WHO guideline development group – Anaemia: Use and interpretation of haemoglobin concentrations for assessing anaemia status in individuals and populations

Barcelona, Spain
6 - 8 November 2019

FOR PUBLIC NOTICE AND COMMENT

- The following experts are participating in the meeting on their individual capacity. Affiliations are presented only as a reference.

- The participation of experts in a WHO meeting does not imply that they are endorsed or recommended by the WHO nor does it create a binding relationship between the experts and WHO.

- The biographies have been provided by the experts themselves and are the sole responsibility of the individuals concerned. WHO is not responsible for the accuracy, veracity and completeness of the information provided.

- In accordance with WHO guidelines for declarations of interest (WHO expert)\(^1\), expert’s biographies are published to strengthen public trust and transparency. Comments and perceptions are brought to the knowledge of WHO through the public notice and comment process. Comments sent to WHO are treated confidentially and their receipt will be acknowledged through a generic email notification to the sender. Please send any comments to the following email: nutrition@who.int

- WHO reserves the right to discuss information received through this process with the relevant expert with no attribution to the provider of such information. Upon review and assessment of the information received through this process, WHO, in its sole discretion, may take appropriate management of conflicts of interests in accordance with its policies.

---

**Dr Beverley-Ann Biggs**  
Infectious disease physician and public health researcher from the Department of Medicine and the Victorian Infectious Diseases Service, Melbourne, Australia. She is founder and director of the Royal Melbourne Hospital Refugee Health Programme, providing support to general practitioners and other health providers, and a specialist outreach programme in rural areas for improved health and wellbeing of refugees and asylum seekers. She is recognized internationally for her work on maternal and child health, refugee health, nutrition and infectious diseases. Dr Biggs is a Chief Investigator with the Australasian Refugee Health group on collaborative projects in Vietnam and Bangladesh that are exploring the mechanisms involved in childhood stunting and impaired development, as well as developing strategies for prevention. She has previously consulted for the World Health Organization, including as a member of the other guideline development groups. In addition, she is a member of the Victorian Refugee Health Network, which brings together health providers, non-governmental organizations, and departments of health and immigration to advise on policy and programmes.

**Dr Rachel Hammonds**  
Post-doctoral fellow at the Faculty of Law, Law and Development Research Group, University of Antwerp, Belgium. Rachel Hammonds is an internationally recognised global health specialist, human-rights advocate and licensed attorney with over 20 years' experience in international research design and execution, project management, human-rights advocacy and analysis. She has successfully led international, multi-disciplinary teams of researchers in designing research strategies to identify and address the challenges to realising health-related human rights in different contexts. Much of her research has focused on sexual and reproductive health and rights, global health governance and financing for development. She is a board member and advisor to Mothers at Risk, an international non-profit organisation devoted to reducing the vulnerability of mothers, women and girls living in poverty.

**Dr Crystal Karakochuk**  
Faculty member of the Land and Food Systems University of British Columbia, in Canada. She is a registered dietitian with a strong interest in maternal, child nutrition and global health. Internationally she has worked with United Nations agencies in Rwanda, Malawi, Ethiopia, Timor-Leste, Italy, and United States of America, in operations research, humanitarian aid and nutrition programming. Dr. Karakochuk's research programme combines two distinct fields of research: nutrition and haematology addressing two key objectives: to improve diagnostic methods and investigate new biomarkers for anaemia and iron deficiency for individual and population level assessment; and to evaluate the risk-benefit of Canadian and
global micronutrient supplementation policies to advance clinical practice and to inform safe, effective nutrition therapy worldwide.

Dr Heimo Mairbäurl
Physiologist of the German Center for Lung Research University Hospital Heidelberg in Germany.
Dr Mairbäurl works at the Translational Lung Research Center in the University of Heidelberg. His research areas are related to the physiology and pathophysiology of high altitude and hypoxia, specifically in two projects: high altitude-pulmonary oedema and its relation to mechanisms of alveolar-fluid clearance and erythrocyte function at high altitude. His research group is also interested in haemoglobin concentration and total haemoglobin mass in high-altitude residents.

Dr Lynnette Neufeld
Director of Knowledge Leadership at the Global Alliance for Improved Nutrition (GAIN) and a member GAIN’s Senior Management Team. Geneva, Switzerland.
She has extensive experience in the field of nutrition, working on design, implementation and evaluation of nutrition interventions aimed to improve iron status and reduce the prevalence of anaemia in populations. This has included randomized-controlled trials testing the efficacy of various iron and multiple micronutrient formulations for pregnant and lactating women and for infants and young children in Mexico, India and Bangladesh.
Dr Neufeld has participated in several World Health Organization guideline development groups, reviewing evidence for relevant interventions including multiple micronutrient powders, supplements for women, fortification among others. She also has supported efforts to improve the understanding and appropriate utilization of such guidance within the academic and programmatic communities.

Dr Tarek Owaidah
Medical director of the Department of Pathology and Laboratory Medicine, King Faisal Specialist Hospital & Research Center. Riyadh, Saudi Arabia.
His expertise is focused on thrombosis, haemostasis and transfusion medicine, with special interest in the diagnosis and management of various thrombotic and bleeding disorders.
Dr Owaidah has been the Deputy Director of the blood bank since 2005 and Deputy Director of Stem cell and Cord Blood Bank since 2007. He participated in the screening of the country for iron-deficiency anaemia and started an anaemia clinic in Al Habib Hospital in 2014.

Dr Kamija Phiri
Professor of the College of Medicine, University of Malawi Zomba, Blantyre, in Malawi.
Dr Phiri has a broad interest in infectious diseases and nutrition and has performed several hospital and population-based trials on malaria and anaemia in children and pregnant women. He is also interested in knowledge translation and leads a network of organizations interested in evidence-informed decision-making in Malawi called EVIDENT.
He is the principal investigator of a large multi-centre (across Malawi, Kenya & Uganda, and with collaborators in the United Kingdom of Great Britain and Northern Ireland, Norway and United States of America) consortium on the efficacy of
intermittent preventive-antimalarial therapy in the post-discharge management of children with severe anaemia.

Dr Harshi Sachdev
Paediatrician at the Sitaram Bhartia Institute of Science and Research, New Delhi, in India.
Dr Sachdev current research interests include developmental origins of adult disease, nutrition in children, adolescents and mothers in low and middle-income countries, and systematic reviews to guide policy and practice. His specific areas of proficiency include: paediatrician with expertise and research on childhood anaemia, conducting systematic reviews on iron and anaemia, and dietary iron requirements and anaemia. Dr Sachdev has served on over 100 expert groups/task forces at national, regional and international levels, including with the Indian Council of Medical Research and the World Health Organization. He has received 39 international and/or government funded projects and has participated in considerable reports and guideline development groups, including the WHO Guideline: Daily iron supplementation in infants and children, 2016. Dr Sachdev had edited several books on paediatrics and has extensive publications in peer reviewed journals and book chapters.

Dr Elizabeth Tejero
Head of the Laboratory of Nutrigenomics and Nutrigenetics, National Institute for Genomic Medicine, Mexico City, in Mexico.
Her main area of research is in nutrigenomics, encompassing projects aimed at investigating the interaction between the genome and the compounds present in food, among other topics. These endeavours have made important contributions to this area, such as the study of the interaction between genetic variants and lifestyle factors that influence the development of metabolic diseases. Dr Tejero has published over 70 research articles in international and national journals and over eight book chapters. Many of the results of her research have been published in the highest regarded peer-reviewed journals. Her work has approximately 970 citations.

Dr Vip Viprakasit
Professor of Paediatrics and Research Program Director from the Faculty of Medicine, Mahidol University, Bangkok, in Thailand.
Dr. Viprakasit’s major research focus has been on a translational medicine to bridging between basic molecular biology to routine clinical practice in haematology. He has extensively studied thalassemia in several aspects including molecular basis, pathophysiology, genotype-phenotype correlation, molecular diagnosis from routine service to pre-implantation genetic analysis to non-invasive prenatal test and newborn screening. From these fundamental works, he has expanded his works into molecular basis, clinical management and developing clinical and laboratory tools for iron overload and iron-deficiency anaemia, both are prevalent in his region and representing two important problems in low- and middle-income countries.

Dr Pattanee Winichagoon
Professor at the Institute of Nutrition, Mahidol University, Salaya, Nakhon Pathom, in Thailand.
Her research interests include maternal and child micronutrient nutrition situation, focusing on iron and nutritional anaemia; field efficacy and effectiveness of micronutrient interventions (including supplementation and food fortification); growth monitoring and nutrition surveillance; and community-based nutrition policy and programme implementation.

Dr Winichagoon has been engaged in both research and teaching positions for over 30 years. Her dedicated work in the areas of maternal and child micronutrient status, micronutrient intervention and community-based nutrition has been well recognized in Thailand and by the international nutrition community, with numerous published papers in peer-reviewed journals. She has provided scientific advice to various international agencies (WFP, UNICEF, WHO, World Bank) and participated in global expert consultations on iron, micronutrients, maternal and child nutrition programmes.

Dr Erika Wood
Head of the Transfusion Research Unit Monash University. Melbourne, in Australia. She is a professor and transfusion-medicine specialist. She also works as a consultant haematologist at Monash Health and holds an honorary consultant haematologist appointment at Peter MacCallum Cancer Centre / Victorian Comprehensive Cancer Centre. Her area of expertise is on anaemia diagnosis and management, blood transfusion and clinical research in haematology. Dr Wood is a member of the World Health Organization's Expert Advisory Panel on Transfusion Medicine and has served as a WHO regional advisor in blood safety. She is the current President of the International Haemovigilance Network, promoting and supporting haemovigilance systems worldwide.

Dr Melissa Young
Assistant professor at Hubert Department of Global Health, Emory University. Atlanta, GA, United States of America. Dr Melissa Young specializes in the areas of maternal and child nutrition, micronutrients, anaemia and breastfeeding. She completed a post-doctoral fellowship in 2014 in the Department of Global Health at Emory University. Dr Young has training in human nutrition, epidemiology, community nutrition and applied economics. She has extensive experience working with high-risk populations across a diverse range of cultures and populations. She is currently working on projects in India, Vietnam, Cambodia and United States of America.