforts globally/Global Alliance for Improved Nutrition (GAIN), Iodine Global Network (IGN), Food Fortification Initiative (FFI) and the Micronutrient Forum
- Positioning women at the center for successful nutrition outcomes: innovative case studies from Colombia, Laos and Malawi/ World Food Programme (WFP)

#### 5:30 TO 7:00

- Identifying gaps, challenges and innovative solutions in program planning, implementation and monitoring for 2016-2020/The Home Fortification Technical Advisory Group (HF-TAG)
- Approaches to prevent and control anemia: examples of global, national, district and community efforts/SPRING

#### **MONDAY 24**

#### 8:30 TO 12:00

■ Tackling the needs of women and children during the first 1000 days through an integrated agriculture nutrition health intervention (MAMA SASHA) using biofortified sweet potato/International Food Policy Research Institute (IFPRI)

#### 8:30 TO 10:00

#### SPONSORED SYMPOSIA

- Use of female community health volunteers (FCHV) as an effective strategy to improve coverage of micronutrient programs in Nepal: Celebrating success of 45 years of micronutrient programs/United Nations Children's Fund (UNICEF)
- Leveraging a proven approach to achieve large scale deployment of multi-micronutrient supplements to pregnant, nutritionally at risk, hard-to-reach women/Vitamin Angels

#### 10:30 TO 12:00

#### SPONSORED SYMPOSIA

- Iron and folic acid interventions in malaria endemic areas/World Health Organization (WHO) and the Micronutrient Initiative (MI)
- Market-based approaches to reduce micronutrient deficiencies in women of reproductive age and children—experiences from Ghana/GIZ GmbH

#### LEARNING CENTRE

 Mapping the multiple burden of malnutrition: your digital resource/Global Alliance for Improved Nutrition (GAIN) Canada and Amway

#### 2:00 TO 3:30

#### SPONSORED SYMPOSIA

- Elimination of IDD from the Americas: a public health triumph/ Global Alliance for Improved Nutrition (GAIN), Iodine Global Network (IGN), Food Fortification Initiative (FFI), and the Micronutrient Forum
- Implementation research to improve implementation outcomes (coverage, adherence, quality, and equity) of micronutrient/ nutrition programs and policies/Sight and Life and the Society for Implementation Science in Nutrition (SISN)
- Women's Nutrition Now: improving access to health and nutrition for pregnant women/Micronutrient Initiative (MI)

4:00 TO 5:30

**OPENING CEREMONY** 

5:30 TO 7:00

**WELCOME RECEPTION** 

#### **OVERVIEW**

TUESDAY-FRIDAY
30 MINUTE COFFEE BREAKS AT 10:00 AM AND 3:30 PM
LUNCH FROM 12:00 TO 1:00

#### **TUESDAY 25**

#### 8:30 TO 10:00

#### **OPENING KEYNOTE**

 Better nutrition: translating commitments into results and impact/Ms. Gerda Verburg, United Nations Assistant Secretary-General and Coordinator of the Scaling up Nutrition (SUN) Movement

#### 10:30 TO 12:00

#### **PLENARY**

 Positioning women's nutrition at the center of sustainable development <u>DEEP DIVE</u>

#### 1:00 TO 2:00

#### **LEARNING CENTRE**

- Measurement issues associated with biological and food specimen collection and analysis in household surveys/U.S. Centers for Disease Control and Prevention (CDC)
- Poster Presentations

#### 2:00 TO 3:30

#### **CONCURRENT SESSIONS**

- New biomarkers/indicators for assessing micronutrient status in population-based surveys
- Micronutrients in breastmilk and relationships to maternal and infant status
- Zinc intervention trials
- The food environment as a determinant of optimal dietary consumption
- Country ownership and leadership in working with multiple actors to promote policies, enable innovation and fund effective national micronutrient strategies
- Transformational leadership

#### 4:00 TO 5:30

#### **CONCURRENT SESSIONS**

- Global coverage of micronutrient interventions
- Interventions to increase micronutrients in breast milk **DEEP DIVE**
- Filling the data void in nutrition surveillance
- How has the arrival of the SDGs changed financing for nutrition?
- Climate change and micronutrient nutrition

#### 5:30 TO 7:00

#### SPONSORED SYMPOSIA

- The future of micronutrient innovation: Elevator Pitch Contest/ Sight and Life
- Progress in scaling up biofortification/HarvestPlus
- Optimal red blood folate concentration in women of reproductive age for prevention of neural tube defects: new guidelines and applications in low, medium and high income countries/World Health Organization (WHO) and U.S. Centers for Disease Control and Prevention (CDC)
- Rainer Gross Award

#### 7:00

#### ■ POSTER PRESENTATIONS AND COCKTAIL RECEPTION

# TRACK 1 Measuring and interpreting information on micronutrient status.

TRACK 2 Effects of micronutrient interventions on indicators and functional outcomes.

#### ■ TRACK 3 Scaling up micronutrient interventions in vulnerable populations: bridging the gaps between evidence and implementations.

■ TRACK 4 Transforming the enabling environment to forge a future for micronutrients— what will it take?

#### ■ Deep Dive

Opening Ceremony, Welcome Reception, Gala Dinner Learning Centres

Poster Presentations

- Mexico and Latin American Focus
- Keynotes
- Sponsored Symposia

#### **WEDNESDAY 26**

#### 8:30 TO 10:00

#### **PLENARY**

Use of evidence for the design and improvement of programs:
 Mexican experience

#### 10:30 TO 12:00

#### **CONCURRENT SESSIONS**

- Advances in program monitoring
- Micronutrient interventions to improve child development
- Effectiveness of large scale fortification
- Navigating vitamin A supplementation (VAS) decisions in different contexts
- Adolescent nutrition: achievements, challenges and future actions DEEP DIVE
- Ensuring high coverage and quality of micronutrient
- Interventions: what is needed from the health system?

#### 1:00 TO 2:00

#### **LEARNING CENTRE**

- Contributions of civil society organizations (CSO) in generating evidence for nutrition-specific and nutrition-sensitive interventions: what it takes to conduct an impact evaluation in local settings, challenges, and lessons learned
- Poster Presentations

#### 2:00 TO 3:30

#### **PLENARY**

 Updated prevalence of anemia, iron deficiency and vitamin A deficiency in settings of inflammation and globally: key findings from the BRINDA project

#### 4:00 TO 5:30

#### **CONCURRENT SESSIONS**

- Vitamin D in pregnancy and infancy: implications for maternal and child health
- Effects of iron supplementation on malaria and the gut microbiome
- Should there be regional guidelines for newborn vitamin A supplementation?
- Meeting micronutrient needs during emergencies
- What works to improve infant and young child nutrition practices
- Effective policies and delivery platforms to reach women of reproductive age **DEEP DIVE**

#### 7:00

#### **GALA DINNER**



Simultaneous translation available for this session (Spanish/English) La traducción simultánea está disponible en esta sesión Inglés/Español

#### **OVERVIEW**

#### **THURSDAY 27**

#### 8:30 TO 10:00

#### **PLENARY**

Transforming the enabling environment to forge a future for micronutrients — what will it take?

#### 10:30 TO 12:00

#### **CONCURRENT SESSIONS**

- New technologies for assessment of micronutrient status
- Risk benefit of micronutrient interventions
- Innovations in nutrition sensitive programs to address micronutrient deficiencies: design, implementation and effectiveness
- Economics of demand
- Micronutrients in the context of the nutrition transition

#### SPONSORED SYMPOSIA

- Recognition of the work of Dr. Guillermo Arroyave and Dr. Fernando Viteri/Sociedad Latinoamericana de Nutrición (SLAN) and Instituto de Nutrición de Centro América y Panamá (INCAP)
- Building the global roadmap for scaling up rice fortification/ World Food Programme (WFP)

#### 1:00 TO 2:00

#### **LEARNING CENTRE**

- Interactive demonstration of new tools and resources to implement and monitor micronutrient programs/U.S. Centers for Disease Control and Prevention (CDC), United Nations Children's Fund (UNICEF), Home Fortification Technical Advisory Group (HF-TAG), Global Alliance for Vitamin A (GAVA), Micronutrient Initiative (MI), World Health Organization (WHO), and the Global Alliance for Improved Nutrition (GAIN)
- Poster Presentations

#### 2:00 TO 3:30

#### **PLENARY**

■ Have micronutrient powder programs scaled up too quickly (have the programs come before the evidence)? — Debate

#### **CONCURRENT SESSIONS**

- New technologies for delivering micronutrients
- New efficacy trials of biofortified crops beyond biomarkers
- Effectiveness of home fortification programs
- Are we talking the language to turn evidence into policy and programs?
- The critical role of capacity for delivering micronutrient interventions

#### 5:30 TO 7:00

#### SPONSORED SYMPOSIA

- Accelerating anemia reduction/Global Nutrition Report (GNR)
- Hidden hunger in older adults: an urgent, yet preventable, global health and economic problem/Tufts University
- Meeting of the Nutrition Leadership Programmes (NLP)

#### FRIDAY 28

#### 8:30 TO 10:00

#### **PLENARY**

 Implementation science in nutrition: purposes, forms, functions and country examples

#### 10:30 TO 12:00

#### **CONCURRENT SESSIONS**

- Dietary assessment re-imagined using individual dietary intake data for program baseline and impact assessment
- lodine nutrition during perinatal period and early childhood
- What's stopping you? Addressing barriers to food fortification implementation success
- Scaling up micronutrient interventions to reach the Global Nutrition Targets: what are the costs, benefits, and sustainable financing options?
- Opening the door to the next generation of partnerships
- Intervention mix: determining policies with and without data

#### 12:00 TO 2:00

#### SPONSORED SYMPOSIA

 Scaling up micronutrient interventions in Nigeria: one vision and plan for collective action/United Nations Children's Fund (UNICEF) Nigeria

#### **LEARNING CENTRE**

Positioning qualitative research as a key element of implementation research. Key challenges and opportunities/ National Institute of Public Health Mexico (INSP), Global Alliance for Improved Nutrition (GAIN), and Cornell University

#### 1:00 TO 2:00

■ Poster Presentations

#### 2:00 TO 3:30

#### **PLENARY**

 Bridging discovery and delivery: future directions for the Micronutrient Forum

#### 4:00 TO 5:30

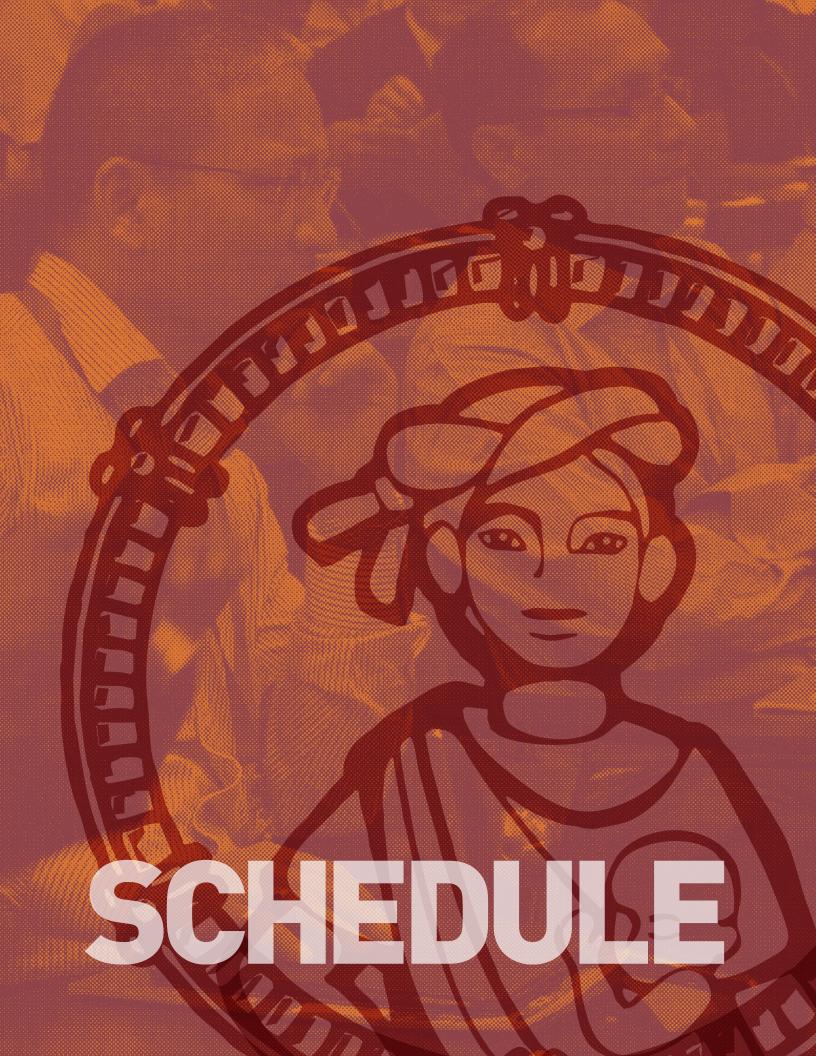
#### **KEYNOTE AND CLOSING CEREMONY**

Dr. Lawrence Haddad,

Global Alliance for Improved Nutrition (GAIN);

Dr. José Narro Robles,

Federal Secretary of Health, Mexico



# SUNDAY

8:30 TO 12:30		ROOMS $\psi$
SPONSORED SYMPOSIA		
Micronutrient Initiative (MI-TAN), Scaling Up Nutrition Movement (SUN) Secretariat and the Bill & Melinda Gates Foundation (BMGF)	Initiatives to address data gaps in nutrition	TULUM 1&2
10:30 TO 12:00		ROOMS $\psi$
World Food Programme (WFP)	Nutrition-sensitive programming: addressing the underlying determinants of malnutrition in Ecuador, Honduras and the Dominican Republic. Key examples of the WFP work in the region	XCARET 1
DSM	The responsibility of industry in public health nutrition	COZUMEL 2
2:00 TO 3:30		ROOMS $\psi$
University of California, Davis	Use of economic optimization modeling to design and manage micronutrient intervention strategies: recent model and policy engagement results	COZUMEL 4
International Food Policy Research Institute (IFPRI)	Stories of change in nutrition	COZUMEL 2
4:00 TO 5:30		ROOMS $\psi$
International Atomic Energy Agency (IAEA)	Stable isotope techniques help optimal formulation and impact assessment of food fortification programs	TULUM 1&2
Global Alliance for Improved Nutrition (GAIN), Iodine Global Network (IGN), Food Fortification Initiative (FFI) and the Micronutrient Forum	A new global repository for food fortification: helping to map and track food fortification efforts globally	COZUMEL 4
World Food Programme (WFP)	Positioning women at the center for successful nutrition outcomes: innovative case studies from Colombia, Laos and Malawi	XCARET 1
5:30 TO 7:00		ROOMS $\psi$
The Home Fortification Technical Advisory Group (HF-TAG)	Identifying gaps, challenges and innovative solutions in program planning, implementation and monitoring for 2016-2020	COZUMEL 2
Strengthening Partnerships, Results, and Innovation in Nutrition Globally (SPRING)	Approaches to prevent and control anemia: examples of global, national, district and community efforts	TULUM 1&2

# MONDAY

8:30 TO 10:00		ROOMS $\psi$
SPONSORED SYMPOSIA		
United Nations Children's Fund (UNICEF)	Use of female community health volunteers (FCHV) as an effective strategy to improve coverage of micronutrient programs in Nepal: celebrating success of 45 years of micronutrient programs	COZUMEL 4
Vitamin Angels	Leveraging a proven approach to achieve large scale deployment of multi-micronutrient supplements to pregnant, nutritionally at risk, hard-to-reach women	COZUMEL 2
8:30 TO 12:00		R00MS ↓
International Food Policy Research Institute (IFPRI)	Tackling the needs of women and children during the first 1000 days through an integrated agriculture-nutrition-health intervention (MAMA SASHA) using biofortified sweet potato	TULUM 1&2
10:30 TO 12:00		R00MS ↓
World Health Organization (WHO) and Micronutrient Initiative (MI)	Iron and folic acid interventions in malaria-endemic areas	COZUMEL 3
Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ GmbH)	Market-based approaches to reduce micronutrient deficiencies in women of reproductive age and children — experiences from Ghana	COZUMEL 4
10:30 TO 12:00		RM: COZUMEL 2
LEARNING CENTRE		
Global Alliance for Improved Nutrition (GAIN) Canada and Amway	Mapping the multiple burden of malnutrition: your digital resource	
2:00 TO 3:30		R00MS ↓
SPONSORED SYMPOSIA		
lodine Global Network (IGN)	Elimination of IDD from the Americas: a public health triumph	COZUMEL 2
Sight and Life and the Society for Implementation Science in Nutrition (SISN)	Implementation research to improve implementation outcomes (coverage, adherence, quality, and equity) of micronutrient/nutrition programs and policies	XCARET 1
Micronutrient Initiative (MI)	Women's Nutrition Now: improving access to health and nutrition for pregnant women	TULUM 1&2



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**TRACK 2** Effects of micronutrient interventions on indicators and functional outcomes.

■ TRACK 3 Scaling up micronutrient interventions in vulnerable populations: bridging the gaps between evidence and implementations.

■ TRACK 4 Transforming the enabling environment to forge a future for micronutrients— what will it take?



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# **MONDAY**



#### OPENING CEREMONY

#### WORDS OF WELCOME

#### Dr. Juan Angel Rivera Dommarco

Chair, Micronutrient Forum Global Conference 2016 Local Organizing Committee

#### Mr. Joel Spicer

President, Micronutrient Initiative (MI), Host organization of the Micronutrient Forum Secretariat

#### Dr. Lynnette Neufeld

Micronutrient Forum International Steering Committee

#### Dr. Mauricio Hernández

Director, National Institute of Public Health (INSP), Mexico

#### **OPENING MESSAGE AND CEREMONY**

Ing. Paula Angelica Hernández Olmos

National Coordinator, PROSPERA Program

Use of evaluation data to revise the PROSPERA program

5:30 TO 7:00

#### **WELCOME RECEPTION**

#### **→ PLENARY/EARLY MORNING**

8:30 TO 10:00 RM: GRAN CANÚN

#### **OPENING KEYNOTE**

MODERATORS: DR. RAFAEL FLORES-AYALA, U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC) AND DR. KLAUS KRAEMER, SIGHT AND LIFE

#### **KEYNOTE SPEAKER**

Ms. Gerda Verburg U.N. Assistant Secretary General and the Scaling Up Nutrition Movement (SUN) Coordinator Better nutrition: translating commitments into results and impacts

#### → PLENARY / LATE MORNING

10:30 TO 12:00 RM: GRAN CANCÚN

#### POSITIONING WOMEN'S NUTRITION AT THE CENTRE OF SUSTAINABLE DEVELOPMENT

DEEP DIVE

MODERATOR: DR. LYNNETTE NEUFELD, GLOBAL ALLIANCE FOR IMPROVED NUTRITION (GAIN)

	SPEAKERS	PRESENTATIONS
10:30	<b>Dr. Lynnette Neufeld</b> Global Alliance for Improved Nutrition (GAIN)	Introduction and session overview
10:35	<b>Dr. Ana Langer</b> Harvard School of Public Health	Women and health: the key to sustainable development
10:50	<b>Dr. Robert Black</b> Johns Hopkins University (JHU)	Nutrition is central to women's health
11:05	<b>Dr. Parul Christian</b> Bill & Melinda Gates Foundation (BMGF)	Women's nutrition: agenda for action and research
11:20	<b>Dr. Jacqueline Kung'u</b> Micronutrient Initiative (MI)	Advancing maternal and neonatal health and nutrition in Africa: impact evaluation from an integrated community-based multi-country project
11:35	DISCUSSION/Q&A	

 $12\!:\!00$  TO  $1\!:\!00$  / Lunch break

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1:00 TO 2:00		RM: TULUM 1&2
LEARNING CENTRE		
U.S. Centers for Disease Control and Prevention (CDC)	Measurement issues associated with biological and food specimen collection and analysis in household surveys	
1:00 TO 2:00		RM: GRAN CANCÚN

#### **POSTER PRESENTATIONS**

VIEW LIST OF POSTER PRESENTATIONS ON PAGE 52

#### → CONCURRENT SESSIONS / EARLY AFTERNOON

2:00 TO 3:00 RM: COZUMEL 2

# NEW BIOMARKERS/INDICATORS FOR ASSESSING MICRONUTRIENT STATUS IN POPULATION-BASED SURVEYS

MODERATOR: DR. DORA INÉS MAZARIEGOS CORDERO,

INSTITUTO DE NUTRICIÓN DE CENTRO AMÉRICA Y PANAMÁ (INCAP)

	SPEAKERS	PRESENTATIONS
2:00	Dr. Ralph D. Whitehead Jr. U.S. Centers for Disease Control and Prevention (CDC)	Inclusion of MRDR in population-based surveys in Guatemala, Uganda, Mozambique, and Nepal: implications for cut-offs and prevalence of vitamin A deficiency
2:20	<b>Dr. Jacky Knowles</b> Global Alliance for Improved Nutrition (GAIN)	lodine survey methods adapted to account for the changing landscape and salt intake through processed foods
2:40	<b>Dr. Alex Brito</b> USDA-ARS Western Human Nutrition Research Center (WHNRC)	cB12: a novel combined indicator of vitamin B12 status
3:00	<b>Dr. Bradley A. Woodruff</b> GroundWork	Statistical considerations of the analysis and presentation of urinary iodine concentrations in population-based surveys
3:15	<b>Dr. Hans Verhoef</b> London School of Hygiene and Tropical Medicine and Wageningen University (WU)	Diagnostic test performance of zinc protoporphyrin to detect iron deficiency in Kenyan pregnant women

2:00 TO 3:00 RM: COZUMEL 1 & 5

#### MICRONUTRIENTS IN BREASTMILK AND RELATIONSHIPS TO MATERNAL AND INFANT STATUS

MODERATORS: DR. TERESITA GONZÁLEZ DE COSÍO, UNIVERSIDAD IBEROAMERICANA AND MTRA. ERIKA OCHOA, TECNOLOGICO DE MONTERREY, CAMPUS CD MEXICO (ITESM)

	SPEAKERS	PRESENTATIONS
2:00	<b>Dr. Lindsay Allen</b> USDA-ARS Western Human Nutrition Research Center (WHNRC)	Existing global data on breastmilk micronutrient concentrations
2:25	<b>Dr. Munirul Islam</b> ICDDR,B, Bangladesh	Collecting breastmilk for micronutrient analysis; methodological issues
2:45	<b>Dr. Daniela Hampel</b> USDA-ARS Western Human Nutrition Research Center WHNRC	Developing reference values for breastmilk micronutrients
3:05	<b>Ms. Chen Li</b> McGill University	Adequacy of major minerals and trace elements in human breast milk is associated with Guatemalan infant anthropometric indices within the first six months of life
3:20	<b>Dr. Sherry Tanumihardjo</b> University of Wisconsin- Madison	Breast milk retinol reflects liver reserves and dietary exposure in Thai lactating women
2:00	TO 3:30	RM: COZUMEL 3

#### ZINC INTERVENTION TRIALS

MODERATORS: DR. CHRISTINE MCDONALD, CHILDREN'S HOSPITAL OAKLAND RESEARCH INSTITUTE (CHORI) AND DR. EDGAR VÁZQUEZ GARIBAY, UNIVERSIDAD DE GUADALAJARA (UDG)

	SPEAKERS	PRESENTATIONS
2:00	<b>Dr. Diego Moretti</b> Federal Institute of Technology (ETH), Zurich, Switzerland	Impact of biofortified wheat on zinc nutrition in school-age children
2:20	<b>Dr. Chris Duggan</b> Harvard University	Zinc versus multiple micronutrient supplementation of young Tanzanian children
2:40	<b>Dr. Janet King</b> Children's Hospital Oakland Research Institute, (CHORI)	Effect of a small nutrient-dense meal on maternal nutrition and pregnancy outcomes
3:00	<b>Dr. Saurabh Mehta</b> Cornell University	A randomized trial of iron- and zinc-biofortified pearl millet: effects on zinc concentrations and anthropometry in school children in India
3:15	<b>Dr. Sonja Y. Hess</b> University of California, Davis	Exploring reasons for different growth responses to small-quantity lipid-based nutrient supplements and zinc supplements among young children in two studies in neighboring districts of Burkina Faso



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TRACK 4 Transforming the enabling environment to forge a future for micronutrients— what will it take?



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2:00 TO 3:30 RM: COZUMEL 4

#### THE FOOD ENVIRONMENT AS A DETERMINANT OF OPTIMAL DIETARY CONSUMPTION

MODERATORS: BONNIE MCCLAFFERTY, GLOBAL ALLIANCE FOR IMPROVED NUTRITION (GAIN) AND MTRA. GABRIELA GARCIA, NATIONAL INSTITUTE OF PUBLIC HEALTH (INSP), MEXICO

	SPEAKERS	PRESENTATIONS
2:00	<b>Dr. Anna Herforth</b> Independent Consultant	The food environment: availability, convenience and desirability
2:15	<b>Dr. Inge Brower</b> Wageningen University (WU)	Does local food availability support implementation of food-based dietary guidelines in northern Ghana?
2:30	<b>Ms. Lilly Schofield</b> Save The Children UK	Using cost of the diet to inform a program to prevent chronic malnutrition in children in Myanmar
2:45	<b>Dr. Margaret Armar-Klemesu</b> Noguchi Memorial Institute	Outcomes from focused ethnographic surveys of rural mothers for improved infant feeding
3:00	<b>Dr. Marti van Liere</b> Global Alliance for Improved Nutrition (GAIN)	Making nutrition aspirational and desirable
3:15	MODERATED DISCUSSION	
2:00	TO 3:30	RM: GRAN CANCÚN

COUNTRY OWNERSHIP AND LEADERSHIP IN WORKING WITH MULTIPLE ACTORS (BILATERAL AGENCIES, PRIVATE DONORS, MULTILATERAL ORGANIZATIONS, NGOS, CSOS, ACADEMIA, PRIVATE SECTOR) TO PROMOTE POLICIES, ENABLE INNOVATION AND FUND EFFECTIVE NATIONAL MICRONUTRIENT STRATEGIES

MODERATOR: MS. PATRIZIA FRACASSI, SCALING UP NUTRITION MOVEMENT (SUN)

	SPEAKERS	PRESENTATIONS
2:00	<b>Dra. Nina Sadjunani</b> SUN Lead Group and National SDGs, Secretariat	Micronutrient interventions in Indonesia: what does it take to realize country ownership and leadership?
2:15	<b>Dr. Ariela Luna</b> Peru	Micronutrient interventions in Peru: driving the agenda in terms of funding, implementation and monitoring of effective coverage

	MODERATED DISCUSSION	TOPIC
2:30	The contribution of multiple actors in supporting the enabling environment for effective implementation of micronutrient interventions	
	<b>Prof. Uma Koirola</b> Civil Society Alliance, Nepal	The role of civil society
	<b>Mr. Mauricio Adade</b> DSM Latin America	The role of the private sector
	<b>Dr. Noel Marie Zagre</b> United Nations Children's Fund (UNICEF) Regional Office for West and Central Africa	The role of technical assistance
	<b>Dr. Omar Dary</b> United States Agency for International Development (USAID)	The role of donors
3:15	Q&A/DISCUSSION	

#### TRANSFORMATIONAL LEADERSHIP

MODERATOR: TBC

2:00 TO 3:30

SPEAKER	PRESENTATION
<b>Dr. Namukolo Covic</b> International Food Policy Research Institute (IFPRI)	Framing transformational leadership as distinct from capacity building
PANELISTS	PRESENTATIONS
Mrs. Agnes Mukamana Nduguye SUNLEAD, Rwanda	SUNLEAD transforming district level multisectoral teams
<b>Dr. Simone Frey</b> European Nutrition Leadership Platform (ENLP), Bioanalyt	Two key outcomes of the European Nutrition Leadership Platform (ENLP) leadership training in Europe
<b>Ms. Oluwatoyin Oyekenu,</b> Save the Children (SC)	Multisectorial teams vs collaborative teams
<b>Dr. Richmond Aryeetey</b> University of Ghana	Successful program implementation — what does it take?

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#### → CONCURRENT SESSIONS / LATE AFTERNOON

4:00 TO 5:30 RM: GRAN CANCÚN

#### **GLOBAL COVERAGE OF MICRONUTRIENT INTERVENTIONS**

MODERATOR: DR. RAHUL RAWAT, BILL & MELINDA GATES FOUNDATION (BMGF)

	SPEAKERS	PRESENTATIONS
4:00	<b>Dr. Aashima Garg</b> United Nations Children's Fund (UNICEF)	What are children eating? Global overview of infant and young child feeding programs and home fortification programs using micronutrient powder
4:20	<b>Ms. Valerie Friesen</b> Global Alliance for Improved Nutrition (GAIN)	Assessing coverage of large-scale food fortification interventions: fortification assessment coverage tool (FACT) results and implications
4:40	Ms. Julia Krasevec United Nations Children's Fund (UNICEF)	Global coverage of salt iodization and vitamin A supplementation programs
5:00	<b>Dr. Amynah Janmohamed</b> Helen Keller International (HKI)	Determinants of vitamin A supplementation coverage for children 6-59 months in thirteen sub-Saharan African countries: results from 45 post-event coverage surveys
	DISCUSSANT	

5:15 Dr. Rafael Flores-Ayala

U.S. Centers for Disease Control and Prevention (CDC)

**4:00 TO 5:30** RM: COZUMEL 1 & 5

#### INTERVENTIONS TO INCREASE MICRONUTRIENTS IN BREASTMILK

DEEP DIVE

MODERATOR: DR. LINDSAY ALLEN, USDA-ARS WESTERN HUMAN NUTRITION RESEARCH CENTER (WHNRC)

	SPEAKERS	PRESENTATIONS
4:00	<b>Dr. Setareh Shahab-Ferdows</b> USDA-ARS Western Human Nutrition Research Center (WHNRC)	Interventions with LNS in Ghana and Malawi (iLiNS and BAN)
4:20	<b>Ms. Kamilla Ericksen</b> Human Nutrition Research, Cambridge	Effects of maternal multiple micronutrient supplementation in The Gambia
4:40	<b>Dr. Sophie Moore</b> Human Nutrition Research, Cambridge	Is maternal supplementation effective for increasing micronutrients in breast milk?
5:00	<b>Dr. Kyly Whitfield</b> Mount Saint Vincent University	Thiamin-fortified fish sauce: a novel means of increasing erythrocyte and breast milk thiamin concentrations among rural Cambodian women and their infants
5:15	<b>Dr. Asmaa El Hamdouchi</b> CNESTEN-IbnTofail University	Combined consumption of a single high-dose vitamin A supplement and provision of vitamin A fortified oil to households maintains adequate milk retinol concentrations for 6 months in lactating Moroccan women

4:00 TO 5:30 RM: COZUMEL 4

#### FILLING THE DATA VOID IN NUTRITION SURVEILLANCE

MODERATOR: DR. OMAR DARY, UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID)

	SPEAKERS	PRESENTATIONS
4:00	<b>Dr. Omar Dary</b> United States Agency for International Development (USAID)	Introduction
4:05	<b>Dr. Hana Bekele</b> World Health Organization (WHO) Africa	World Health Organization (WHO) nutrition surveillance experience in African countries
4:25	<b>Dr. Maria Elena Jefferds</b> U.S. Centers for Disease Control and Prevention (CDC)	U.S innovations in surveillance and research for understanding early child feeding
4:45	<b>Dr. Abigail Perry</b> Department for International Development (DFID)	International initiatives to strengthen nutrition information platforms
5:05	<b>Dr. Chris Osa. Isokpunwu</b> Federal Ministry of Health, Nigeria	Nigeria's annual SMART survey and multiple deprivation analysis: a planning, advocacy and accountability tool for health and nutrition programming
5:15	DISCUSSION	
4:00	TO 5:30	RM: XCARET 1

## HOW HAS THE ARRIVAL OF THE SDGS CHANGED FINANCING FOR NUTRITION?

MODERATOR: DR. KLAUS KRAEMER, SIGHT AND LIFE

	SPEAKERS	PRESENTATIONS
4:00	<b>Dr. John McArthur</b> Brookings Institute	The changing funding environment for nutrition
	<b>Dr. Sue Horton</b> Waterloo University	Why investing in micronutrients should be prioritized
	<b>Dr. Katharine Kreis</b> PATH	Innovation in models for micronutrient accessibility
	<b>Dr. Laurette Dubé</b> McGill University	What we have achieved from our investments in micronutrients?
	Mr. Pragya Mathema United Nations Children's Fund (UNICEF) Nigeria	Estimating the investment required and expected economic returns of scaling up micronutrient powders in Nigeria



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4:00	TO 5:30		RM: TULUM 1 & 2
CLIMATE CHANGE AND MICRONUTRIENT NUTRITION MODERATOR: DR. PATRICK WEBB, TUFTS UNIVERSITY			
	SPEAKERS	PRESENTATIONS	
4:00	<b>Dr. Jessica Fanzo</b> Johns Hopkins University (JHU)	Climate change and effects on health	
4:20	<b>Dr. Keith Wiebe</b> International Food Policy Research Institute (IFPRI)	Climate change and food production	
4:40	TBC	Climate change and food composition	
	PANEL & DISCUSSION		
5:00	<b>Dr. Patrick Webb</b> Tufts University	Global Panel—wrap-up and discussion of policy implications	
5:30	TO 7:00		R00MS ↓
SPONS	ORED SYMPOSIA		
Sight a	nd Life	The future of micronutrient innovation: Elevator Pitch Contest	COZUMEL
Harves	stPlus	PROGRESS IN SCALING UP BIOFORTIFICATION  Moderated by 2016 World Food Prize Winner Howarth Bouis, this symposium will highlight exciting examples of how biofortification programs have been implemented and scaled up in a variety of settings. Following the symposium, attendees will be ushered to a special cocktail event where the new CEO of HarvestPlus, Beverley Postma, will be introduced.	TULUM 1 &
Preven	enters for Disease Control and ation (CDC) and the World Health zation (WHO)	Optimal red blood folate concentration in women of reproductive age for prevention of neural tube defects: new guidelines and applications in low, medium and high income countries	COZUMEL
Rainer	Gross Award		COZUMEL
7:00	TO 8:00		RM: GRAN CANCÚN

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# WEDNESDAY

#### → PLENARY/MORNING

8:30 TO 10:00

#### USE OF EVIDENCE FOR THE DESIGN AND IMPROVEMENT OF PROGRAMS: MEXICAN EXPERIENCE

MODERATOR: THANIA DE LA GARZA NEGRETE, NATIONAL COUNCIL FOR THE EVALUATION OF SOCIAL **DEVELOPMENT POLICY (CONEVAL)** 

	SPEAKERS	PRESENTATIONS
8:40	<b>Dr. Juan Angel Rivera Dommarco</b> National Institute of Health (INSP), Mexico	History in the use of evidence for improving the design of the national conditional cash transfer program in Mexico
8:55	Mr. Daniel Aceves National Center for Social Protection in Health (CNPSS)	Improving children's nutrition in the context of a conditional cash transfer program
9:10	Q&A	
9:20	<b>Dr. Anabelle Bonvecchio</b> National Institute of Health (INSP), Mexico	Addressing the double burden of malnutrition through a national behavioral change strategy
9:35	<b>Ms. Ana María Pineda Reyes</b> Liconsa	Providing micronutrients through a milk distribution program
9:50	Q&A	

#### → CONCURRENT SESSIONS / MORNING

10:30 TO 12:00 RM: TULUM 1 & 2

#### **ADVANCES IN PROGRAM MONITORING**

MODERATOR: DR. ALISON TUMILOWICZ, GLOBAL ALLIANCE FOR IMPROVED NUTRITION (GAIN)

	SPEAKERS	PRESENTATIONS
10:30	<b>Dr. Alain B. Labrique,</b> Johns Hopkins University (JHU)	What works and what doesn't work with mHealth
10:50	<b>Dr. Chowdhury Jalal</b> Micronutrient Initiative (MI)	Monitoring coverage of micronutrient programs in Ethiopia and Kenya: lessons learned from using Large Country Lot Quality Assurance Survey (LC LQAS) methodology
11:05	Mr. Greg S. Garrett Global Alliance for Improved Nutrition (GAIN)	Modelling the consumption of iodized salt through processed foods, and implications for USI programming

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Learning Centres

# **WEDNESDAY**

11:20	<b>Dr. Richa Pandey</b> United Nations Children's Fund (UNICEF) India	Using strategic partnerships and external real-time monitoring to improve adolescent micronutrient programmes in India's largest state — Uttar Pradesh
11:35	<b>Dr. Stella Nordhagen</b> Helen Keller International (HKI) Senegal	Fostering change: using monitoring to iteratively improve project implementation
11:50	<b>Dr. Annette Imohe</b> United Nations Children's Fund (UNICEF) Nigeria	Application of innovation to enhance national Maternal, Neonatal and Child Health Week (MNCHW) in Nigeria — Real time monitoring and reporting using SMART tablets and follow up on corrective response using SMS platform

10:30 TO 12:00 RM: COZUMEL 2

#### MICRONUTRIENT INTERVENTIONS TO IMPROVE CHILD DEVELOPMENT

MODERATORS: DR. MANDANA ARABI, GLOBAL ALLIANCE FOR IMPROVED NUTRITION (GAIN) AND MTRA. THANYA SOFÍA LABRADA ALBA, UN KILO DE AYUDA

	SPEAKERS	PRESENTATIONS
10:30	<b>Dr. Beth Prado</b> USA	ILINS studies in Burkina Faso, Ghana and Malawi
10:50	<b>Dr. Marius Smuts</b> South Africa	Tswaka trial on complementary foods in South Africa
11:10	<b>Dr. Beverly Biggs</b> Monash University, Melbourne	Effects of maternal micronutrient powders and iron supplements on child development in Vietnam
11:30	<b>Dr. Lindsey Locks</b> Harvard University	The effect of daily zinc and/or multivitamin supplementation on early childhood development in Tanzania: results from a randomized controlled trial

10:30 TO 12:00 RM: COZUMEL 3

#### **EFFECTIVENESS OF LARGE-SCALE FORTIFICATION**

MODERATOR: DR. MARY SERDULA, U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)

	SPEAKERS	PRESENTATIONS
10:30	<b>Dr. Emily Keats</b> The Hospital for Sick Children	Systematic evidence review and program analysis of large-scale fortification efforts for improving health outcomes in low and middle income countries
10:45	Mrs. Ning Pribadi Indonesia Food Fortification Foundation (KFI)	Effectiveness of edible oil fortification in Indonesia
11:05	Dr. Ramadhani Abdallah Noor African Academy of Public Health (AAPH), Tanzania, and Harvard T. Chan School of Public Health (HSPH)	Folic acid fortification of wheat flour increases folate levels among women of reproductive age in Tanzania

11:25	<b>Ms. Mireya Palmieri</b> Instituto de Nutrición de Centro América y Panamá (INCAP)	Reduction in anemia and iron deficiency among young children and women in Guatemala: 1995–2015
11:45	<b>Dr. Helena Pachon</b> Food Fortification Initiative (FFI)	Challenges of measuring biological impact in food fortification
11:55	DISCUSSION	
10:30	0 TO 12:00	RM: COZUMEL 1 & 5

#### NAVIGATING VITAMIN A SUPPLEMENTATION (VAS) DECISIONS IN DIFFERENT CONTEXTS

MODERATOR: DR. ROLF KLEMM, HELEN KELLER INTERNATIONAL (HKI) AND JOHNS HOPKINS UNIVERSITY (JHU)

	SPEAKERS PART A	PRESENTATIONS
10:30	<b>Dr. Erin McLean</b> United Nations Children's Fund (UNICEF) New York	Mortality trends and data gaps: implications for vitamin A supplementation
10:45	Ms. Alison Greig Micronutrient Initiative (MI)	A framework for shifting from universal VAS toward sustainable elimination of vitamin A deficiency
10:55	<b>Ms Dora Inés Mazariegos Cordero</b> Instituto de Nutrición de Centroamérico y Panamá	Changes to the vitamin A supplementation distribution program in Guatemala due to evidence of improved vitamin A status among children
	SPEAKERS PART B	PRESENTATIONS
11:05	Ms. Nita Dalmiya United Nations Children's Fund (UNICEF) Senegal	The changing programme landscape: implications for VAS delivery platforms and VAS coverage
11:20	<b>Dr. Sospeter Gatobu</b> Micronutrient Initiative (MI)	Cost-effectiveness of transitioning from child health days in Senegal and Ethiopia to routine
11:30	Mr. David Doledec Helen Keller International (HKI)	Vitamin A supplementation (VAS) through facility-plus-outreach costs less and achieves comparable coverage compared with door-to-door distribution
11:40	<b>Dr. Deepika Mehrish Sharma</b> United Nations Children's Fund (UNICEF)	Traversing the last mile to reach excluded children with vitamin A supplementation (VAS): use of mHealth strategy for improved coverage in geographically difficult terrain
11:45	Q&A	

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TRACK 3 Scaling up micronutrient interventions in vulnerable populations: bridging the gaps between evidence and implementations.

■ TRACK 4 Transforming the enabling environment to forge a future for micronutrients— what will it take?



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# **WEDNESDAY**

10:30 TO 12:00 RM: GRAN CANCÚN

#### **ADOLESCENT NUTRITION: ACHIEVEMENTS, CHALLENGES AND FUTURE ACTIONS**

DEEP DIVE

MODERATORS: DR. JACQUELINE KUNG'U, MICRONUTRIENT INITIATIVE (MI) AND DR. MARTHA KAUFER, COLEGIO MEXICANO DE NUTRIÓLGOS (CMN)

	SPEAKERS	PRESENTATIONS
10:30	<b>Dr. J.H. Rah</b> United Nations Children's Fund (UNICEF)	Why is adolescent nutrition important? A review of the evidence base
10:45	Ms. Julie Ruel-Bergeron Johns Hopkins University (JHU)	A review of delivery platforms for reaching adolescent girls with micronutrient interventions in four low and middle-income countries
11:00	Ms. Jennifer Busch-Hallen Micronutrient Initiative (MI)	Tackling growing pains: advancing large scale nutrition programs for adolescent girls
11:15	<b>Dr. Usha Ramakrishnan</b> Emory University	Current experiences delivering micronutrient interventions to adolescent girls: lessons learned and gaps
11:30	<b>Dr. Rehana A. Salam</b> Aga Khan University	Nutrition interventions for pregnant adolescents: a systematic review and meta-analysis

10:30 TO 12:00 RM: COZUMEL 4

# ENSURING HIGH COVERAGE AND QUALITY OF MICRONUTRIENT INTERVENTIONS: WHAT IS NEEDED FROM THE HEALTH SYSTEM? — PANEL DISCUSSION

MODERATOR: DR. EMORN UDOMKESMALEE, MAHIDOL UNIVERSITY, THAILAND

PANELISTS	PRESENTATIONS
<b>Dr. Stephen Vosti</b> University of California, Davis	Priority setting—potential of economic optimization modelling to help design cost-effective programs
TBC	Health systems strengthening improves equity: progress in Odisha
<b>Dr. Alejandria Villa</b> Commission for Protection in Health Secretary of Health, Mexico	Logistics—forecasting, procurement, product, distribution systems
<b>Dr. Anabelle Bonvecchio</b> National Institute of Health (INSP), Mexico	Development and scale-up of effective nutrition training in the health sector
<b>Dr. Saul Morris</b> Children's Investment Fund Foundation (CIFF)	Monitoring—equipping systems to track effective coverage of micronutrient programs

## WEDNESDAY

12:00 TO 2:00	RM: TULUM 1 & 2

#### **LEARNING CENTRES**

**PATH** 

Contributions of civil society organizations (CSOs) in generating evidence for nutrition-specific and nutrition-sensitive interventions: what it takes to conduct an impact evaluation in local settings, challenges, and lessons learned

1:00 TO 2:00 RM: GRAN CANCÚN

#### **POSTER PRESENTATIONS**

VIEW LIST OF POSTER PRESENTATIONS ON PAGE 52

#### → PLENARY / EARLY AFTERNOON

2:00 TO 3:30 RM: GRAN CANCÚN

# UPDATED PREVALENCE OF ANEMIA, IRON DEFICIENCY AND VITAMIN A DEFICIENCY IN SETTINGS OF INFLAMMATION AND GLOBALLY: KEY FINDINGS FROM THE BRINDA PROJECT

MODERATOR: DR. RAFAEL FLORES-AYALA, U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)

	SPEAKERS	PRESENTATIONS
2:00	Dr. Parminder Suchdev Emory University and U.S. Centers for Disease Control and Prevention (CDC)	Overview of the biomarkers reflecting inflammation and nutritional determinants of anemia (BRINDA) project
2:15	<b>Dr. Sorrel Namaste</b> Strengthening Partnerships, Results and Innovation in Nutrition Globally (SPRING)	Approaches to adjust iron biomarkers for inflammation: implications for estimating prevalence of iron deficiency
2:30	<b>Ms. Leila Larson</b> Emory University	Approaches to adjust retinol/RBP for inflammation: implications for estimating prevalence of vitamin A deficiency
2:45	<b>Dr. Reina Engle-Stone</b> University of California, Davis	Predictors of anemia among women and preschool children in settings with varying burdens of infectious disease
3:00	<b>Dr. Lisa Rogers</b> World Health Organization (WHO)	BRINDA findings and global prevalence estimates: programmatic, policy and research implications
	MODERATED Q&A	
3:15	Dr. Rafael Flores-Ayala U.S. Centers for Disease Control and Prevention (CDC)	

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**DISCUSSION** 

Dr. Dan Roth

University of Toronto

5:00

#### → CONCURRENT SESSIONS / LATE AFTERNOON

4:00	TO 5:30	RM: COZUMEL 4	
	VITAMIN D IN PREGNANCY AND INFANCY: IMPLICATIONS FOR MATERNAL AND CHILD HEALTH MODERATOR: DR. DAN ROTH, UNIVERSITY OF TORONTO		
4:00	<b>Dr. Dan Roth</b> University of Toronto	Introduction	
	SPEAKERS	PRESENTATIONS	
4:05	<b>Dr. Cristina Palacios</b> University of Puerto Rico	Vitamin D supplementation in pregnancy: an updated systematic review	
4:20	<b>Dr. Alison Gernand</b> Pennsylvania State University	Role of vitamin D in placental function and risk of preeclampsia	
4:35	<b>Dr. Tim Green</b> South Australia Health and Medical Research Institute and University of Adelaide	Vitamin D and calcium supplementation to reduce pre-eclampsia: resolving the controversy through a 2x2 randomised trial	
4:50	<b>Dr. Hope Weiler</b> McGill University	Normalization of vitamin D status with 1200 IU of vitamin D daily supports a leaner body mass phenotype in young infants	

4:00 TO 5:30 RM: COZUMEI 1 & 5

Panel discussion on future of vitamin D in pregnancy, lactation and infancy

#### EFFECTS OF IRON SUPPLEMENTATION ON MALARIA AND THE GUT MICROBIOME

MODERATORS: DR. RITA WEGMULLER, MRC GAMBIA AND DR. SALVADOR VILLALPANDO, NATIONAL INSTITUTE OF PUBLIC HEALTH (INSP), MEXICO

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	SPEAKERS	PRESENTATIONS
4:00	<b>Dr. Carla Cerami</b> University of North Carolina	Update on iron-malaria interactions
4:25	<b>Dr. Martin Mwangi</b> Wageningen University (WU)	Iron supplementation in pregnancy does not increase risk of malaria
4:50	<b>Dr. Michael Zimmermann</b> Federal Institute of Technology (ETH), Zurich	Iron's effects on the gut microbiome, and optimal dose of iron
	DISCUSSANT	PRESENTATION
5:15	<b>Dr. Rita Wegmuller</b> MRC Gambia	Implications for policy

# WEDNESDAY

#### SHOULD THERE BE REGIONAL GUIDELINES FOR NEWBORN VITAMIN A SUPPLEMENTATION?

MODERATOR: DR. ROLF KLEMM, HELEN KELLER INTERNATIONAL (HKI) AND JOHNS HOPKINS UNIVERSITY (JHU)

SPEAKERS	PRESENTATIONS
<b>Dr. Lisa Rogers</b> World Health Organization (WHO)	Meta-analysis of newborn vitamin A supplementation trials
DEBATERS	
<b>Dr. Sam Newton</b> Kwame Nkrumah University of Science and Technology, Ghana	Take newborn vitamin A supplementation off the table
Dr. Keith West Johns Hopkins University (JHU), USA	Newborn vitamin A supplementation saves lives

Dr. Emorn Udomkesmalee Mahidol University, Thailand

4:00 TO 5:30

#### **MEETING MICRONUTRIENT NEEDS DURING EMERGENCIES**

MODERATOR: MS. RUTH SITUMA, UNITED NATIONS CHILDREN'S FUND (UNICEF), NEW YORK

	SPEAKERS	PRESENTATIONS
4:00	Ms. Ruth Situma United Nations Children's Fund (UNICEF), New York	Introduction to session and options to ensure adequate intake of micronutrients for different population groups during emergencies
4:10	<b>Ms. Giulia Baldi</b> World Food Programme (WFP) Rome, Italy	Operationalizing access to essential (micro)nutrients during emergencies and beyond
4:30	<b>Mr. Giriraj Subedi</b> Nepal Ministry of Health and Population	Child nutrition week (CNW) in Nepal in response to earthquake emergency (28 June to 4 July, 2015)



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# **WEDNESDAY**

4:45	<b>Dr. Mary Hodges</b> Helen Keller International (HKI), Sierra Leone	Attendance for essential nutrition actions during the Ebola emergency demonstrate resilience when fully integrated maternal and child health services were available in Freetown, Sierra Leone
5:00	Mr. Carlos Grijalva-Eternod University College London (UCL)	Haemoglobin concentration in non-pregnant women is associated with household diet diversity measured using a 7-day but not a 24h recall period: evidence from the REFANI-N study
5:15	GENERAL DISCUSSION	

4:00 TO 5:30 RM: COZUMEL 2

#### WHAT WORKS TO IMPROVE INFANT AND YOUNG CHILD NUTRITION PRACTICES

MODERATOR: DR. EVA MONTERROSA, SIGHT AND LIFE

	SPEAKERS	PRESENTATIONS
4:00	<b>Dr. Mekonnen Tesfamariam</b> Catholic Relief Services, Ethiopia	Drips of change through keyhole and home gardens: supporting improved dietary diversity to pregnant and lactating women and children under five coupled with social behavior change communication and community mobilization
4:20	<b>Mr. Mahamadou Tanimoune</b> World Food Programme (WFP), Rwanda	Provision of micronutrient fortified foods alongside nutrition education enhances achievement of dietary diversity in children under 2 years
4:40	<b>Dr. Dian Nurcahyati Hadihardjono</b> Helen Keller International (HKI), Indonesia	Changes in food consumption and household food insecurity as a result of implementation of enhanced homestead food production in one district in West Timor, Indonesia
5:00	Ms. Fanny Sandalinas United Nations Children's Fund (UNICEF)	Impact of an integrated infant and young child feeding program including daily use of small quantity lipid-based nutrient supplement on infant and young child feeding practices in Katanga, Democratic Republic of Congo
5:20	DISCUSSION/Q&A	

## WEDNESDAY

4:00 TO 5:30 RM: GRAN CANCÚN

#### EFFECTIVE POLICIES AND DELIVERY PLATFORMS TO REACH WOMEN OF REPRODUCTIVE AGE

DEEP DIVE

MODERATOR: DR. PARUL CHRISTIAN, BILL & MELINDA GATES FOUNDATION (BMGF)

SPEAKERS	PRESENTATIONS
<b>Dr. Parul Christian</b> Bill & Melinda Gates Foundation (BMGF)	Introduction
<b>Dr. Saskia de Pee</b> World Food Programme (WFP), Italy	Nutrition for adolescent girls and women, including during pregnancy: from evidence-based guidelines to policies for implementation
<b>Dr. Stephen Hodgins</b> Save the Children, USA	Current status of ANC in health care systems and delivery of nutrition interventions — global overview
<b>Dr. Garret Mehl</b> World Health Organization (WHO), Geneva	Current experiences delivering micronutrient interventions to adolescent girls: lessons learned and gaps
<b>Dr. Phuong Nguyen</b> International Food Policy Research Institute (IFPRI)	Factors influencing the utilization of maternal nutrition interventions in a large scale MNCH program in Bangladesh
<b>Dr. Sheila C. Vir</b> Public Health Nutrition and Development Centre, India	Improving maternal nutrition through self help groups (SHG) of women — experience from India
Q&A	
00	LOCATION: IBEROSTAR HOTE

**GALA DINNER** 

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#### → PLENARY / MORNING

8:30 TO 10:00 RM: GRAN CANCÚN

# TRANSFORMING THE ENABLING ENVIRONMENT TO FORGE A FUTURE FOR MICRONUTRIENTS — WHAT WILL IT TAKE?

MODERATORS: MS. GERDA VERBURG, SCALING UP NUTRITION MOVEMENT (SUN) COORDINATOR AND MTRO. CÉSAR RAMOS, UNIVERSIDAD DE GUADALAJÀRA (UDG)

	SPEAKERS	PRESENTATIONS
8:30	<b>Dr. Lawrence Haddad</b> Global Alliance for Improved Nutrition (GAIN)	Transforming the enabling environment to forge a future for micronutrients — what will it take?
	PANELISTS	PRESENTATIONS
9:00	<b>Ms. Jane Badham</b> JB Consultancy	Transformational leadership
	Mr. Joel Spicer Micronutrient Initiative (MI)	The role of advocacy and communication
	Ms. Inge Kauer Access to Nutrition Foundation (ACF)	Private sector and accountability
	<b>Mr. Martin Short</b> Power of Nutrition	Financing models
	<b>Dr. Eileen Kennedy</b> Tufts University	Governance

#### → CONCURRENT SESSIONS / MORNING

10:30 TO 12:00 RM: COZUMEL 1 & 5

#### **NEW TECHNOLOGIES FOR ASSESSMENT OF MICRONUTRIENT STATUS**

MODERATOR: DR. JANET KING, CHILDREN'S HOSPITAL OAKLAND RESEARCH INSTITUTE (CHORI)

	SPEAKERS	PRESENTATIONS
10:30	<b>Prof. John Beattie</b> University of Aberdeen	New "-omics" approaches for micronutrient status biomarker discovery
10:45	<b>Dr. Marc Hellerstein</b> University of California, Berkeley	Use of flux proteomics and 'virtual biopsy' to assess micronutrient requirements and identify novel biomarkers of micronutrient status
11:00	DISCUSSION	

	SPEAKERS	PRESENTATIONS
11:10	<b>Dr. Neal Craft</b> Craft Technologies	New methods for collecting, processing and transporting biological specimens for micronutrient status assessment
11:12	<b>Dr. David Boyle</b> PATH	New multiplex ELISA assay for assessing micronutrient status biomarkers
11:24	<b>Dr. Balaji Srinivasan</b> Cornell University	A smartphone-based point-of-care ferritin biosensor for assessment of iron deficiency
11:36	<b>Dr. Joseph Kehayias</b> Tufts University	Evaluation of X-ray fluorescence for the assessment of zinc in fingernails
11:48	DISCUSSION	
10:3	0 TO 12:00	RM: GRAN CANCÚN

#### **RISK BENEFIT OF MICRONUTRIENT INTERVENTIONS**

MODERATOR: DR. ADRIAN GHEORGHE, LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE (LSHTM)

	SPEAKERS	PRESENTATIONS
10:30	<b>Dr. Adrian Gheorghe</b> London School of Hygiene and Tropical Medicine (LSHTM)	Introduction
10:40	<b>Dr. Sant-Rayn Pasricha</b> University of Oxford	IUNS/MNF—risk benefits of iron supplementation for children
11:10	<b>Dr. Ken Brown</b> Bill & Melinda Gates Foundation (BMGF)	Benefits and risks of vitamin A intervention programs
11:30	<b>Dr. Frank Wieringa</b> Copenhagen University, Denmark	Fortification with multiple micronutrients might result in opposing health effects
11:45	DISCUSSION	
	<b>Dr. Adrian Gheorghe</b> London School of Hygiene and Tropical Medicine (LSHTM)	

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10:30 TO 12:00 RM: COZUMEL 3

# INNOVATIONS IN NUTRITION-SENSITIVE PROGRAMS TO ADDRESS MICRONUTRIENT DEFICIENCIES: DESIGN, IMPLEMENTATION AND EFFECTIVENESS

MODERATORS: DR. MARIE RUEL, INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE (IFPRI) AND DR. JEF L. LEROY, INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE (IFPRI)

SPEAKERS	PRESENTATIONS	
<b>Mr. Haribondhu Sarma</b> ICDDR,B	The role of concurrent evaluation in course correction of intervention during implementation: the experience of market-based home fortification in Bangladesh	
<b>Ms. Kristina D. Michaux</b> University of British Columbia	The impact of homestead food production (HFP) with or without fishponds (HFP+F) on dietary diversity, dietary intake, nutritional biochemical indicators, and anthropometry in Prey Veng Province, Cambodia	
<b>Dr. Shibani Ghosh</b> Tufts University	Rising production and consumption of fruit, vegetables and animal source foods associated with nutrition sensitive integrated programming in Nepal	
<b>Dr. Amy Webb Girard</b> Emory University	An integrated agriculture, nutrition and health project promoting orange flesh sweet potato during pregnancy and the early postpartum period increased maternal nutrition knowledge, vitamin A intakes and nutritional status of women in Western Kenya	
Dr. Jef L. Leroy International Food Policy Research Institute (IFPRI)	Tubaramure, a food-assisted integrated health and nutrition program in Burundi improves maternal and child hemoglobin levels and reduces anemia: a theory-based cluster-randomized controlled intervention trial	
<b>Dr. Deanna Olney</b> International Food Policy Research Institute (IFPRI)	The impact of lipid-based nutrition supplements and micronutrient Sprinkles delivered through a food-assisted health and nutrition program on child linear growth in Guatemala	
DISCUSSION		
	Mr. Haribondhu Sarma ICDDR,B  Ms. Kristina D. Michaux University of British Columbia  Dr. Shibani Ghosh Tufts University  Dr. Amy Webb Girard Emory University  Dr. Jef L. Leroy International Food Policy Research Institute (IFPRI)  Dr. Deanna Olney International Food Policy Research Institute (IFPRI)	

# ECONOMICS OF DEMAND

Dr. Marti van Liere

10:30

MODERATOR: DR. MARTI VAN LIERE, GLOBAL ALLIANCE FOR IMPROVED NUTRITION (GAIN)

Introduction

	Global Alliance for Improved Nutrition (GAIN)	
	SPEAKERS	PRESENTATIONS
10:35	Mr. Matthew Willcox Institute of Decision Making	When it comes to marketing there is one P that is more important than the 4Ps. How insights from the psychology of choice should set the agenda for price, product, promotion and place
11:00	(TBC)	Price response and price policies and micronutrient rich foods

# 11:20 Mr. Ricardo Jorge Dos Santos Lobo Action Against Hunger Dr. Rudaba Khondker Global Alliance for Improved Nutrition (GAIN), Bangladesh Conditional cash transfers and their impact on micronutrient outcomes (Placement) How to combine the 4Ps in a programmatic approach: driving demand of multiple micronutrient powders as part of optimal IYCN in Bangladesh

10:30 TO 12:00 RM: COZUMEL 4

#### MICRONUTRIENTS IN THE CONTEXT OF THE NUTRITION TRANSITION

MODERATORS: DR. RICARDO UAUY, INTA-CHILE AND

MTRA. ROCIO ALVARADO CASAS, NATIONAL INSTITUTE OF PUBLIC HEALTH (INSP), MEXICO

	SPEAKERS	PRESENTATIONS	
10:30	<b>Dr. Daniel López de Romaña</b> Micronutrient Initiative (MI)/ Instituto de Investigación Nutricional (IIN)	Updating the evidence on micronutrient deficiencies in Latin America	
10:45	<b>Dr. Manuel Ruz</b> Universidad de Chile	Two-year zinc supplementation in type 2 diabetes: a randomized clinical	trial in Chile
11:00	<b>Dr. Ricardo Uauy</b> INTA-Chile	Food systems (or diets) for the prevention of malnutrition in all forms	
11:15	<b>Dr. Olga Patricia García Obregón</b> Universidad Autónoma de Querétaro (UAQ)	Consequences of micronutrient deficiencies in obese populations	
11:30	<b>Dr. Teresita González de Cosío</b> Universidad Iberoamericana (UIA)	Lactation performance in obese women and potential effects on nutrition of their children	nal status
11:45	Q&A		
10:30	TO 12:00		R00MS ↓
SPONS	DRED SYMPOSIA		
Sociedad Latinoamericana de Nutrición (SLAN) and Instituto de Nutrición de Centro América y Panamá (INCAP)		Recognition of the work of Dr. Guillermo Arroyave and Dr. Fernando Viteri (TBC)	TULUM 1 & 2
World F	ood Programme (WFP)	Building the global roadmap for scaling up rice fortification	XCARET 1
12·00 TC	1:00 / LUNCH BREAK		



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1:00 TO 2:00 RM: XCARET 1

#### **LEARNING CENTRE**

U.S. Centers for Disease Control and Prevention (CDC), UNICEF, Home Fortification Technical Advisory Group (HF-TAG), Global Alliance for Vitamin A (GAVA), Micronutrient Initiative (MI), World Health Organization (WHO), and Global Alliance for Improved Nutrition (GAIN)

Interactive demonstration of new tools and resources to implement and monitor micronutrient programs

1:00 TO 2:00 RM: GRAN CANCÚN

#### **POSTER PRESENTATIONS**

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#### → PLENARY/EARLY AFTERNOON

2:00 TO 3:30 RM: GRAN CANCÚN

# HAVE MICRONUTRIENT POWDER PROGRAMS SCALED UP TOO QUICKLY (HAVE THE PROGRAMS COME BEFORE THE EVIDENCE)? — DEBATE

MODERATOR: DR. MARIA ELENA JEFFERDS, U.S. CENTERS FOR DISEASE CONTROL PREVENTION (CDC)

	DEBATERS	PRESENTATIONS
2:00	<b>Dr. Stanley Zlotkin</b> The Hospital for Sick Children (HSC)	Not too quickly
2:20	<b>Dr. Omar Dary</b> United States Agency for International Development (USAID)	Yes, too quickly
	DISCUSSANT	
2:40	Dr. Marie Ruel International Food Policy Research Institute (IFPRI)	
3:00	Q&A	

#### → CONCURRENT SESSIONS/LATE AFTERNOON

4:00 TO 5:30 RM: COZUMEL 3

#### **NEW TECHNOLOGIES FOR DELIVERING MICRONUTRIENTS**

MODERATOR: DR. KEN BROWN, BILL & MELINDA GATES FOUNDATION (BMGF)

	SPEAKERS	PRESENTATIONS
4:00	<b>Dr. Dora Pereira</b> University of Cambridge	New compounds for safer delivery of supplemental iron
4:20	<b>Ms. Aviva Rappaport</b> University of British Columbia	The efficacy of the Lucky Iron Fish™ in-home fortification of iron to improve hemoglobin concentration in rural Cambodian women: a randomized control trial
4:35	<b>Dr. Ana Jaklenec</b> Massachusetts Institute of Technology (MIT)	New approaches for delivering multiple micronutrients in fortified food
4:55	<b>Ms. Laura Hackl</b> Federal Institute of Technology (ETH), Zurich	Evaluation of iron and zinc bioavailability from fortified rice using coating, hot and cold extrusion: human stable isotope studies
5:10	<b>Dr. Prosper Kujinga,</b> Wagenigen University (WU) and University of Zimbabwe	Daily consumption of zinc fortified water increases daily zinc intake and improves overall morbidity from common childhood infections in rural Kenyan children: a randomized, controlled effectiveness trial
5:25	DISCUSSION	



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4:00 TO 5:30 RM: COZUMEL 4

#### NEW EFFICACY TRIALS OF BIOFORTIFIED CROPS—BEYOND BIOMARKERS

MODERATOR: DR. VENKATESH MANNAR, UNIVERSITY OF TORONTO AND THE TATA TRUSTS & TATA CORNELL INITIATIVE

	SPEAKERS	PRESENTATIONS
4:00	<b>Dr. Jere Haas</b> Cornell University	High iron beans: the Rwandan efficacy trial—improvement in iron status, physical activity and cognition
4:20	<b>Prof. Sunil Sazawal</b> Swami Vivekanad Subharti University, India	Efficacy of high zinc-biofortified wheat consumption on improvement of micronutrient status, and prevention of morbidity among preschool children (aged 4-6 years) and women of child bearing age—a double masked, randomized, controlled trial in India
4:40	<b>Dr. Marjorie Haskell</b> University of California, Davis	Provitamin A maize: effect on dark adaptation and breast milk retinol in rural Zambia
4:55	Ms. Boitshepo Bibi Giyose Food and Agriculture Organization (FAO)	World Health Organization (WHO)/Food and Agriculture Organization (FAO) external consultation proceedings on biofortification: brief communication
5:10	DISCUSSION	

4:00 TO 5:30 RM: COZUMEL 1 & 5

#### **EFFECTIVENESS OF HOME FORTIFICATION PROGRAMS**

MODERATOR: DR. SASKIA J.M. OSENDARP, MICRONUTRIENT INITIATIVE (MI)/WAGENINGEN UNIVERSITY (WU)

	SPEAKERS	PRESENTATIONS
4:00	Mr. Pradiumna Dahal United Nations Children's Fund (UNICEF) Nepal and Dr. Zuguo Mei U.S. Centers for Disease Control and Prevention (CDC)	Effectiveness of an integrated infant and young child feeding and micronutrient powder program in Nepal
4:15	<b>Dr. Hermann Lanou</b> Institut de recherche en science de la Santé (IRSS), The Institute of Tropical Medicine (ITM), Antwerp	Impact of a community-based IYCN intervention and MNPs on child growth, anemia and morbidity from infectious diseases in Burkina Faso
4:30	Ms. Aregash Samuel Ethiopian Public Health Institute (EPHI), Wageningen University (WU)	Effectiveness of a program intervention with reduced-iron micronutrient powders on morbidity, iron status and child growth in young children in Ethiopia

#### 4:45 Dr. Saskia J.M. Osendarp Determinants of success in home fortification programs in Burkina Faso and Ethiopia Micronutrient Initiative (MI), Wageningen University (WU) 4:55 Ms. Katie Tripp Impact of an integrated infant and young child feeding program including daily U.S. Centers for Disease Control use of small quantity lipid-based nutrient supplement on stunting and micronutrients and Prevention (CDC) status in young children in Katanga, DRC 5:10 Dr. Susana Matias Prenatal and postnatal supplementation with lipid-based nutrient supplements University of California, Davis reduced anemia and iron deficiency in young Bangladeshi children 5:25 Q&A

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**4:00 TO 5:30** RM: COZUMEL 2

#### ARE WE TALKING THE LANGUAGE TO TURN EVIDENCE INTO POLICY AND PROGRAMS?

MODERATOR: MS. JANE BADHAM, JB CONSULTANCY

SPEAKERS	PRESENTATIONS
<b>Dr. Jeannine Baumgartner</b> North-West University, South Africa	What does the scientist hear?
<b>Dr. David Chiriboga</b> University of Massachusetts Medical School (former Minister of Public Health, Ecuador)	What a policy-maker hears from nutrition scientists?
<b>Ms. Nelly Zavaleta</b> Instituto de Investigación Nutricional	What civil sociey hears and doesn't hear from nutrition scientists?
<b>Dr. Praween Kumar Agrawal</b> United Nations Children's Fund (UNICEF)	The journey toward the first ever comprehensive national nutrition survey in India: creating an enabling environment
DISCUSSION	

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Simultaneous translation available for this session (Spanish/English) La traducción simultánea está disponible en esta sesión Inglés/Español ■ TRACK 1 Measuring and interpreting information on micronutrient status.

■ TRACK 2 Effects of micronutrient interventions on indicators and functional outcomes.

■ TRACK 3 Scaling up micronutrient interventions in vulnerable populations: bridging the gaps between evidence and implementations.

■ TRACK 4 Transforming the enabling environment to forge a future for micronutrients— what will it take?

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4:00 TO 5:30 RM: GRAN CANCÚN

#### THE CRITICAL ROLE OF CAPACITY FOR DELIVERING MICRONUTRIENT INTERVENTIONS — PANEL

MODERATOR: DR. NAMUKOLO COVIC, INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE (IFPRI)

SPEAKERS	PRESENTATIONS	
<b>Dr. Stuart Gillespie</b> International Food Policy Research Institute (IFPRI)	Framing: what do evaluations of micronutrient interventions tell us about contains a second contains a	ritical
<b>Dr. Jessica Fanzo</b> Johns Hopkins University (JHU)	Framing: educating and training the workforce for nutrition for the future	
PANELISTS	PRESENTATIONS	
Prof. Patrick Kolsteren Ghent University	An academic perspective	
(TBC)	An African country perspective	
Ms. Laura Astete Robilliard	A Latin American country perspective	
<b>Dr. Elvina Karyadi</b> Micronutrient Initiative (MI)	An Asian country perspective	
5:30 TO 7:00		R00MS ↓
SPONSORED SYMPOSIA		
Tufts University	Hidden hunger in older adults: an urgent, yet preventable, global health and economic problem	COZUMEL 2
Nutrition Leadership Programmes	Meeting of the Nutrition Leadership Programmes	COZUMEL 4
Global Nutrition Report	Accelerating anemia reduction	COZUMEL 3



#### **→ PLENARY/MORNING**

8:30 TO 10:00 RM: GRAN CANCÚN

# IMPLEMENTATION SCIENCE IN NUTRITION: PURPOSES, FORMS, FUNCTIONS AND COUNTRY EXAMPLES

MODERATOR: MS. ANNE PENISTON, U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID)

	SPEAKERS	PRESENTATIONS
8:35	Ms. Anne Peniston U.S. Agency for International Development (USAID)	Introduction
8:40	Dr. David Pelletier Cornell University (CU) & Society for Implementation Science in Nutrition (SISN)	Implementation science in nutrition: forms and functions
9:00	Mrs. Patrizia Fracassi Scaling Up Nutrition Movement Secretariat (SUN)	Summary of implementation constraints, bottlenecks and priorities from a sample of Scaling Up Nutrition Movement (SUN) countries
	VIGNETTES	PRESENTATIONS
9:20	Ing. German Gonzalez Secretariat for Food Security & Nutrition (CONASAN)	Implementation research in practice: examples from Guatemala
9:25	Ms. Natsayi Nembaware Adventist Development and Relief Agency (ADRA)	Implementation research in practice: examples from sub-Saharan Africa
9:30	<b>Dr. Richmond Ayreetey</b> University of Ghana (UG)	Implementation research in practice: examples from Ghana
9:35	<b>Dr. Sunny Kim</b> International Food Policy Research Institute (IFPRI)	Implementation research in practice: examples from India
	DISCUSSANT	
9:40	<b>Dr. Rolf Klemm</b> Helen Keller International (HKI) and Johns Hopkins University (JHU)	
9:55	Q&A	



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#### → CONCURRENT SESSIONS / MORNING

10:30 T0 12:00 RM: COZUMEL 2

# DIETARY ASSESSMENT RE-IMAGINED USING INDIVIDUAL DIETARY INTAKE DATA FOR PROGRAM BASELINE AND IMPACT ASSESSMENT

MODERATORS: DR. JOANNE E. ARSENAULT, UNIVERSITY OF CALIFORNIA, DAVIS AND DRA. TERESA SHAMAH, NATIONAL INSTITUTE OF PUBLIC HEALTH (INSP), MEXICO

	SPEAKERS	PRESENTATIONS
10:30	<b>Dr. Jennifer Coates</b> Tufts University	Tools for individual level data collection and analysis of dietary intake of nutrients: current situation and gaps (based on the results of the INDDEX: to scale up and streamline dietary assessment in low-income countries)
10:45	<b>Dr. Joanne E. Arsenault</b> University of California, Davis	Diet-based metrics and indicators for use in programs (with focus on dietary diversity score)
11:00	<b>Dr. Mourad Moursi</b> International Food Policy Research Institute (IFPRI)	Technology-based tools for dietary assessment
11:15	<b>Dr. Nancy Lopez</b> National Institute of Public Health (INSP), Mexico	Mexico: national micronutrient survey results (lessons from large-scale implementation of dietary assessment in programs)
11:30	<b>Dr. Laura Trijsburg</b> Wageningen University (WU)	Comparison of duplicate portion and 24h recall as reference methods for validating a food frequency questionnaire using urinary markers as the estimate of true intake
11:45	DISCUSSION AND Q&A	
10:30	TO 12:00	RM: TULUM 1 & 2

#### IODINE NUTRITION DURING PERINATAL PERIOD AND EARLY CHILDHOOD

MODERATOR: DR. ROLAND KUPKA, UNITED NATIONS CHILDREN'S FUND (UNICEF), NY

	SPEAKERS	PRESENTATIONS
10:30	<b>Dr. Maria Andersson</b> Federal Institute of Technology (ETH), Zurich	Defining optimal iodine nutrition during infancy
10:55	<b>Dr. Grace Marquis</b> McGill University, Montreal	Salt iodization in Ethiopia and child development: intervention preconception, in infancy and pre-schoolers
11:20	<b>Dr. Pattanee Winichagoon</b> Mahidol University, Bangkok	Does iodine deficiency during pregnancy affect offspring cognitive development?
11:40	<b>Dr. Nuriya Platonova</b> Federal Endocrinology Research Center, Moscow	Influence of iron deficiency on the effectiveness of the prevention of iodine deficiency during pregnancy in the regions of the Russian Federation
	DISCUSSANT	
11: 50	<b>Dr. Roland Kupka</b> United Nations Children's Fund	



(UNICEF), NY



10:30 TO 12:00

#### WHAT'S STOPPING YOU? ADDRESSING BARRIERS TO FOOD FORTIFICATION IMPLEMENTATION SUCCESS

MODERATOR: MS. SARAH ZIMMERMAN, FOOD FORTIFICATION INITATIVE (FFI)

	SPEAKERS	PRESENTATIONS
10:30	<b>Dr. Ian Darnton-Hill</b> University of Sydney/Tufts University	Review of barriers to fortification implementation in countries
 10:45	Ms. Karen Codling Iodine Global Network (IGN) & Food Fortification Initative (FFI), Asia	Does providing free or subsidized fortificant facilitate sustainable food fortification? Experiences from salt and wheat flour fortification
10:50	<b>Dr. Arijit Chakrabarty</b> Global Alliance for Improved Nutrition (GAIN) India	How to integrate food-fortification programmatic monitoring into government's overall food control activities? Experience with salt fortification in India
11:00	<b>Ms. Laura Rowe</b> Project Healthy Children, USA	How to effectively collate, analyze and report fortification monitoring data? Malawi's experience with salt, sugar, wheat flour, and maize flour fortification
11:10	<b>Mr. Peiman Milani</b> PATH	How to overcome the challenges of scaling up food fortification? Two decades of experience with rice fortification
11:30	Ms. Becky Tsang Food Fortification Initiative (FFI) Asia	Public and private sector dynamics in scaling up rice fortification: the Colombian experience and its lessons
11:40	Q&A	
10.20	TO 12:00	COZIIMEL 1 & 5

10:30 TO 12:00 COZUMEL 1 & 5

#### SCALING UP MICRONUTRIENT INTERVENTIONS TO REACH THE GLOBAL NUTRITION TARGETS: WHAT ARE THE COSTS, BENEFITS, AND SUSTAINABLE FINANCING OPTIONS?

DR. MEERA SHEKAR, WORLD BANK

	SPEAKERS	PRESENTATIONS
10:30	<b>Dr. Jakub Kakietek</b> World Bank	Costs and impacts of scaling-up vitamin A and prophylactic zinc supplementation programs
10:45	<b>Mr. Dylan Walters</b> University of Toronto	Costs and impacts of scaling-up anemia-prevention programs
11:00	<b>Dr. Jack Clift</b> Results for Development	Financing micronutrient programs: options and scenarios



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### **FRIDAY**

#### 11:15 FACILITATED PANEL DISCUSSION

How realistic are these cost estimates and the financing options? What are the opportunities for additional financing (domestic, ODA and innovative financing)? How can we maximize accountability and better track financial resources available for the micronutrient interventions?

#### Dr. Ferew Lemma

Ministry of Health, Ethiopia

#### Dr. Obey Assery-Nkya

Office of the Prime Minister United Republic of Tanzania

#### Dr. Ellen Piwoz

Bill & Melinda Gates Foundation (BMGF) TBC

11:40 **Q&A** 

10:30 TO 12:00 COZUMEL 3

#### OPENING THE DOOR TO THE NEXT GENERATION OF PARTNERSHIPS

MODERATOR: DR. MANDANA ARABI, GLOBAL ALLIANCE FOR IMPROVED NUTRITION (GAIN)

	SPEAKERS	PRESENTATIONS
10:30	<b>Dr. Mandana Arabi</b> Global Alliance for Improved Nutrition (GAIN)	Partnerships for international development: when to partner, with what objectives, and what are the real costs?
10:45	<b>Dr. J.B. Cordaro</b> Mars Incorporated	The way forward for public-private partnerships: possibilities and challenges from the private sector side
11:00	<b>Dr. Garrett Mehl</b> World Health Organization (WHO)	Reaching out to innovative opportunities for nutrition
11:15	<b>Ms. Florencia Vasta</b> Bill & Melinda Gates Foundation	A novel model of pre-competitive public-private collaboration for nutrition research for vulnerable populations
11:30	DISCUSSION AND Q&A	

10:30 TO 12:00 RM: GRAN CANCÚN

#### INTERVENTION MIX: DETERMINING POLICIES WITH AND WITHOUT DATA

MODERATORS: DR. LAWRENCE HADDAD, GLOBAL ALLIANCE FOR IMPROVED NUTRITION (GAIN) AND DR. BERENICE GAONA, NATIONAL INSTITUTE OF HEALTH (INSP), MEXICO

	SPEAKERS	PRESENTATIONS
10:30	<b>Dr. Rajendra Prasad Pant</b> Nepal Ministry of Health and Population	Nepal case study

### **FRIDAY**

10:55 Dr. Juan Angel Rivera Dommarco Mexico case study National Institute of Public Health (INSP), Mexico **DISCUSSANT** Mr. Shawn Baker 11:20 Bill & Melinda Gates Foundation (BMGF) 11:35 Q&A

12:00 TO 1:00 / LUNCH BREAK

ROOMS ↓

#### SPONSORED SYMPOSIA

The Government of Nigeria and the United Nations Children's Fund (UNICEF) Nigeria

Scaling up micronutrient interventions in Nigeria: one vision and plan for collective action

COZUMEL 3

12:00 TO 2:00 RM: XCARET 1

#### **LEARNING CENTRES**

National Institute of Public Health Mexico (INSP), Global Alliance for Improved Nutrition (GAIN), Cornell University

Positioning qualitative research as a key element of implementation research. Key challenges and opportunities

RM: GRAN CANCÚN 1:00 TO 2:00

#### **POSTER PRESENTATIONS**

VIEW LIST OF POSTER PRESENTATIONS ON PAGE 52

#### **→ PLENARY**

BRIDGING DISCOVERY AND DELIVERY: FUTURE DIRECTIONS FOR THE MICRONUTRIENT FORUM

MODERATOR: DR. LYNNETTE NEUFELD, CHAIR, MICRONUTRIENT FORUM INTERNATIONAL STEERING COMMITTEE

**SPEAKERS PRESENTATIONS** 2:00 Dr. Lindsay Allen Reflections on the Micronutrient Forum Conference program University of California, Davis

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#### MODERATED DISCUSSION AND SUMMARY

2:10 **Dr. Andrew Prentice** 

London School of Hygiene and Tropical Medicine (LSHTP)

Mr. Shawn Baker

Bill & Melinda Gates Foundation (BMGF)

**Dr. Bonnie McClafferty**Global Alliance for Improved
Nutrition (GAIN)

Mr. Mauricio Adade

DSM

Dr. Gonzalo Hernández Licona

National Council for the Evaluation of Social

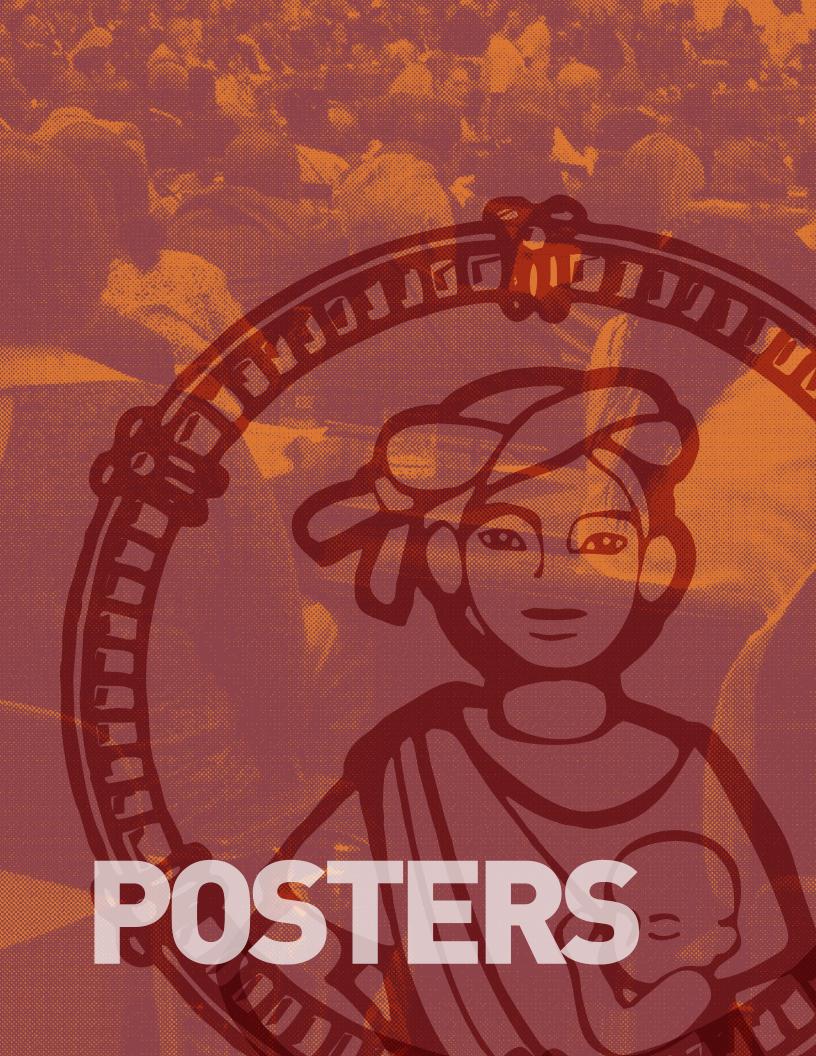
Development Policy (CONEVAL)

**Dr. José Ignacio Ávalos** Un Kilo de Ayuda

4:00 TO 5:30 RM: GRAN CANCÚN

#### KEYNOTE AND CLOSING CEREMONY

SPEAKERS	PRESENTATIONS
<b>Dr. Rafael Flores-Ayala</b> Co-Chair, Micronutrient Forum International Steering Committee	Words of thanks
<b>Dr. Juan Angel Rivera Dommarco</b> Chair, Micronutrient Forum Global Conference 2016 Local Organizing Committee	Words of thanks
<b>Dr. Lawrence Haddad</b> Global Alliance for Improved Nutrition (GAIN)	From hidden to centre stage: opportunities to move micronutrient malnutrition higher up the development agenda
<b>Dr. José Narro Robles</b> Ministry of Health	Development of the nutrition component of PROSPERA: the role of the Ministry of Health



POSTER PRESENTATIONS
WILL TAKE PLACE IN
THE EXHIBITION AREA
OUTSIDE THE GRAN
CANCÚN HALL ON
THE THIRD FLOOR OF THE
CANCÚN CONVENTION
CENTER

#### **POSTER SESSIONS**

TU & WE: TUESDAY AND WEDNESDAY

TH & FR: THURSDAY AND FRIDAY

#### **POSTER THEMES**

- 53 ASSESSMENT of micronutrients in breastmilk
- 53 BEHAVIOURAL economics
- **53 COMMUNICATION** and advocacy for micronutrient policies and programs
- 53 DIETARY assessment: methods and results
- **54 EFFECTS** of interventions on micronutrient content of breastmilk
- **54 EFFICACY** or effectiveness of micronutrient interventions
- **55 EVALUATION** of new biomarkers, analytic methods and biological specimens
- 55 FINANCING for micronutrient interventions
- 56 FORMATIVE and/or implementation research to improve program design and/or implementation; process and impact evaluation
- 58 FUNCTIONAL outcomes: e.g. child development, cognition, growth, stunting, birth outcomes, morbidity, long-term health
- **59 IMPROVING** women's micronutrient status and functional outcomes for women
- **59 INNOVATIONS** in methods for monitoring and surveillance of programs
- **60 INNOVATIVE** and public-private partnerships in support of micronutrient interventions
- 60 INNOVATIVE program or delivery models
- **61 IRON**, zinc, vitamin A, iodine, vitamin B12, folate, vitamin D, multiple micronutrients

- 62 LEADERSHIP and capacity development
- **62 METHODS** for assessing human function in micronutrient interventions
- **62 MICRONUTRIENTS** in emergencies, refugees, and food aid dependent populations
- 62 MICRONUTRIENTS, overweight and obesity
- 63 MONITORING and surveillance for tracking progress and program improvement
- **63 OTHER** micronutrient-related interventions (e.g. agriculture, biofortification, education, social protection)
- **64 PREVALENCE** and risk factors for micronutrient status (deficiency, overload)
- **67 RISKS** or risk/benefit of micronutrient interventions
- **67 STAKEHOLDER** mapping and engagement for micronutrient interventions
- **68 TRANSLATING** evidence into policy decisions for micronutrient interventions
- **68 USE** of cash transfers and vouchers to improve micronutrient nutrition

## ASSESSMENT OF MICRONUTRIENTS IN BREASTMILK

Masako Fujita / 0043 / TU & WE Another way milk vitamin A protects infants from mortality: positive correlation between vitamin A and secretory immunoglobulin A antibody in breast milk of mothers in rural Kenya

**Shaikh Ahmad** / 0154 / TU & WE Maternal obesity is negatively associated with colostrums vitamin A content

Juliana A. Haber / 0122 / TH & FR Supplementation of lactating Guatemalan women with a lipid-based nutrient supplement increases infant intake of select micronutrients from breast milk

**Alejandra Wiedeman** / 0203 / TH & FR Water-soluble choline content in human milk and its contribution towards the adequacy of dietary choline intake in infants

#### **BEHAVIOURAL ECONOMICS**

Alexandra Towns / 0069 / TU & WE It is not a weed, it is food! Promoting women and children's consumption of micro-nutrient-rich African indigenous vegetables in Malawi and Zambia

Paula Dominguez-Salas / 0149 / TH & FR The role of animal-source food systems in improving nutrition in low-income settings

#### COMMUNICATION AND ADVOCACY FOR MICRONUTRIENT POLICIES AND PROGRAMS

Sisay Sinamo Boltena / 0027 / TU & WE Promoting local foods for improved nutrition: opportunities and challenges in meeting micronutrient needs of children in Western Kenya

Van Khanh Tran / 0090 / TU & WE Large scale fortification in Vietnam: a national strategy

Deepika Mehrish Sharma / 0105 / TU & WE Applying positive deviance for making adolescent anemia control programme relevant to tribal communities: the experience from Khunti district, India

**Salomon Shamosh** / 0135 / TU & WE History, nutrition, health and ecology for the generation of communication strategies regarding spirulina (*A. maxima*) Lauren Smith / 0152 / TU & WE Women as 'agents of change' for improved maternal infant and young child nutrition (MIYCN): evidence from the Rwanda campaign 'A 1000 days in the land of a 1000 hills'

Madhusree Banerjee / 0122 / TH & FR Anemia control programs and nutritional issues of adolescent girls in rural Gujarat

Sarah Ngalombi / 0133 / TH & FR SBCC interventions to address barriers to appropriate use of micronutrient powders (MNPs) in Uganda

Jack Bagriansky / 0202 / TH & FR Projecting national economic consequences of IDD and benefits of USI

**Sudeep Sharma** / 0229 / TH & FR Addressing micronutrient deficiency with policy advocacy

Ranjeeta Rani / 0231 / TH & FR Effective communication for improved knowledge attitude and practices towards fortified foods

#### DIETARY ASSESSMENT: METHODS AND RESULTS

**Abdul-Razak Abizari** / 0005 / TU & WE More than two-thirds of dietary iodine in children in Northern Ghana is obtained from bouillon cubes containing iodized salt

Catherine Oladoyinbo / 0009 / TU & WE Dietary diversity and nutrient intake adequacy among adult women in Iwo local government area, Osun State Nigeria

Imane El Menchawy / 0011 / TU & WE Eating patterns and iron status of school children in rural Morocco

#### Fabrice Fabien Dongho Dongmo

0013 / TU & WE

Effect of some cooking parameters on carotenoids content of Cameroonian foods cooked with crude palm oil (Elaeis guineensis Jacq): case of maize (Zea mais) cake

Vani Sethi / 0035 / TU & WE Using ProPAN for designing fortnightly counseling sessions to enhance maternal diet diversity in socially backward poverty pockets of Bihar (India) Rajwinder Harika / 0044 / TU & WE Bioavailability of iron from iron fortified bouillon cube improves with the addition of food additive tetra sodium pyrophosphate

Khalid El Kari / 0057 / TU & WE Fruits and vegetables important sources to eliminate vitamin A deficiency in Morocco

Marya Lieberman / 0060 / TU & WE Laboratory validation of a paper test card for part-per-billion quantification of iodide in simulated urine

**Wendy Coyoy Galvan** / 0077 / TU & WE Food and nutritional determinants of zinc deficiency in Guatemalan stunted children under five

Vani Sethi / 0082 / TU & WE Diagnostic accuracy of mid-upper-armcircumference for screening thinness in Indian adolescents

Elad Tako / 0088 / TU & WE Chronic zinc deficiency alters gut microbiota structure and function in vivo (Gallus gallus)

Mestawet Gebremeskel / 0093 / TU & WE The contribution of home gardens to dietary diversity, vitamin A intake and nutritional status of children 6-23 months: a comparative cross-sectional study in Melga District, southern Ethiopia

Jennifer Coates / 0099 / TU & WE Scaling up dietary data for decision-making in low-income countries: new technological frontiers

Cristina Palacios / 0110 / TU & WE Adequacy of micronutrient intake and contribution of supplements among a sample of Puerto Rican infants

**Suruchi Pradhan** / 0111 / TU & WE A comparison of dietary diversity, phytate and mineral intake in South Asian women living in United Kingdom and Pakistan

Aniket Daftardar / 0116 / TU & WE Improving strategies for women in pre and post delivery period by using pulse uv light for vit D fortification

**Phuong Nguyen** / 0086 / TH & FR Pregnant adolescents and pregnant adult women in Bangladesh have similarly inadequate dietary micronutrient intakes

Matthew Smith / 0088 / TH & FR
Assessing global diet and nutrient supplies
with the new global expanded nutrient supply
[GENuS] model

**Girma Mengistu** / 0090 / TH & FR Energy and nutrient intake of infants and young children in pastoralist communities of Ethiopia

**Kendra Byrd** / 0099 / TH & FR Leveraging technology: using electronic data collection tools to conduct the four-pass 24 hour recall in the context of the WASH benefits randomized controlled trial

**El Arbi Rjimati** / 0100 / TH & FR Micronutrient status in children and pregnant women in two Moroccan regions

**Brekhna Aurangzeb** / 0102 / TH & FR Trends and determinants of infant and young child feeding practices (IYCF) in Pakistan

Prosper Kujinga / 0121 / TH & FR Daily food-based dietary recommendations combined with zinc fortified drinking water ensure nutrient adequacy among 4-6 year old Kenyan children

Nazia Binte Ali / 0126 / TH & FR Dietary diversity score for food intake of under five children and their association with socio-demographic factors in rural Bangladesh: lessons from a cross-sectional survey

Kristen Hurley / 0171 / TH & FR Relations between feeding behaviors and infant dietary diversity in rural Guatemala

**Agatha Previdelli** / 0258 / TU & WE An exploratory factor analysis of micronutrient among elderly

Alida Melse-Boonstra / 0183 / TH & FR Daily vitamin A intake recommendations revisited: global confusion and need for alignment

Sabri Bromage / 0195 / TH & FR Gender differences in food intake, nutrient intake, and nutrition status among Mongolian adults

Frinné Rodríguez / 0204 / TH & FR Malnutrition due to nutrients deficiency in indigenous children of the Huasteca region, Mexico

**Alejandra Wiedeman** / 0205 / TH & FR Contribution of dietary choline intake to choline status during early childhood **Beatriz Basabe Tuero** / 0211 / TH & FR Inadequate micronutrient intake in women of childbearing age

Yunhee Kang / 0219 / TH & FR Association between maternal social capital and dietary diversity among children aged 6-12 months in rural Ethiopia

**D.J. Nithya** / 0222 / TH & FR Correlation of dietary diversity with micronutrient intake and blood haemoglobin and serum retinol levels

# EFFECTS OF INTERVENTIONS ON MICRONUTRIENT CONTENT OF BREASTMILK

Hassan Aquenaou / 0087 / TU & WE Antenatal care in Rabat and outskirts, Morocco: risk factors for non-attendance

## EFFICACY OR EFFECTIVENESS OF MICRONUTRIENT INTERVENTIONS

Florence Uchendu / 0002 / TU & WE Nigerian biscuits contributed one-half of vitamin A daily requirement of pre-school children

Lynette Owiti / 0010 / TU & WE Factors influencing adherence to iron and folate supplements by pregnant women attending antenatal clinic at Thika level 5 hospital in Kenya

Fatima Ezzahra Zahrou / 0012 / TU & WE Can multi-micronutrient milk fortification improve the iodine status, growth and health, of rural Moroccan schoolchildren? A randomized controlled trial

Alan de Brauw / 0030 / TU & WE Using agriculture to improve child health: results from a randomized controlled trial on vitamin A intake

**Beatrice Brunner** / 0033 / TU & WE Reducing micronutrient deficiencies in Pakistan: cost-effectiveness of subsidies on fortified packaged complementary food Jai Das / 0036 / TU & WE

Systematic review and meta-analysis of nutrition supplementation interventions for pregnant women and children

**Abner Daniel** / 0037 / TU & WE Coverage validation of vitamin A in the state of Chhattisgarh, India

Tanimoune Mahamadou / 0039 / TU & WE Effect of complementary feeding programme using micronutrient fortified blended food on anaemia among refugees in Rwanda

Khalid El Kari / 0051 / TU & WE Efficiency of the consumption of multiple micronutrients fortified milk on vitamin D status of schoolchildren aged 7-9 years in Morocco

**Keja Joshi Reddy** / 0052 / TU & WE Double fortified salt supplementation among Indian pregnant women and effects on neonatal outcome

Patty Th. Scholten / 0054 / TU & WE Effectiveness of nutrition interventions attempting to improve maternal and child health in North Africa: a bibliographic analysis of articles from 2000–2015

Nicole Stoffel / 0059 / TU & WE A comparison of iron absorption from single versus twice daily dosing and from consecutive versus alternate day dosing in iron-depleted women by using iron stable isotopes

**Sidelsi Suárez Fundora** / 0070 / TU & WE Clinical-hematological evaluation of neotrofin in the treatment of anemic pregnant woman in 10 De Octubre municipality.

**Huong Cao** / 0074 / TU & WE Effect of weekly dose of MNP combined with nutritional education on nutritional status and hemoglobin concentration of Vietnamese children aged 6-23 months in midland area

Jean Max Beautiere / 0080 / TU & WE Using formative research to design the introduction of micronutrient powder in Guinea

Crystal D. Karakochuk / 0082 / TU & WE
The effect of oral iron with or without multiple
micronutrients on hemoglobin concentration
among anemic non-pregnant Cambodian
women of reproductive age: a 2x2 factorial
randomized controlled supplementation trial

Leah Perlas / 0075 / TH & FR Pregnant and lactating women and the elderly still iodine deficient 20 years after USI in the Philippines

Yunhee Kang / 0077 / TH & FR Mid-program impact on feeding frequency and dietary diversity among infants and young children in rural Malawi

**Junsheng Huo** / 0078 / TH & FR Systematic review and meta analysis on nutrition intervention effect of YYB for infants and young children in China

Malay Mridha / 0096 / TH & FR Daily lipid-based nutrient supplements containing 800 μg vitamin A increased serum retinol-binding protein in lactating but not in pregnant women in rural Bangladesh

Mario Capanzana / 0116 / TH & FR Vitamin D fortified milk: dose response study

Bernard Ilboudo / 0128 / TH & FR Cluster-randomized trial protocol for analysis of the effect of individual support of the pregnant woman at home, associated with appropriate prenatal cares on the prevention and management of anemia in pregnancy in the health rural district of Sindou (Burkina Faso)

Emily M. Teshome / 0131 / TH & FR Daily home fortification with 12.5mg iron as ferrous fumarate versus 3mg iron as NaFeEDTA: a randomized, placebo-controlled, non-inferiority trial in Kenyan children

Feruza Ospanova / 0256 / TH & FR External quality assessment program for iodine deficiency disorders (IDD) monitoring in Central Eastern Europe and Commonwealth Independent States (CEE/CIS) region by reference lab of Kazakh Academy of Nutrition (KAN)

Daniela Medeiros / 0141 / TH & FR
The effect of folic acid supplementation with
ferrous sulfate on the linear and ponderal
growth of children aged 6–24 months

**Denish Moorthy** / 0142 / TH & FR Systematic review of reviews: comparing nutrition-specific and -sensitive intervention impacts on anemia and hemoglobin concentrations Rita Wegmüller / 0148 / TH & FR

Efficacy of hepcidin-based screen-and-treat approaches using two different doses vs a standard universal approach of iron supplementation in young children in rural Gambia: a double-blind randomized controlled trial

Cornelius M. Smuts / 0257 / TH & FR Randomized controlled trial on the effects of lipid-based nutrient supplements on linear growth of 6 month-old infants in South Africa

Mehdi Azlaf / 0170 / TH & FR

Efficacy study of the consumption of multiple micronutrients fortified milk on the nutritional status of vitamin A among school children in rural region in Morocco

Mari Skar Manger / 0172 / TH & FR Effects of prenatal lipid-based nutrient supplementation on birth outcomes: a systematic review and meta-analysis

Pallavi Panth / 0175 / TH & FR Is there an increased risk of iodine deficiency among reproductive-age women [18-45] with "normal" thyroid function?

**Rebecca Campbell** / 0180 / TH & FR Daily complementary food supplementation improves micronutrient status in 18 month old children in rural Bangladesh

Neal Craft / 0187 / TH & FR Impact of provitamin A biofortified maize consumption on carotenoid status of Zambian children

Cristieli Oliveira / 0190 / TH & FR Multiple micronutrients in powder through primary healthcare reduce iron deficiency, vitamin A deficiency and improve nutritional status in young Brazilian Amazonian children: a pragmatic controlled trial

Tawanda Muzhingi / 0212 / TH & FR Peanut butter increase the bioavailability and bioconversion of kale  $\beta$ -carotene to vitamin A

EVALUATION OF NEW BIOMARKERS, ANALYTIC METHODS AND BIOLOGICAL SPECIMENS

Samson Gebremedhin / 0006 / TH & FR Validity of reported night blindness as an indicator of vitamin A deficiency status during pregnancy Alejandra Contreras-Manzano

0024 / TH & FR

Anemia, iron deficiency and iron deficiency anemia in Mexican elderly population from ENSANUT 2012

Umu Hawa Jalloh / 0059 / TH & FR Impact of Ebola on mass vitamin A supplementation and deworming coverage in Sierra Leone

Mohammed Amine Radouani

0089 / TH & FR

Relation between leptin-adiponectin ratio and body fat, insulin, glucose and lipid profile during normal pregnancy

**Sun Eun Lee** / 0094 / TH & FR Clusters of micronutrients associated with single plasma proteins reflect homeostatic regulation in Nepalese children

Wanqi Zhang / 0164 / TU & WE Estimation of urinary iodine excretion by iodine/creatinine ratio from morning spot urine in school-age children

Emily M. Teshome / 0175 / TU & WE Diagnostic test performance of zinc protoporphyrin to detect iron deficiency in Kenyan preschool children

Marija Knez / 0231 / TU & WE

An initial evaluation of newly proposed biomarker of zinc status in humans — linoleic acid: dihomo-γ-linolenic acid (LA:DGLA) ratio

**Guy-Marino Hinnouho** / 0236 / TU & WE Comparison of hemoglobin assessments by Hemocue® and by automated hematology analyzer in young children: evidence from the Lao zinc study

## FINANCING FOR MICRONUTRIENT INTERVENTIONS

Robert James Reid / 0107 / TH & FR Cost assessment of free-public and market-based distribution models of superkid micronutrient powder (MNP) in Lao PDR

Sanjeev Kumar / 0156 / TU & WE Costs of childhood diarrhoea management program and scale-up feasibility under public sector in Bihar state of India

Mary D'Alimonte / 0213 / TU & WE Financial needs to achieve the global nutrition target for anemia in women: how much will it cost and how to pay for it?

FORMATIVE AND/OR IMPLEMENTATION RESEARCH TO IMPROVE PROGRAM DESIGN AND/OR IMPLEMENTATION; PROCESS AND IMPACT EVALUATION

Samson Gebremedhin / 0005 / TH & FR
The effectiveness bundling of zinc with oral
rehydration salts (ORS) for improving
adherence to acute watery diarrhea
treatment in Ethiopia: cluster randomised
controlled trial

Adewale Oparinde / 0009 / TH & FR Developing country consumers' acceptance of biofortified foods: a synthesis

**Dylan Walters** / 0012 / TH & FR Potential for fortification of locally produced oil: vitamin A status of children under five in two districts of Tanzania

Medina Wandella / 0013 / TH & FR
The effects of simulated consumption
of biofortified cassava on dietary vitamin A
inadequacy among rural primary school
children aged 6-12 years in Kibwezi
District, Eastern Kenya

Laura A. Rowe / 0015 / TH & FR How to improve food fortification program compliance: bridging the gap between the ideal and the pragmatic

**Rizwan Yusufali** / 0020 / TH & FR Optimization of cost contributors for rice fortification

Kuong Khov / 0021 / TH & FR Stability of vitamin A, iron and zinc in fortified rice during storage and its impact on future national standards and programs-case study in Cambodia

**Peiman Milani** / 0026 / TH & FR Piloting a commercial model for rice fortification: lessons learned from Brazil (track 3, session 14.3a) Victor Taleon / 0028 / TH & FR Consumer acceptance and preference of biofortified yellow cassava in the western provinces of the Democratic Republic of Congo

Alexis D'Agostino / 0029 / TH & FR Reflecting on experiences to improve programming: looking at micronutrient powder distribution qualitatively

**Sarah Ngalombi** / 0250 / TU & WE Piloting through partnership: micronutrient powders in Uganda

**Rizwan Yusufali** / 0250 / TH & FR Scaling up rice fortification: a case for adopting a wider geographic perspective in the design of programs

Kamrun Nahar / 0251 / TU & WE Adapting and testing the Nurturing Connections© approach to improve behaviour change interventions to promote optimal intra-household nutrition practices

Ngozi Nnam / 0036 / TH & FR Iron,  $\beta$ -carotene and vitamin C contents of some underutilized vegetables in south eastern Nigeria

Christina Nyhus Dhillon / 0039 / TH & FR Operationalizing micronutrient powder programs: lessons learned from the USAID/ SPRING MNP consultation

Alison Tumilowicz / 0040 / TH & FR Application of focused ethnography to elaborate a program impact pathway: an example from a micronutrient powder project in Ethiopia

**Angella Atero Atwaru** / 0050 / TH & FR Promoting biofortified crops using positive deviant lead mothers

**Shariqua Khan** / 0052 / TH & FR Scaling up fortification of rice through the government's school feeding programme in Odisha, India

**Donald Cole** / 0055 / TH & FR Planning an integrated agriculture and health program to improve nutrition outcomes using biofortified sweetpotato and designing its evaluation: experience from western Kenya Inge D. Brouwer / 0057 / TH & FR Local capacity building and mobilising community support are important determinants of success for a large scale community-based complementary food project in Ethiopia

Nicola Martin / 0058 / TH & FR Improved women's nutrition through affordable nutritious foods in Bangladesh

Aregash Samuel Hafebo / 0062 / TH & FR Promotion of local foods with provision of MNPs or sq-LNS can improve nutrient adequacy for 6-23 month old children in Tigray, Ethiopia

**Césaire T. Oueédraogo** / 0065 / TH & FR The impact of a programmatic intervention to promote increased antenatal care seeking and iron-folic acid supplement consumption in Zinder, Niger

Hanqi Luo / 0067 / TH & FR
Predicted effects of current and potential
micronutrient intervention programs on
adequacy of iron intake in a national sample
of women and young children in Cameroon

Michael Diressie / 0072 / TH & FR Factors influencing consumers' willingnessto-pay for vitamin A biofortified yellow cassava foods in Kinshasa and Bas Congo provinces of D.R. Congo

Michael Diressie / 0073 / TH & FR Evaluation and intention to adopt vitamin A maize among women in Eastern Province, Zambia

Renuka Jayatissa / 0074 / TH & FR Effectiveness of multiple micronutrient supplementation programme in Sri Lanka

**Kenda Cunningham** / 0079 / TH & FR Participation in homestead food production activities improves maternal dietary diversity

**Pooja Pandey Rana** / 0080 / TH & FR Lactation management in Nepal, a scalable model for increasing early and exclusive breastfeeding

#### **Preetu Mishra** / 0081 / TH & FR The adverse side effects and other factors inhibiting compliance in India's weekly iron folic acid supplementation programme

**Kenda Cunningham** / 0083 / TH & FR Improving maternal and child nutrition practices in Nepal

Megan Landry / 0091 / TH & FR Maternal diet during pregnancy and lactation: current evidence and implications for programs

Aminuzzaman Talukder / 0097 / TH & FR Improved food security and increased production, dietary diversity and income among participating households in a cluster randomized control trial of homestead food production with or without aquaculture in Prey Veng province, Cambodia

Pham Kim Ngoc / 0098 / TH & FR
The multiple dimensions of inequality
influencing nutrition related outcomes
in Son La Province, Vietnam: findings
from a household survey

Mahfuzur Rahman / 0101 / TH & FR Opportunities and challenges of market based approach to promoting home fortification with micronutrient powder through frontline volunteer health workers in Bangladesh

Fakhar Uddin / 0105 / TH & FR Programmatic determinants of high and low performances of home fortification program with micronutrient powder in Bangladesh

**Judy McLean** / 0147 / TU & WE From evidence to national scale: the case of micronutrient powders in Rwanda

Martina Northrop-Lyons / 0149 / TU & WE Lessons learned on the importance of monitoring for action and community sensitization and mobilization during the home fortification with MNP pilot in Northern Zambia

Haribondhu Sarma / 0155 / TU & WE Effects of home contact by frontline volunteer health workers in improving program coverage of home fortification with micronutrient powder in Bangladesh

Fanny Sandalinas / 0163 / TU & WE Formative work to design the packaging of micronutrient powders (MNPs) for home fortification programs in 3 countries in west and central Africa Simon Wieser / 0166 / TU & WE Does it work? Is it worth it? Evaluating the costs and benefits of micro-nutritional interventions

Esther Kariuki / 0172 / TU & WE Mobile phone texting in building adherence to iron and folic acid supplementation among pregnant women in Kenya

**Tobi Osunkentan** / 0173 / TU & WE Understanding the Hausa socio-cultural context in Northern Nigeria — informing behaviour change messaging using cultural domain analysis

Marti van Liere / 0177 / TU & WE What do we know about her: identifying entry points for nutrition interventions targeting adolescent girls in India, Pakistan and Indonesia

David Doledec / 0179 / TU & WE SMS reminders and vocal messages increase adherence to immunization and 6-month vitamin A supplementation

Phillip Makhumula / 0182 / TU & WE Homogeneity of vitamin A fortified sugar distributed in Malawi as a direct result of the type of premix used

**Hermann Lanou** / 0184 / TU & WE Barriers and enablers of mothers using community-based nutrition services and MNPs in rural Burkina Faso

Annette Imohe / 0185 / TU & WE Participatory formative research to develop a social marketing strategy in Northern Nigeria

Moshood Omotayo / 0186 / TU & WE A comprehensive program model for integrating prenatal calcium and iron supplementation into primary healthcare in Western Kenya

Alia Poonawala / 0187 / TU & WE Identifying barriers and enhancers of home fortification utilization in market-based delivery: lessons from Bangladesh and Vietnam.

**Tobi Osunkentan** / 0189 / TU & WE Key fieldwork lessons from conducting multi-site formative research to inform development of an integrated nutrition program for children 6–23 months in Northern Nigeria Melissa Young / 0190 / TU & WE Assessing feasibility and program effectiveness of home fortification of complementary foods in Bihar: design and methodology

**Greg S. Garrett** / 0194 / TU & WE Knowledge, attitude and practices among consumers regarding fortified foods in Vietnam

#### Carol Levin / 0199 / TU & WE

Cost and cost-effectiveness of Mama-SASHA a project to improve health and nutrition of women and children through an integrated orange-fleshed sweetpotato production and health service delivery model in Kenya

Caitlin Gomez / 0205 / TU & WE Sierra Leone: post Ebola resilience plan includes scaling up MNP for children 6-23 months

Annette Imohe / 0209 / TU & WE Understanding local infant and young child feeding practices to create an effective micronutrient powder program in Northern Nigeria

Jonathan Gorstein / 0210 / TU & WE National policy responses to iodine deficiency disorders: iodine supplementation in Indonesia, the Philippines, and Thailand

Jennifer Busch-Hallen / 0211 / TU & WE How to reach an additional 2 million pregnant women per year with the right dose of iron and folic acid supplements: evidence-informed program design in 8 high burden countries

Stephen Kodish / 0212 / TU & WE Multi-phase formative research to understand micronutrient powder (MNP) acceptance and utilization among children aged 6 – 23 months in Northern Nigeria

Johana Rocio Ruiz Murcia / 0214 / TU & WE Evaluation of the content of iron and folic acid in bakery products made with fortified wheat flour in Colombia

**Douglas Taren** / 0219 / TU & WE Mother and child vitamin A deficiency clump together but not iron deficiency in Benin

Tausif Janjua / 0221 / TU & WE Stability of potassium iodate (KI03) in different types of edible salt and packing materials under different climatic conditions In Pakistan

Mario Capanzana / 0227 / TU & WE From pyramid to plate: a formative research on the development of a Filipino food guide

**Abanti Zakaria** / 0228 / TU & WE Implementation science in practice: vitamin A supplementation global programming

Meseret Azene / 0234 / TU & WE Iron fractionation of cereals contaminated with different types of Ethiopian soils and its consequence on bioaccessibility

M. Michelle Jimenez / 0237 / TU & WE Consumption of multi-micronutrient powders (MMNP) in young children: knowledge, perceptions and practices of families, health personnel and other community actors in 3 regions of Peru

Tanjul Saxena / 0239 / TU & WE Use of fortified aata by community using small chakki for flour fortification: a pilot project in tribal blocks of Udaipur District, Rajasthan India

**Vincent Assey** / 0242 / TU & WE Rolling up food fortification to rural areas in Tanzania

Carol Henry / 0243 / TU & WE Starting young incorporating local pulses in the menus of childcare centers in Saskatoon: a pilot intervention

FUNCTIONAL OUTCOMES: E.G. CHILD DEVELOPMENT, COGNITION, GROWTH, STUNTING, BIRTH OUTCOMES, MORBIDITY, LONG-TERM HEALTH

Zewdie Aderaw / 0002 / TH & FR Spatial epidemiology of child malnutrition in Ethiopia: further analysis of 2011 Ethiopian demographic and health survey

Sebastian Vollmer / 0008 / TH & FR Association between household unavailability of iodized salt and childhood undernutrition: evidence from 87 demographic and health surveys Samson Gebremedhin / 0007 / TU & WE Vitamin A supplementation and childhood morbidity from diarrhea, fever, acute respiratory infections and anemia in sub-Saharan Africa: evidence from 28 demographic and health surveys

**Tsedeke Hailemariam** / 0017 / TH & FR Prevalence of chronic malnutrition (stunting) and associated factors among children aged less than 24 months in west part of Ethiopia

Yasir Bin Nisar / 0022 / TH & FR Iron-folic acid supplementation during pregnancy reduces the risk of stunting in children less than 2 years of age: a retrospective cohort study from Nepal

Fabian Rohner / 0025 / TH & FR Associations between stunting and zinc deficiency in pre-school aged children in Azerbaijan

**Hermano Rocha** / 0030 / TH & FR Vitamin A supplementation different effect on morbidity in girls and boys: transversal series household population study in northeast of Brazil, 1987 to 2007

**Brietta M. Oaks** / 0049 / TH & FR Associations of maternal hemoglobin and iron status with pregnancy outcomes in three countries

Phuong Nguyen / 0084 / TH & FR Effects of weekly supplementation with multiple micronutrients or iron and folic acid before conception on offspring development at 2 years of age in Vietnam

Ines Gonzalez-Casanova / 0121 / TU & WE Effects of preconception supplementation with multiple micronutrients or iron and folic acid compared to folic acid only on offspring linear growth during the first two years of life: a randomized controlled trial in Vietnam

#### Giovanna Gatica-Domínguez

0087 / TH & FR

Plasma folate and vitamin B12 during pregnancy and child neurodevelopment over the first 30 months of age: a cohort study

Aminata Shamit Koroma / 0128 / TU & WE Infant and young child feeding practices among caretakers of children 0-23 months in Sierra Leone prior to the Ebola outbreak Hassan Aquenaou / 0129 / TU & WE Anemia in pregnancy: pregnancy outcome and neonatal data in a Moroccan population

Elizabeth Prado / 0131 / TU & WE Effects of small quantity lipid-based nutrient supplements on neurobehavioral development in the international lipid-based nutrient supplements (iLiNS) project

Laxmi Majji / 0139 / TU & WED Delivering tribal pregnant and lactating mothers a daily nutritional boost through women self-help group platforms: evidence from states of Andhra Pradesh and Telangana, India

Tazeen Tahsina / 0165 / TU & WE Determining factors of childhood wasting in rural Bangladesh: lessons from a cross-sectional survey

Ahmadwali Aminee / 0171 / TU & WE Calcium supplementation among targeted pregnancies: a life saving strategy to reduce the risk of eclampsia and maternal and newborn deaths

Yaw Addo / 0180 / TU & WE Associations between acute phase proteins and stunting in children under 5 y: a multi-country analysis

**Barbara Stoecker** / 0203 / TU & WE Goiter but not thyroid hormones were affected by iodine supplementation in lactating women in rural Ethiopia

**Veronica Mundo Rosas** / 0218 / TU & WE Impact of "the national crusade against hunger (CNCH)" over anemia prevalence in preecholer children

Jaqueline Lepsch / 0220 / TH & FR
Association between early pregnancy vitamin
D inadequacy and changes on serum lipid
profile throughout pregnancy

# IMPROVING WOMEN'S MICRONUTRIENT STATUS AND FUNCTIONAL OUTCOMES FOR WOMEN

Clayton Ajello / 0016 / TH & FR Leveraging a proven approach to achieve large-scale deployment of multimicronutrient supplements to pregnant, nutritionally at-risk, hard-to-reach women

**Tanimoune Mahamadou** / 0031 / TH & FR Promoting women nutrition in Nyamagabe and Rutsiro Districts in Rwanda

#### **Sara Fikru** / 0037 / TH & FR

Nutrition education impacts on the perceived barriers of pulse processing and consumption in regard of nutritional benfits/micro & macro nutrients/in a rural community in Oromia, Ethiopia

Christina Tzogiou / 0251 / TH & FR Impact of maternal malnutrition on child health: what do we know about its social costs and the cost-effectiveness of food-fortification?

Sheela Sinharoy / 0048 / TH & FR Women's dietary diversity in rural Bangladesh: pathways through women's empowerment

Elifatio Elinafasi Towo / 0069 / TH & FR Food fortification strategies as integrated interventions for improving nutrition outcome of women and children in Tanzania

Mekonnen Tesfamariam / 0095 / TU & WE Improving dietary diversity of women and children through homestead vegetable production coupled with cooking demonstration and behavior change communication

Semalign Samuel / 0122 / TU & WE Anemia and associated factors among pregnant women attending antenatal care services in public health centers of Kembata Tembaro Zone, southern Ethiopia

Julius J. Okello / 0141 / TU & WE Determinants of participation in an integrated agriculture-health intervention using biofortified sweetpotato and impacts on health service utilization by pregnant women

#### Chowdhury Abdullah Al Asif

0153 / TU & WE

Increases in dietary adequacy and food security among extremely poor households in Bangladesh: a quasi-experimental evaluation of making markets work for women [M2W2]

#### Wanqi Zhang / 0169 / TU & WE Research of the average requirement

Research of the average requirement of iodine intake in euthyroid Chinese women of childbearing age

# Indira Bose / 0174 / TU & WE The difficulty of meeting the nutrient

requirements of adolescent girls: a cross-comparison of three different cost of the diet studies in El Salvador, Ghana and Madagascar

#### **Elaine A. Yu** / 0217 / TU & WE Anemia and tuberculosis among patients in rural South India

**Abimbola O. Ajomale** / 0226 / TH & FR lodine deficiency among female undergraduate students in a peri-urban area of Ogun State, Southwest Nigeria

Elizabeth Parkes / 0238 / TH & FR Enhancing nutrition and capacity strengthening of farmers in selected communities in Nigeria

# INNOVATIONS IN METHODS FOR MONITORING AND SURVEILLANCE OF PROGRAMS

Peng Liu / 0006 / TU & WE Should urinary iodine concentration of school-aged children continue to be used as a proxy of iodine status for different adult population groups?

Fabian Rohner / 0021 / TU & WE Comparative validation of five quantitative rapid test kits for the analysis of salt iodine content: laboratory performance, user- and field-friendliness

Rabi N. Parhi / 0034 / TU & WE 'Wall mark and armband': feasibility and diagnostic accuracy of using simple screening tools for maternal low stature and maternal wasting by frontline workers during monthly village health days in Bihar, India

Amir Makhmudov / 0106 / TU & WE Creating sustainable and measurable progress in monitoring the iodine nutritional status of a population: external quality assurance and iodine

#### Emmerentia Elza Strydom

0120 / TU & WE

Evaluation of an inexpensive and disposable paper analytical device (saltPAD) for quantifying iodine in iodized salt

Mary Christine Castro / 0158 / TU & WE Validation of a semi-quantitative test for vitamin A detection in coconut cooking oil

Mary Christine Castro / 0159 / TU & WE Accuracy in quantification of vitamin A levels in coconut cooking oil using a portable device: agreement, sensitivity and specificity

Annette Imohe / 0183 / TU & WE Improving the performance of maternal, new-born and child health weeks in Nigeria through a real-time monitoring tool

Veronica Lopez-Teros / 0146 / TH & FR Retinol transfer from the mother to the breastfed infant in agricultural and urban regions in northwest-Mexico, assessed by stable isotopes

Ogechi Akalonu / 0159 / TH & FR Planning and reporting tool enhances supply management for maternal new-born and child health week saving \$436,000 in resources

Julia Krasevec / 0162 / TH & FR Trends in estimated national 2-dose vitamin A supplement coverage among children aged 6-59 months

#### Christine Northrop-Clewes

0164 / TH & FR

Comparison of algorithms for adjusting serum retinol concentrations in the presence of an acute phase response using data from four countries

Carine Mapango / 0166 / TH & FR Laboratory and field manual for specimen collection, field testing, specimen processing, storage, and shipment: a tool for nutrition surveys

#### María del Carmen Morales Ruan

0177 / TH & FR

Validation of Masimo Pronto 7 for the determination of hemoglobin concentrations in children from 1 to 5 years old in México

Lucia Cuevas Nasu / 0185 / TH & FR Is there a relationship of household food insecurity and anemia in children receiving the benefit from food assistance programs in Mexico?

# INNOVATIVE AND PUBLIC-PRIVATE PARTNERSHIPS IN SUPPORT OF MICRONUTRIENT INTERVENTIONS

**Edwin Habeych** / 0054 / TH & FR Iron stabilization in food—an industry perspective

Hajra Hafeez-ur-Rehman / 0256 / TU & WE National fortification alliances (NFAs): program guidance based on lessons learned from nine countries

**Suvabrata Dey** / 0134 / TH & FR Catalyze consolidation of the salt industry to achieve universal salt iodization (USI)

**Andreas Blüthner** / 0201 / TU & WE Fortification of staple foods in Central America

Andreas Blüthner / 0202 / TU & WE The affordable nutritious foods for women (ANF4W) partnership

# INNOVATIVE PROGRAM OR DELIVERY MODELS

Felix Brooks-Church / 0016 / TU & WE Bridging the gap between national nutrition programming and rural at-risk communities through small-scale fortification

Ann Micka / 0248 / TH & FR Addressing a gap in prenatal and postnatal multiple-micronutrient supplement coverage for low-income pregnant and lactating women in the United States

### Vani Sethi / 0024 / TU & WE

Harnessing power of women collectives to deliver proven nutrition-sensitive and nutrition-specific interventions for improving women's nutrition in three Indian states — Bihar, Chhattisgarh, and Odisha

**Sourav Bhattacharjee** / 0025 / TU & WE Are women's collectives' effective vehicles for improving women's nutrition in tribal eastern India? Findings of a scoping study

Sisay Sinamo Boltena / 0026 / TU & WE The impact of community resource persons on demand and uptake of biofortified crops: a case study of Northern Uganda

#### Sanjay Rijal / 0038 / TU & WE

Improving the consumption of vitamin 'A' rich food among children age 6-23 months through child cash grant in the most deprived areas of Nepal

Panam Parikh / 0055 / TU & WE Can including milk in a phytate-rich local diet be an effective strategy to combat zinc deficiency?

Lelisse Keno / 0061 / TU & WE Influence of community maternal and newborn health and nutrition (CMNHN) family meetings on maternal and newborn nutrition in pastoralist community, Afar region, Ethiopia

Myriam Sidibe / 0073 / TU & WE Follow in my green foodsteps: a branded school- and community-based programme to improve iron intake in Nigeria

Aregash Samuel Hafebo / 0076 / TU & WE Knowledge, attitude and practices of caregivers using MNPs in a program setting in Ethiopia

**Giriraj Subedi** / 0089 / TU & WE Increasing consumption of adequately iodized salt in two priority districts of Nepal

Kamran Rizvi / 0092 / TU & WE
Positioning maternal nutrition at the centre of

Positioning maternal nutrition at the centre o undernutrition reduction strategy: a case study from Uttar Pradesh

**Getu Tarekegn** / 0115 / TU & WE Integrating vitamin A supplementation (VAS) intervention into routine health systems for program sustainability in Ethiopia

**Justine Kavle** / 0288 / TU & WE Community-based distribution of iron-folic acid supplementation: evidence and program implications for anemia programming for women and girls

**Keith Porter** / 0136 / TU & WE Motivational factors of village health volunteers (VHV) delivering nutrition services in Cambodia Roland Kupka / 0145 / TU &~WE

The role of micronutrient powders in improving complementary feeding practices

Martina Northrop-Lyons / 0150 / TU & WE Village Lao women's union volunteers are instrumental in the uptake of the superkid home fortification programme with micronutrient powders (MNP) in Lao PDR

Fanny Sandalinas / 0123 / TH & FR Child health days (CHD): an opportunity to strengthen birth registration

**Dipankar Chakma** / 0125 / TH & FR Making markets work for women (M2W2): an innovation achieving household micronutrient adequacy through poultry raising

Md. Ataur Rahman / 0130 / TH & FR Improved interpersonal counselling (IC) by health workers and supply chain enhances the utilization of iron-folic acid supplements (IFAS) among pregnant mothers in selected districts of Bangladesh: a case study

Kroeun Hou / 0132 / TH & FR A community based distribution strategy using village health volunteers (VHV) is effective in increasing coverage of micronutrient powders (MNPs) among children 6-24 months in Cambodia

Marti J. van Liere / 0136 / TH & FR Understanding and increasing the potential of markets to improve infant and young child nutrition: using a program impact pathway

Edgar Onyango / 0137 / TH & FR
Use of early child development centres (ECD) increases coverage of routine vitamin A supplementation (VAS) to children 12 to 59 months of age

**Tausif Janjua** / 0139 / TH & FR Demonstrating a model to reach target population in geographical areas not covered by lady health workers (LHW) in Pakistan

Victoria Azodoh / 0140 / TH & FR External monitoring of maternal new-born and children health weeks with SMART tablets improves accountability and transparency

Payal Gupta / 0152 / TH & FR Essential program elements to scale up the use of zinc and ORS in childhood diarrhoea treatment program: experiences from Asia

# Jeanne Ejigui / 0157 / TH & FR Design of an operational implementation approach for scaling of community-based home fortification (HF) program coupled with IYCF in four health districts (HD) in the northern region of Cameroon

Letje Reerink / 0194 / TH & FR Factors for successful implementation of market based approaches to deliver micronutrient powders to communities

# Manoj Raut / 0198 / TH & FR Revitalising iron and folic acid (IFA) supplements for pregnant women as a key component of the ante-natal care (ANC) package: program experiences of demonstration projects in two populous countries of Bangladesh and Indonesia in Asia

Elisa Cadena / 0201 / TH & FR National program for the prevention and reduction of nutritional anemia for infants and young children

#### Elijah Mbiti / 0206 / TH & FR Effectiveness of non-conventional delivery platforms in improving access of ORS and zinc in Narok County, Kenya

Marcela Saises / 0209 / TH & FR Fortified rice-mongo curls: opportunity for improving the nutritional requirements of children six (6) months to five (5) years old for iron and zinc

Sudeep Sharma / 0228 / TH & FR Village-level wheat flour fortification to improve the nutritional status of tribal population

Lauren Wilner / 0234 / TH & FR
Successful improvement of micronutrient
content in corn soy blend (CSB) porridge
used for treatment of moderate acute
malnutrition (MAM) through a social behavior
change communication (SBCC) intervention
aimed at increasing amount of added fortified
vegetable oil (FVO)

#### IRON, ZINC, VITAMIN A, IODINE, VITAMIN B12, FOLATE, VITAMIN D, MULTIPLE MICRONUTRIENTS

**Julián Herrera Mejía** / 0003 / TH & FR Calcium effect on genes expression involved in non-heme iron absorption by intestinal epithelial cells: Caco-2

Kifle Habte / 0004 / TH & FR Iron, folate and vitamin B12 status of Ethiopian professional runners

Umesh Kapil / 0007 / TH & FR Status of iodine nutrition among pregnant mothers in selected districts of Uttarakhand, India

**Selekane Ananias Motadi** / 0010 / TH & FR lodine nutritional knowledge of food handlers: a Capricorn and Waterberg district study, Limpopo Province, South Africa

Tsedeke Hailemariam / 0018 / TH & FR Availability of adequately iodized salt on prevention of iodine deficiency disorders at household level and associated factors in Lalo Assabi District, West Wollega Zone, Oromia region, west Ethiopia

**Ijeoma Eboagwu** / 0012 / TH & FR Physical and sensory properties of soycheese as a potential carrier for micronutrient sprinkles production

## **Alejandra Contreras-Manzano** 0023 / TH & FR

Vitamin D deficiency (VDD) and insufficiency (VDI) was associated with cardiovascular risk factors in 20-49 years of age

Manju Reddy / 0033 / TH & FR Novel iron enriched *aspergillus oryzae* that has similar absorption as ferrous sulfate in humans: potential to be used as a fortificant

Laura Hackl / 0043 / TH & FR Iron bioavailability from ferric pyrophosphate in extruded rice cofortified with zinc oxide or zinc sulfate: a human stable isotope study

Marly Cardoso / 0045 / TH & FR Home fortification with a multiple micronutrient powder reduces vitamin A deficiency in young Brazilian children

Helena Pachón / 0053 / TH & FR Relationship between fortified wheat flour consumption and prevalence of iron deficiency and anemia in Colombia. Taddese Alemu / 0060 / TH & FR Level of dietary factors inhibiting bioavailability of iron in major prepared "ready to eat" foods consumed by pregnant mothers in rural Arsi, central Ethiopia

Elad Tako / 0071 / TH & FR
Studies of cream seeded carioca beans
(phaseolus vulgaris l.) from a Rwandan
efficacy trial: in vitro and in vivo
(including effects on intestinal microbiome)
screening tools reflect human studies
and predict beneficial results from iron
biofortified beans

Marinel Rothman / 0103 / TU & WE Feeding practices in relation to nutritional status of 6-month old infants from a peri-urban setting in South Africa

Nancy Krebs / 0109 / TU & WE Maternal preconception anthropometry in four diverse sites prior to nutrition intervention

Fernando Pizarro / 0113 / TU & WE Calcium does not affect zinc absorption in humans

**Gabriela Galan** / 0114 / TU & WE Blueberry inhibit the absorption on non-heme iron

Mamady Daffe / 0118 / TU & WE Assessing iodine content in salt and mapping salt production in Guinea

**Brekhna Aurangzeb** / 0143 / TU & WE Hemoglobin, calcium and bone mineral density in children with coeliac disease

Imelda Dugay / 0157 / TU & WE A double-blind randomized placebocontrolled trial evaluating the effect of micronutrient powder (MNP) on urinary iodine levels of Filipino children aged 4–6 years

Sokhoing Ly / 0255 / TU & WE Median urinary iodine concentrations are indicative of adequate iodine status among women of reproductive age in Prey Veng, Cambodia

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Malavika Vinodkumar / 0196 / TU & WE A study in improving micronutrient status of women and children in communities using crystal salt enriched with multiple micronutrients

Valeria Galetti / 0206 / TU & WE Population biomarker kinetics of iron status and hepcidin during iron fortification in Moroccan children: a double-blind, randomized controlled trial

Kerry Schulze / 0225 / TU & WE Newborn micronutrient status in the JiVitA-3 trial of antenatal multiple micronutrient (MM) and iron-folic acid (IFA) supplementation

Jeannine Baumgartner / 0232 / TU & WE Iodine status of complementary-fed South African infants receiving lipid-based nutrient supplements: a randomized controlled trial

Cecília Zanin Palchetti / 0233 / TU & WE Association between serum unmetabolized folic acid concentrations and folic acid from fortified foods

Edwin Habeych / 0235 / TU & WE Multifortification of bouillon in central and east Africa — feasibility and cost efficiency

#### LEADERSHIP AND CAPACITY DEVELOPMENT

Aynalem Firew / 0044 / TH & FR Building capacity in continuous quality improvement for maternal nutrition in the Afar region of Ethiopia

Hajira Amin / 0051 / TH & FR Knowledge and skills retention among community volunteers following community maternal and newborn health and nutrition (CMNHN) training in the Afar region of Ethiopia

Chitrarpita Saha / 0092 / TH & FR Identification and promotion of positive deviant behaviours (PDB) regarding infant and young child feeding (IYCF) among rural mothers for improving child health and nutrition — a cross sectional study

Jessica Fanzo / 0134 / TU & WE Ethical dilemmas of improving undernutrition: a moral obligation to coordinate and collaborate

Hala Boukerdenna / 0229 / TU & WE Management of conflicts of interest in the context of food fortification in public health

Rosemary Mwaisaka / 0238 / TU & WE Assessment of capacity needs for effective monitoring of nutritious and fortified foods in the ECSA region

Deepti Gulati / 0240 / TU & WE Bridging the nutrition gap through public private partnership

Deepti Gulati / 0230 / TH & FR Edible oil fortification in Rajasthan: enriching foods, enriching lives

#### METHODS FOR ASSESSING HUMAN **FUNCTION IN MICRONUTRIENT INTERVENTIONS**

Hassan Aguenaou / 0068 / TH & FR Practices of mothers and health professionals about complementary feeding in twelve basic health care facilities in Casablanca, Morocco

Hassan Aguenaou / 0084 / TU & WE Risk factors and epidemiology of neural tube defects in Morocco

K. Michael Hambidge / 0108 / TU & WE Physiological zinc (Zn) requirements during pregnancy and lactation are achieved by indigenous Guatemalan women consuming a plant-based, high phytate diet

Tausif Janjua / 0143 / TH & FR Review of potassium iodate (KIO3) supply chain mechanism for universal salt iodization program (USIP) in Pakistan

Sherry Tanumihardjo / 0178 / TH & FR A review of the biomarkers of nutrition for development document for vitamin A

#### MICRONUTRIENTS IN EMERGENCIES. **REFUGEES, AND FOOD AID DEPENDENT POPULATIONS**

Ismael Ngnie-Teta / 0082 / TH & FR Maintaining high coverage vitamin A supplementation in the context of community quarantines during Ebola epidemic in Guinea

Henry Mark / 0178 / TU & WE

Distributing micronutrient powders in an emergency: experiences from 3 Boko Haram conflict affected north Nigeria states

Ifeanyi Maduanusi / 0181 / TU & WE Implementation of the maternal, new-born and child health week in the conflict affected north Nigerian state of Borno

**Aly Diana** / 0214 / TH & FR

Acceptability of a novel beef powder added to infant and young child complementary foods in West Java, Indonesia

#### MICRONUTRIENTS, OVERWEIGHT AND **OBESITY**

#### Gisela María Pita-Rodríguez

0011 / TH & FR

Adiposity indicators, inflammation and anemia in women of childbearing age

Wilna Oldewage-Theron / 0019 / TH & FR Is overweight and obesity associated with multiple micronutrient deficiencies in low-income women? A case study from Qwa-Qwa, South Africa

Diane Baik / 0032 / TH & FR

Positive deviance/hearth (PDH), a food-based approach to increase consumption of vitamin A and iron-rich foods and rehabilitate malnourished children in Shribordi, Bangladesh

Sophonneary Prak / 0035 / TH & FR Double burden of malnutrition in Cambodia: micronutrient deficiencies are prevalent in both undernourished and overweight women

Dessalegn Ajema / 0056 / TH & FR Assessment of the magnitude of double burden of malnutrition and its associated factors among selected in-school adolescents in Arba Minch Town, southern Ethiopia: school based cross sectional study

Christian Razo-García / 0112 / TU & WE Adiposity and diet in women in the second to third trimester of pregnancy

#### **Olga P. García** / 0146 / TU & WE

Zinc deficiency increases the risk of chronic inflammation in a school-aged population of children with a high prevalence of obesity

Alberto Prieto Patron / 0198 / TU & WE What is the role of maternal education and early feeding recommendations to fight anemia and overweight in 6-23 month old children? Evidence from 87 demographic and health surveys

Paulina Estrella / 0200 / TU & WE Vitamin A and E are associated with markers of obesity, inflammation and insulin resistence in Mexican school-aged children

#### **Elaine A. Yu** / 0216 / TU & WE

The dual burden diabetes and tuberculosis among women and men with low adiposity in rural South India

# MONITORING AND SURVEILLANCE FOR TRACKING PROGRESS AND PROGRAM IMPROVEMENT

Daniel Muhinja / 0038 / TH & FR Multiple micronutrient powder supplementation in Turkana central, south and east: a program review by World Vision

**Vijaya Kancherla** / 0041 / TH & FR A 2015 global update on folic acid-preventable spina bifida and anencephaly

**Dorene Asare-Marfo** / 0047 / TH & FR Adoption rate of high iron bean varieties in Rwanda: results from a census of bean producing households

Hassan Aguenaou / 0070 / TH & FR Exclusive breastfeeding in Rabat and outskirts, Morocco: risk factors for non-compliance

Elvina Karyadi / 0113 / TH & FR Improved quality assurance and quality control and USI regulatory monitoring increase adequately iodized salt in Central Java province, Indonesia

Cherry Maramag / 0114 / TH & FR Availability of vitamin A fortified unbranded and branded vegetable cooking oil in public markets in a province of the Philippines using lot quality assurance sampling

#### Jillian L. Waid / 0118 / TH & FR

The association of food price change and homestead food production with dietary diversity of women in Bangladesh

Jessica Farebrother / 0119 / TH & FR Monitoring iodine nutrition: program recommendations to reduce excessive iodine intakes in eastern Africa

Miriam Bwengye / 0124 / TH & FR Accurate and cost effective methods for monitoring and inspection of food fortification programs in Uganda

Emmanuel Odu / 0127 / TH & FR Nigeria reaches 246 million children with vitamin supplementation through the maternal new-born and child health week campaign

Stanley Chitekwe / 0167 / TU & WE Increased coverage of vitamin A supplementation in Nigeria is tainted by rising programme inequities

Annette Imohe / 0168 / TU & WE Determining barriers to universal coverage of nutrition interventions delivered through the maternal new-born and child health weeks in Nigeria

#### Chinwe Ezeife / 0170 / TU & WE

The evolution of Nigeria's vitamin A campaign into an integrated platform for delivering nutrition and health interventions nationally

Prakash Kotecha / 0188 / TU & WE Child anemia control: a feasibility study within the government set up in Uttar Pradesh, India

Sanjeev Kumar / 0192 / TU & WE Capacity building of community level health workers and equipping them with supplies to enhance care seeking and usage of zinc and ORS for management of childhood diarrhoea through public sector in Gujarat, India

**Svenja Jungjohann** / 0197 / TU & WE Commercial monitoring of oil fortification to assess availability and compliance of local oil brands fortified with vitamin A in Mozambique

Van Khanh Tran / 0222 / TU & WE Knowledge attitude and practices among consumers regarding fortified foods in Vietnam

#### Sueppong Gowachirapant

0224 / TU & WE

lodine status of Thai school-aged children and women of reproductive age living in the same household

**Moudod Hossain** / 0230 / TU & WE Formulation of the Bangladesh national micronutrient strategy: a big tent approach for better outcomes

**Sangeeta Saxena** / 0241 / TU & WE Analyzing family and health survey data of India regarding nutritional indicators

OTHER MICRONUTRIENT-RELATED INTERVENTIONS (E.G. AGRICULTURE, BIOFORTIFICATION, EDUCATION, SOCIAL PROTECTION)

Changpyo Lee / 0015 / TU & WE Improvement of agriculture production, food accessibility and consumption by a 2.5 year of new natural farming programs in post conflict areas in Sri Lanka

Muneta Grace Manzeke / 0028 / TU & WE Agronomic biofortification of cowpea (vigna unguiculata (l.) walp.) with zinc: potential avenue for ameliorating micronutrient malnutrition among rural households

Amynah Janmohamed / 0041 / TU & WE Improved toilets are associated with higher hemoglobin concentrations among rural Cambodian women in the first trimester of pregnancy

Abebe Haile / 0046 / TU & WE Proximate analysis and sensory evaluation of cookies developed from blend of moringa stenopetalla leaf powder with wheat flour for lactating mothers and pregnant women

Jan Low / 0050 / TU & WE Uptake of biofortified orange-fleshed sweetpotato (OFSP), changes in health service utilization, and nutritional impact in an integrated agriculture-health intervention in Western Kenya

Taddese Zerfu / 0067 / TU & WE Dietary diversity during pregnancy reduced the risk of maternal anemia, low birth weight, and pre-term birth in a prospective cohort study in rural Ethiopia

Endale Amare / 0081 / TU & WE Flour blending as a natural fortification means to enrich micronutrient level of a staple food teff injera used as complementary food in Ethiopia

Nassul Kabunga / 0096 / TU & WE Cattle ownership, childhood malaria and anemia in Uganda

**Diriba Kumssa** / 0097 / TU & WE Could *moringa oleifera* and *m. stenopetala* increase human dietary mineral supply in sub-Saharan Africa?

Amy Webb Girard / 0100 / TU & WE An integrated agriculture, nutrition and health project promoting orange flesh sweet potato improved infant vitamin A consumption but not vitamin A status in Western Kenya

Elise F. Talsma / 0085 / TH & FR Acceptance and adoption of biofortified crops by vulnerable populations

Elise F. Talsma / 0093 / TH & FR Retention of zinc in biofortified rice and maize during processing and cooking

#### Arasur Lakshmanaswamy Iswarya 0249 / TH & FR

Nutritional & anti-nutritional composition of bio fortified pearl millet

Mourad Moursi / 0115 / TH & FR Rice zinc biofortification reduces prevalence of zinc inadequacy among adult women in Bangladesh, the Philippines, and Indonesia

## Meredith Jackson-deGraffenried

Affordable nutritious foods for women (ANF4W) project: improving micronutrient intake through an integrated communication strategy, enhanced homestead food production, and rice fortification

Carol Henry / 0188 / TH & FR
Phenolic, carotenoid, tocopherol, antioxidant
and fatty acid composition of commonly
consumed Canadian yellow pea, lentil and
chickpea cultivars

Carol Henry / 0207 / TH & FR
Assessing the use of traditional household
pulse processing and consumption
for improved food and nutrition security

Imelda Dugay / 0227 / TH & FR Knowledge, attitude and practices of day care pupils' caregivers in La Trinidad, Benguet, Philippines Susan Whiting / 0236 / TH & FR
Using supplemental calcium, milk or
moringa to mitigate fluorosis: a human trial
conducted in the Rift Valley of Ethiopia

**Elizabeth Parkes** / 0237 / TH & FR Effect of processing on total carotenoid content in selected yellow root cassava varieties and their products

**Getahun Ersino** / 0241 / TH & FR A nutrition education intervention affects the diet-health related practices and nutritional status of mothers and children in a pulsegrowing community in Halaba, south Ethiopia

# PREVALENCE AND RISK FACTORS FOR MICRONUTRIENT STATUS (DEFICIENCY, OVERLOAD)

Yalelet Chuchu / 0001 / TU & WE Bone healing, serum level of vitamin D and associated factors at early phase among adult fractured patients in University of Gondar Hospital, Ethiopia

Vanisha Nambiar / 0003 / TU & WE Relationship between prevalence of anemia and pearl millet consumption patterns among rural women of Gujarat, western India

Jessica Ayensu / 0004 / TU & WE Antioxidant micronutrient status and pregnancy outcomes in Ghanaian adolescents attending antenatal clinic in urban (Suntreso) and rural (Mampong) hospitals

#### **Gisela María Pita-Rodríguez** 0008 / TU & WE

Helicobacter pylori infection is not associated with anemia, iron deficiency and inflammation in women of reproductive age in Havana, Cuba

Imane El Harchaoui / 0014 / TU & WE Dietary patterns, nutritional knowledge, prevalence and risk factors for anemia among school children in Morocco

Frank Tammo Wjeringa / 0017 / TU & WE High prevalence of anemia in Cambodian women and children can only be partly attributed to nutritional factors and hemoglobinopathy

Chinagorom Asinobi / 0018 / TU & WE Assessment of iron status and its predisposing factors among pregnant women in Owerri, municipality, Imo state, Nigeria Nicolai Petry / 0019 / TU & WE In Rwandese women with low iron status, iron absorption from low phytic acid beans and biofortified beans is comparable, but low phytic acid beans cause adverse gastrointestinal symptoms

Brenda A.Z. Abu / 0020 / TU & WE Micronutrient deficiencies among apparently healthy school-aged children in rural Cofimvaba, Eastern Cape, South Africa: a community-based cross-sectional study

James P. Wirth / 0022 / TU & WE Anemia and micronutrient deficiencies in pre-school aged children and non-pregnant women in Azerbaijan

**Sonja Y. Hess** / 0029 / TU & WE lodine status of pregnant women and school-age children in Zinder, Niger

Fabian Rohner / 0031 / TU & WE Consumption of iodized salt by women of reproductive age in Sierra Leone is associated with better iodine status and greater equity in iodine status

Hassan Aguenaou / 0032 / TU & WE Vitamin D, calcium and phosphorus status in Moroccan obese women

Tanimoune Mahamadou / 0040 / TU & WE Novel assays for micronutrient surveys: testing suitability of 2 anaemia diagnostic tools in Mahama refugee camp, Rwanda

**Kassandra Harding** / 0042 / TU & WE Tackling anemia in South Asia

Rajwinder Harika / 0045 / TU & WE Micronutrient status and intake in adolescents and women from four African countries

Naima Saeid / 0047 / TU & WE Dietary sodium and potassium intakes among Moroccan children aged 6 to 14 years

**Ngozi Nnam** / 0048 / TU & WE Vitamin A and iodine status of children aged 6-59 months in Kaduna State, Nigeria

Amina Bouziani / 0049 / TU & WE Evaluation of calcium status in Moroccan children by analyzing the 24h-urine excretion

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Frederick Kobina Grant / 0053 / TU & WE Correcting for inflammation modifies estimates of vitamin A and iron deficiencies among pregnant women in Western Kenya

Tamene Taye Asayehu / 0056 / TU & WE Dietary behavior, food and nutrient intake of women do not change during pregnancy in southern Ethiopia

Han'a Al-Rabadi / 0058 / TU & WE Supporting positive behaviours to reduce anaemia in the West Bank

Neha Sareen / 0062 / TU & WE Prevalence of vitamin D deficiency and associated risk factors amongst children residing at high altitude in Shimla district, Himachal Pradesh, India

**Amal Saeed** / 0063 / TU & WE Anemia and iron deficiency among adolescent Sudanese school girls

Fabian Rohner / 0064 / TU & WE lodine status of women of reproductive age and school-age children in Burkina Faso and its association with adequately iodized household salt—results from a national survey

Fabian Rohner / 0065 / TU & WE Prevalence of anemia among women of childbearing age, preschool-age and school-age children in Burkina Faso—results from a national survey

# **Thalia Manfrin Martins Deminice** 0066 / TU & WE

Vitamin A deficiency in the mother-infant pair: four criteria analysis

James P. Wirth / 0023 / TU & WE Anemia determinants and severity of micronutrient deficiencies and malaria in children and non-pregnant women in Sierra Leone prior to the Ebola outbreak

Carol Henry / 0068 / TU & WE Hemoglobin concentration and diet diversity of young children in Boricha district, Sidama zone, southern Ethiopia

Kassandra Harding / 0071 / TU & WE Relationships between women's education and children's micronutrient status: global patterns and trends

Xiaoguang Yang / 0072 / TU & WE Micronutrient nutrition status of pregnant women in China **Quynh Anh Tran** / 0075 / TU & WE Practice of mother's young child feeding and nutrititional status of children aged 6-23 months in midland area, Vietnam

Min Li / 0078 / TU & WE Study on the anemia status of Chinese population

Nga Tran Thuy / 0083 / TU & WE Assessment of micronutrient deficiencies among children in urban, rural and mountainous areas in Vietnam

Jing Chen / 0091 / TU & WE Vitamin D status for healthy old people in Chinese cities

Sabuj Kanti Mistry / 0094 / TU & WE Prevalence of anemia and its correlation with malnutrition among Bangladeshi adolescent girls: findings from a nationwide survey

K. Ryan Wessells / 0098 / TU & WE Micronutrient status of pregnant women in Zinder, Niger and determinants of risk

**Tibebu Moges** / 0101 / TU & WE Dietary intake and nutritional status are poor among adolescent girls in Ethiopia

Ashagrie Woldegiorgis / 0102 / TU & WE Ensuring the safety of complementary foods produced at community levels using locally available ingredients in Ethiopia

Moira Donahue Angel / 0107 / TU & WE Prevalence of iron deficiency and iron deficiency anemia in the northern and southern provinces of Rwanda

**Bridget Aidam** / 0119 / TU & WE Predictors of anemia among infants in a rural district in Ghana

#### Elsa Berenice Gaona Pineda 0124 / TU & WE

Contribution of PROSPERA program supplements to nutrient intake by socioeconomic status in children in Mexico

Faruk Ahmed / 0125 / TU & WE Anaemia and iron deficiency in Bangladeshi pregnant women living in areas of high and low iron in ground water Chandrakant S. Pandav / 0126 / TU & WE India on the threshold of achieving USI-evidence from the first ever national iodine and salt intake survey, 2015

Kapil Yadav / 0127 / TU & WE Optimal iodine status among women of reproductive age at national level may mask significant sub-national differentials evidence from the first national iodine and

#### Mohammed Amine Radouani

salt intake survey, 2015, India

0130 / TU & WE

Prevalence and factors associated with anemia pregnancy in a group of Moroccan pregnant women

Kaoutar Benjeddou / 0132 / TU & WE Nutritional status and vitamin D deficiency among rural school children in Morocco

#### Wanqi Zhang / 0137 / TU & WE

The associations between thyroid volume and goiter rate with iodine intake levels in school-age children from high water iodine areas

Sonja Nicholson / 0138 / TU & WE Nutritional insufficiencies and obesity in women of childbearing age in an affluent nation; findings from the UK national diet and nutrition survey rolling programme (NDNS-RP)

#### Ana María Gómez Álvarez

0140 / TU & WE

Deficiencia de zinc y cobre séricos en mujeres en edad reproductiva

Simon Wieser / 0142 / TU & WE Societal costs of micronutrient deficiencies in 6-59-month-old children in Pakistan

Katherine Wander / 0144 / TU & WE Associations between iron status and prevalent and incident infectious disease among children in Kilimanjaro, Tanzania

Rachel Burke / 0148 / TU & WE Vitamin A deficiency in a cohort of Bolivian infants

Meron Girma / 0106 / TH & FR Vitamin D insufficiency among lactating women in southern Ethiopia: a sunshine abundant region

**Leah Perlas** / 0108 / TH & FR Micronutrient status of Filipino women of reproductive age

Christian Razo-García / 0109 / TH & FR Dietary intake in healthy Mexican pregnant women

Kendra Byrd / 0110 / TH & FR Seasonal variation of kilocalorie, iron, and zinc intake among infants in rural, Western Kenya: an observational study nested within the WASH benefits randomized controlled trial

#### Leila Larson / 0111 / TH & FR

Approaches to understand and adjust retinol binding protein concentrations in the presence of inflammation in preschool-aged children and women of reproductive age: a multi-country analysis

Tazeen Tahsina / 0117 / TH & FR Prevalence of anaemia among pregnant women in rural Bangladesh: do socio-demographic factors matter?

**Prosper Kujinga** / 0120 / TH & FR Assessing micronutrient status in the presence of inflammation: comparing approaches in children aged 2-6 years from rural Western Kenya

Lijuan Wang / 0253 / TU & WE Assessment of iron status for women in China: national health and nutrition survey 2010-2012

**Zuguo Mei** / 0135 / TH & FR Is erythrocyte protoporphyrin a better screening test for iron deficiency in children and women compared to hemoglobin or mean cell volume?

Andinet A. Hailu / 0138 / TH & FR Inadequacy of dietary intakes among pregnant women in Ethiopia

James P. Wirth / 0144 / TH & FR Prevalence of anemia and micronutrient deficiencies in children and non-pregnant women in urban areas of Mozambique

Jorge Rosenthal / 0145 / TH & FR
The association between red blood
cell folate concentration and deficient or
marginally deficient vitamin B12 status:
a national population-based study of women
of childbearing-age in Belize

#### Carmina Lucía Vargas-Zapata 0147 / TH & FR

Levels of indicators of bone remodeling during pregnancy of low socioeconomic status women attending in public hospitals from Barranquilla-Colombia

Youness Taboz / 0150 / TH & FR Sentinel study of the consumption of fortified wheat flour with elemental iron and folic acid on the status of women of childbearing age in Morocco

Jacky Knowles / 0151 / TH & FR Factors associated with household access to adequately iodised salt: initial findings from the 2014 national iodine survey in Senegal

Youness Taboz / 0153 / TH & FR Iron and folic acid status of children 6 to 59 months in Morocco three years after the commercialization of wheat flour fortified with elemental iron and folic acid

Ndeye Khady Touré / 0154 / TH & FR Association between household access to adequately iodised salt and population iodine status: findings from the 2014 national iodine survey in Senegal

Manjeswori Ulak / 0155 / TH & FR Prevalence of vitamin A deficiency among lactating mothers and infants in Bhaktapur, Nepal

Khadija Begum / 0156 / TH & FR Prevalence and predictors of antenatal care (ANC) seeking and adherence to iron-folic acid (IFA) recommendation among pregnant women in Zinder, Niger

**Hasina Rakotomanana** / 0158 / TH & FR The determinants of stunting in children under five in Madagascar

**Youness Taboz** / 0160 / TH & FR Determination of nutritional status of vitamins A and D3 among the Moroccan population

**Ana M. Palacios** / 0161 / TH & FR Factors associated with anemia in infants from rural Retalhuleu, Guatemala

**Jenna Golan** / 0163 / TH & FR Predictors of anemia in female caregivers in the Lake Zone of Tanzania **Lisa Houghton** / 0165 / TH & FR Iron deficiency persists among Maasia but not Kamba preschoolers participating

in a supplementary feeding programme in southern Kenya

Martti Esala / 0168 / TH & FR Diagnosis and management of soil micronutrient deficiencies in sub-Saharan Africa for improved plant, animal and human nutrition

Hassan Aguenaou / 0169 / TH & FR Determination of the correlation of iodine deficiency and excess sodium in the 24h urine among Moroccan schoolchildren

Abebe Gebremariam / 0173 / TH & FR Lactating mothers feeding practice and anemia; an implication for intervention, a case of Jimma district rural setting, Ethiopia

#### María Eugenia Flores-Quijano

0174 / TH & FR

Hepcidin is upregulated by obesity and may exert a detrimental effect on iron status during pregnancy

Mariela Camacho Barrón / 0176 / TH & FR The relationship between obesity, inflammation markers, micronutrients and insulin resistance in school age child

Zipporah Bukania / 0179 / TH & FR
The relationship between blood pressure,
body iron stores and urinary iodine
in healthy women of reproductive age
in rural Eastern Kenya

Alejandra Castañeda-Díaz de León 0182 / TH & FR

Nutritional status and micronutrients intake in indigenous children

Guadalupe López-Rodríguez

0184 / TH & FR

Relationship between pollution heavy metals and anemia among Mexican schoolchildren

Susan Whiting / 0186 / TH & FR Vitamin D deficiency is a predictor for overweight and/or obesity among schoolchildren in central Ethiopia

Ranjan Kumar Jha / 0191 / TH & FR Study on iodine loss during movement of iodized salt from production unit to retail end

Junio Dort / 0192 / TH & FR Current state of micronutrient deficiencies in Haiti

Maria Claret Costa Monteiro Hadler 0193 / TH & FR Folic acid and anemia in children 6 to 24 months of age

Zaynah Chowdhury / 0196 / TH & FR Caregiver feeding behaviors are associated with dietary diversity at 24 months of age in rural Bangladesh

**Derek Headey** / 0197 / TH & FR Anemia enigma: exploring the rapid reduction of child anemia in developing countries

Alison D. Gernand / 0199 / TH & FR Application of a machine learning approach to identify predictors of vitamin D status in pregnancy

## **Yeneisy Lanyau Domínguez** 0208 / TH & FR

Homocysteine and vitamins levels in Cuban elderly with Alzheimer's disease (AD) or mild cognitive impairment (MCI)

Mildred Guirindola / 0210 / TH & FR Maternal health and nutrition and infant and young childfeeding: findings from the 8th national nutrition survey

Mengistu Fereja / 0213 / TH & FR Prevalence of iodine deficiency and associated factors among pregnant women in Ada district, Oromia region, Ethiopia: a cross-sectional study

**Feven Tezera** / 0215 / TH & FR Dietary calcium intake and sunlight exposure among children aged 6-23 months in Dale woreda, southern Ethiopia

Adamu Belay / 0216 / TH & FR Magnitude of iodine deficiency disorder in reproductive age women and school age children and iodized salt coverage in Ethiopia

Meaza Teklu / 0217 / TH & FR Assessment of iron supplement utilization and associated factors among pregnant women's at Lideta sub city Gemechu Kumera / 0218 / TH & FR Prevalence of zinc deficiency and its association with dietary, serum albumin and intestinal parasitic infection among pregnant women attending antenatal care at the University of Gondar Hospital, northwest Ethiopia

Phillipphe Belmont / 0223 / TH & FR Determinants of anemia and iron, zinc, folate and vitamin B12 deficiencies among women of reproductive age in Ecuador

Julia Suryantan / 0225 / TH & FR A comparison of the nutritional status of children under-five from different small-scale surveys in different regions in Indonesia

**Elizabeth Rhodes** / 0233 / TH & FR Integrated DHS and national micronutrient surveys: a case study from Malawi

#### Camila Benaim Rodriguez 0235 / TH & FR

Longitudinal changes in vitamin D concentrations during pregnancy among Brazilian women

Alex Brito / 0239 / TH & FR Maternal vitamin B-12 status is negatively affected by high serum folate at early pregnancy. a prospective cohort of healthy pregnant women

**Tolassa Wakayo** / 0240 / TH & FR Serum vitamin D levels are associated with handgrip muscle strength in Ethiopian schoolchildren: a cross-sectional study

Amanda Wendt / 0242 / TH & FR Iron content in groundwater associated with anemia among children 6-37 months in rural Bangladesh

# RISKS OR RISK/BENEFIT OF MICRONUTRIENT INTERVENTIONS

Hassan Agquenaou / 0085 / TU & WE Impact of an outreach support on the exclusive breastfeeding at the age of 6 months

**Teresa Shamah Levy** / 0123 / TU & WE Role of food assistance programs on anemia status in children <3 years old in Mexico Carla Cerami / 0208 / TU & WE Combatting anemia with iron may inevitably cause a transient increase in risk of malaria

Sherry Tanumihardjo / 0181 / TH & FR Provitamin A carotenoid bioconversion to retinol is drastically slowed when liver levels become excessive in Mongolian gerbils

Amanda Palmer / 0200 / TH & FR Mathematical modeling predicts that six-monthly vitamin A supplementation from 6-59 months of age does not result in excessive total body vitamin A stores

# STAKEHOLDER MAPPING AND ENGAGEMENT FOR MICRONUTRIENT INTERVENTIONS

Rachel Canclini Kettle / 0014 / TH & FR The FTSE4Good's role in infant and young child nutrition: a question of legitimacy

**Sourav Bhattacharjee** / 0027 / TH & FR Engaging with salt traders helps make affordable iodized salt accessible to the most vulnerable households in Odisha, India

**Albertha Nyaku** / 0046 / TH & FR From evidence to action: systematic analysis of intervention options for a national food fortification program in Pakistan

Madeleine Smith / 0061 / TH & FR Making agricultural information systems more nutrition sensitive in Ghana

Ismael Ngnie-Teta / 0079 / TU & WE Introducing multiple micronutrient powders in Guinea using community-based women's group model

**Abner Daniel** / 0104 / TU & WE Delivering essential nutrition interventions for tribal Indian women: what will it take?

**Greg S. Garrett** / 0117 / TU & WE Aligning global partners for food fortification: results of the #futurefortified global summit and outputs of its technical advisory group

**John Uruakpa** / 0252 / TH & FI Developing an integrated national policy framework to address micronutrient deficiencies in Nigeria

Elizabeth Madraa / 0254 / TU & WE Public sector readiness assessment for food fortification program in Uganda

#### **Pragya Mathema** / 0254 / TH & FR Stakeholder engagement to develop a road map to initiative and scale up micronutrient powders linked with infant and child feeding promotion in Nigeria

**Henry Mark** / 0257 / TU & WE A joint call to accelerate the attainment of fortification goals in Nigeria

# TRANSLATING EVIDENCE INTO POLICY DECISIONS FOR MICRONUTRIENT INTERVENTIONS

Godfrey Oakley / 0034 / TH & FR Contribution of total prevention of folic acid preventable spina bifida and anencephaly towards achieving health-related sustainable development goals in India

Janice Meerman / 0042 / TH & FR Dietary choices in Malawi: trends and explanations

Arnaud Laillou / 0063 / TH & FR Economic burden of malnutrition and especially micronutrient deficiencies —2014 Cambodian demographic health survey

Janice Meerman / 0064 / TH & FR Diversifying food production and diets: evidence from Kenya

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#### Judy McLean / 0151 / TU & WE Challenges and opportunities to implementing micronutrient powders (MNP) at scale: lessons learned from a multi-phase multi-country strategy

#### Imelda Angeles-Agdeppa 0160 / TU & WE Awareness of micronutrients among selected Filipino population groups: its implication on program strategies

Stanley Chitekwe / 0161 / TU & WE Identification of factors associated with vitamin A supplementation (VAS) coverage among children aged 6-59 months in Nigeria

Shiva Raj Adhikari / 0162 / TU & WE Cost-effectiveness analysis of the child nutrition week delivery strategy in earthquake affected districts in Nepal in 2015

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Fill the nutrient gap tool: a tool to strengthen nutrition situation analysis and the identification of context-specific strategies to improve nutrient intake among specific target groups

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Jody Harris / 0224 / TH & FR Drivers of micronutrient policy change in three African countries: a policy process analysis

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Operational research on vitamin A
supplementation for children
aged 6 to 59 months by community health
volunteers in Homabay County, Kenya

## USE OF CASH TRANSFERS AND VOUCHERS TO IMPROVE MICRONUTRIENT NUTRITION

Katherine Ford / 0167 / TH & FR Bolsa familia conditional cash transfer program and micronutrient status in western Brazilian Amazonian children





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