Technical Consultation on Global Prevalence and Disease Burden of Vitamin D Deficiency – Workshop 1

January 24-25, 2017

New York Academy of Sciences
7 World Trade Center, 250 Greenwich Street, 40th Floor
New York, NY, 10007

Scientific Organizing Committee

Gilles Bergeron, PhD – Sackler Institute for Nutrition Science
Kenneth Brown, MD – Bill and Melinda Gates Foundation
Gerald Combs, PhD – Tufts University
Maria Elena Jefferds, PhD – US Centers for Disease Control and Prevention
Daniel Roth, MD, PhD – Hospital for Sick Children

Confirmed Participants

Steven Abrams, MD – University of Texas
John Aloia, MD – Winthrop University Hospital
Kevin Cashman, PhD – University College Cork
Luz Maria De-Regil, DSc – Micronutrient Initiative
Kerry Jones, PhD – MRC Human Nutrition Research, UK and MRC Keneba, The Gambia
Adrian Martineau, PhD – MRC National Institute of Medical Research, Imperial College London
Ambrish Mithal, MD – Medanta, The Medicity India
Lisa Rogers, PhD – World Health Organization
Rosemary Schleicher, PhD – US Centers for Disease Control and Prevention
Tom Thacher, MD – Mayo Clinic, Rochester, MN
Tuesday, January 24

8:30 – 9:00  Breakfast

9:00 – 9:10  Introduction – Gilles Bergeron

9:10 – 9:25  Meeting Objectives – Ken Brown

9:25 – 9:30  Meeting Objectives Q & A

9:30 – 12:30  Session 1: How is vitamin D deficiency assessed and defined?
  Moderator – Gilles Bergeron

  9:30 – 10:00  Biomarkers of vitamin D status and current analytical techniques
  Rosemary Schleicher

  10:00 – 10:30  Definitions of vitamin D deficiency in pregnant women and children
  Kerry Jones

  10:30 – 11:00  Coffee Break

  11:00 – 11:30  Ethnic and racial differences in vitamin D metabolism
  John Aloia

  11:30 – 12:00  Discussion on biomarkers and cutoff values:
  • What are the most effective methods and biomarkers to assess deficiency?
  • What are the best cutoff values for deficiency (based on various disease endpoints, specific populations and conditions)?

12:00 – 12:45  Lunch

12:45 – 3:15  Session 2: What are the consequences of vitamin D deficiency?
  Moderator – Maria Elena Jefferds

  12:45 – 1:15  Rickets
  Tom Thacher

  1:15 – 1:45  Bone health in children and adolescents
  Steven Abrams

  1:45 – 2:15  Respiratory infections and asthma
  Adrian Martineau

  2:15 – 2:45  Pregnancy and lactation
  Daniel Roth

  2:45 – 3:15  Discussion on the consequences of vitamin D deficiency:
  • How well do the nutrient biomarkers correlate with disease risk?
  • How does maternal 25(OH)D affect pregnancy outcome?
  • How well does the child’s 25(OH)D correlate with the clinical or sub-clinical rickets and infection risk?
3:15 – 3:30  Afternoon Break

3:30 – 5:30  Session 3: Where is vitamin D deficiency prevalent?

Moderator – Gerald Combs

3:30 – 4:00  Vitamin D status on the Indian Subcontinent
Ambrish Mithal

4:00 – 4:30  Data on vitamin D status from the WHO Micronutrients Database
Lisa Rogers

4:30 – 5:30  Discussion of prevalence data:
• Are there specific countries or regions with a higher prevalence of deficiency?
• Is the prevalence of deficiency severe enough to warrant public health attention?
• In the absence of data, what steps should be taken to assess prevalence?
• Is a global repository needed to track deficiency?

6:30  Dinner  at Tribeca Grill (375 Greenwich Street)
Wednesday, January 25

8:30 – 9:00  Breakfast

9:00 – 10:30  Session 4: What are the current fortification and supplementation policies and programs?
   Moderator – Kenneth Brown

   9:00 – 9:30  WHO policies on vitamin D and their adoption in LMICS
   Luz Maria De-Regil

   9:30 – 10:00  Fortification strategies
   Kevin Cashman

   10:00 – 10:30  Coffee Break

   10:30 – 12:00  Discussion of the public health impact of deficiencies and current programs:
   - What are the consequences of deficiency (e.g. in terms of DALYs and lives lost)?
   - What is currently being done to prevent deficiency?
   - Are these programs effective and cost effective in reducing deficiency in target populations and saving lives/reducing disease burden?

12:00 – 1:00  Lunch

1:00 – 2:00  Section-specific Breakout sessions

   Group 1 – Prevalence and public health importance
   1.  What are the main lessons or where is there a reasonable consensus in terms of public health relevance for tackling these deficiencies?
   2.  Is additional data extraction, analysis and/or collection needed?
   3.  What are the gaps in knowledge that can be used to build a research agenda?

   Group 2 – Programs in fortification and supplementation
   1.  From a programmatic perspective, what are lessons learned from current programs and where is there a reasonable consensus?
   2.  What are the priority questions that need to be raised during workshop 2?
   3.  What are the gaps in knowledge that can be used to build a research agenda?

2:00 – 3:00  Discussion of Breakout Session Topics with Whole Group

3:00 – 3:30  Conclusions based on the current data

3:30 – 4:00  Discussion of Workshop 2 Plan and the Sections for the Special Issue on Vitamin D

4:00 – 4:30  Meeting Close-out