Review of the Dietary Reference Intakes for Sodium and Potassium

Committee

Virginia A. Stallings

Chair

Virginia A. Stallings, M.D., is Professor of Pediatrics at the University of Pennsylvania Perelman School of Medicine, and Director of the Nutrition Center and the Jean A. Cortner Endowed Chair in Gastroenterology and Nutrition at Children's Hospital of Philadelphia. Her research interests include pediatric nutrition, evaluation of dietary intake and energy expenditure, and nutrition-related chronic disease. Dr. Stallings has served on several National Academies of Sciences, Engineering, and Medicine Committees: Committee on Food Allergies: Global Burden, Causes, Treatment, Prevention, and Public Policy; Committee on Nutrition Standards for National School Lunch and Breakfast Programs; Committee on Nutrition Services for Medicare Beneficiaries; Committee on the Scientific Basis for Dietary Risk Eligibility Criteria for WIC (Women, Infants, and Children) Programs; Committee to Review the WIC Food Packages (2003); and the Committee to Review Child and Adult Care Food Program Meal Requirements. She is a former member (1997-2000) and co-vice chair (2000-2002) of the Food and Nutrition Board. Dr. Stallings is board certified in pediatrics and clinical nutrition. She received the Fomon Nutrition Award from the American Academy of Pediatrics. Since 2012, Dr. Stallings has served as a member of the Board of Directors for Danone. Dr. Stallings earned a B.S. in Nutrition and Foods from Auburn University, an M.S. in human nutrition and biochemistry from Cornell University, and an M.D. from the University of Alabama in Birmingham School of Medicine. She is a member of the National Academy of Medicine.

Patsy M. Brannon

Member

Patsy M. Brannon, Ph.D., R.D., is Professor in the Division of Nutritional Sciences at Cornell University, where she has also served as Dean of the College of Human Ecology. Prior to moving to Cornell University, Dr. Brannon was Chair of the Department of Nutrition and Food Science at the University of Maryland. She has also served as Visiting Professor at the Office of Dietary Supplements of the National Institutes of Health. Her research focus includes nutritional and metabolic regulation of gene expression, especially as relating to human development, the placenta, and exocrine pancreas. She was a member of the National Academies of Sciences, Engineering, and Medicine's Committee on Dietary Reference Intakes for Vitamin D and Calcium, and she is currently a member of the National Academies of Sciences, Engineering, and Medicine's Food and Nutrition Board and serves on the Workshop Planning Committee for Special Nutritional Requirements. Dr. Brannon is a member of a number of professional and scientific associations and has served on the Executive Board of the American Society for Nutrition. She has received numerous awards, including the Pew Faculty Scholar in Nutrition award as well as the Centennial Laureate award from Florida State University. Dr. Brannon received her Ph.D. from Cornell University in nutritional biochemistry.

Alicia L. Carriquiry

Member

Alicia L. Carriquiry, Ph.D., is Distinguished Professor of Liberal Arts and Sciences and Professor of Statistics at Iowa State University. She also holds the President's Chair in Statistics and is Director of the Center for Statistics and Applications in Forensic Evidence (CSAFE), a NIST Center of Excellence. Dr. Carriquiry is an elected member of the National Academy of Medicine, and a Fellow of the AAAS. She is also an elected member of the International Statistical Institute, a Fellow of the American Statistical Association, a Fellow of the Institute of Mathematical Statistics, and a Fellow of the International Society for Bayesian Analysis. Currently, she chairs the Committee to Evaluate Access to Mental Health Resources for Veterans Offered by the VA, and serves in the Advisory Board for DBASSE (Division of Behavioral and Social Sciences and Education) and in the Report Review Committee (RRC) of the National Academies. Dr. Carriquiry's research is in applications of statistics in human nutrition, bioinformatics, forensic sciences and traffic safety. She participated in the National Academies' process to develop the Dietary Reference Intakes (DRIs) and maintains an active research and training program in the area of dietary assessment and planning. Carriquiry has published over 120 peer-reviewed articles in journals in statistics, economics, nutrition, bioinformatics, mathematics, animal genetics, and several other areas, and has raised tens of millions of dollars in sponsored research funding. Dr. Carriquiry teaches courses at every level (undergraduate and graduate) in statistics at Iowa State University and has been invited to teach short courses in many organizations around the world as well as in the federal government. Dr. Carriquiry was born in Uruguay, where she graduated as an engineer in 1982. After coming to the United States, she received an M.Sc. in animal science from the University of Illinois (1985), an M.Sc. in statistics (1986) and a Ph.D. in statistics and animal genetics (1989) both from Iowa State University.

Weihsueh A. Chiu

Member

Weihsueh A. Chiu, Ph.D., is a Professor of Veterinary Integrative Biosciences in the College of Veterinary Medicine and Biomedical Sciences at Texas A&M University. Before joining the university, he worked at the U.S. Environmental Protection Agency (EPA) for more than 14 years, most recently as chief of the Toxicity Pathways Branch in the Integrated Risk Information System (IRIS) Division of the National Center for Environmental Assessment. His research focuses on human health risk assessment, including systematic review methods, pharmacokinetics (including physiologically-based pharmacokinetic modeling), dose-response assessment, and characterizing uncertainty, and addressing individual susceptibility to better protect sensitive subpopulations. He is currently Chair-elect of the Dose-Response Specialty Group of the Society for Risk Analysis. He has served on several National Academies of Sciences, Engineering, and Medicine committees, including the Committee on Predictive-Toxicology Approaches for Military Assessments of Acute Exposures, the Committee on Endocrine-Related Low-Dose Toxicity, and as a consultant to the Committee on the Development of Guiding Principles for the Inclusion of Chronic Disease Endpoints in Future Dietary Reference Intakes. Dr. Chiu received an A.B. in physics from Harvard University, and a M.A. and Ph.D. in physics from Princeton University.

Nancy Cook

Member

Nancy Cook, Sc.D., is a Professor in the Department of Medicine at the Brigham & Women’s Hospital and Harvard Medical School, and Professor of Epidemiology at the Harvard Chan School of Public Health. Dr. Cook is involved in the design, conduct, and analysis of several large randomized trials, including the Women’s Health Study, the Physicians’ Health Study, and the Vitamin D and OmegA-3 TriaL (VITAL). She leads the Trials of Hypertension Prevention (TOHP) Follow-up Study, an observational follow-up of participants in Phases I and II of TOHP. Dr. Cook’s methodologic efforts focus on the predictive modeling of observational data and developing risk prediction scores using clinical biomarkers. She was a member of the Institute of Medicine Committee on the Consequences of Sodium Reduction in Populations. She received her M.S. and Sc.D. at the Harvard School of Public Health.

Eric A. Decker

Member

Eric A. Decker, Ph.D., is a Professor and Head of the Department of Food Science at the University of Massachusetts, Amherst. Dr. Decker is actively conducting research to characterize mechanisms of lipid oxidation, antioxidant protection of foods and the health implications of bioactive lipids. Dr. Decker has over 400 publications and he has been listed as one of the Most Highly Cited Scientists in Agriculture since 2005. Dr. Decker has served on numerous committees for institutions such as FDA, Institute of Medicine, Institute of Food Technologist, USDA and the American Heart Association. He has received numerous recognitions for his research including awards from the American Oil Chemist Society, the Agriculture and Food Chemistry Division of ACS, the International Life Science Institute, and the Institute of Food Technologist.

Jiang He

Member

Jiang He, M.D., Ph.D., is Professor and Joseph S. Copes Chair of Epidemiology at Tulane University. Dr. He is a nationally and internationally well-known expert in the clinical, translational, and epidemiological research of cardiovascular and kidney diseases. He has conducted novel studies in obesity, hypertension, diabetes, stroke, cardiovascular disease, and chronic kidney disease funded by the National Institutes of Health (NIH). He has been the principal investigator and co-investigator for more than 30 major research awards from the NIH. Dr. He has authored over 400 scientific articles and has published in first class biomedical journals, including New England Journal of Medicine, Journal of The American Medical Association, Lancet, and National Genetics. He has received many awards from local, national, and international academic institutions and professional societies. He is teaching clinical trials and advanced epidemiologic methods. Dr. He received his M.S. from Tulane University, his Ph.D. from Johns Hopkins University, his D.M.S. from Peking Union Medical College, and his M.D. from Jiangxi Medical College.

Joachim (Joe) H. Ix

Member

Joachim H. Ix, M.D., M.A.S., is Professor and Chief of the Division of Nephrology-Hypertension at the University of California San Diego. He is a nephrologist, epidemiologist, and clinical trialist. His research focuses in two main areas, novel therapies in chronic kidney disease mineral bone disorders (CKD-MBD), and non-invasive assessment of kidney tubule health. Chronic kidney disease leads to altered homeostasis of calcium, phosphate, and associated regulatory hormones which are strongly associated with vascular calcification and cardiac structural abnormalities. His team has used large observational epidemiologic studies to quantify the strength of associations of these factors with cardiovascular disease and related outcomes in CKD patients. The strength and consistency of these findings makes intervention to improve CKD-MBD an important target in lowering cardiovascular disease event risk in CKD patients. He is now evaluating the safety and efficacy of novel therapies that lower intestinal phosphate absorption in CKD patients in multi-center randomized clinical trials. Second, his team is interested in identifying novel non-invasive markers of kidney tubule cell health. Pathologic studies demonstrate that kidney tubule atrophy and fibrosis are important determinants of kidney disease progression, but are poorly captured by glomerular markers of kidney health. Dr. Ix and his team have evaluated a myriad of blood and urine proteins that non-invasively assess the health of kidney tubule cells, and are working to determine if these markers improve assessment of risk of future kidney disease progression and cardiovascular disease risk. Dr. Ix served on the National Academies of Sciences, Engineering, and Medicine Committee on Consequences of Sodium Reduction in Populations. Dr. Ix received his B.S. from the University of California San Diego, his M.D. from the University of Chicago Pritzker School of Medicine, and his M.A.S. from the University of California San Francisco.

Alice H. Lichtenstein

Member

Alice H. Lichtenstein, D.Sc., is Stanley N. Gershoff Professor of Nutrition Science and Policy in the Friedman School of Nutrition Science and Policy and Director and Senior Scientist of the Cardiovascular Nutrition Laboratory at the U.S. Department of Agriculture's Jean Mayer Human Nutrition Research Center on Aging, both at Tufts University. She holds secondary appointments as a Professor of Medicine at Tufts University School of Medicine and Tufts Clinical and Translational Science Institute. Dr. Lichtenstein's research group focuses on assessing the interplay between diet and heart disease risk factors. Past and current work includes addressing in postmenopausal females and older males issues related to trans fatty acids, soy protein and isoflavones, sterol/stanol esters, and novel vegetable oils differing in fatty acid profile and glycemic index. Selected issues are investigated in animal models and cell systems with the aim of determining the mechanisms by which dietary factors alter cardiovascular disease risk. Additional work is focused on population-based studies to address the relationship of cholesterol homeostasis and nutrient biomarkers on cardiovascular disease risk and on the application of systematic review methods to the field of nutrition. Dr. Lichtenstein is a member of the American Society for Nutrition, American Heart Association and American Society for Biochemistry and Molecular Biology. She is a past-chair of the American Heart Association Committee on Nutrition and served as a member of the Department of Health and Human Services/U.S. Department of Agriculture 2000 Dietary Guidelines Advisory Committee and vice-chair of the 2015 Dietary Guidelines Advisory Committee, the National Academies of Sciences, Engineering, and Medicine (previously the Institute of Medicine) Committee on the Consequences of Sodium Reduction in Populations, Committee on Examination of Front-of-Package Nutrition Rating Systems and Symbols (Phase I), Dietary Reference Intake macronutrient panel, and the Food Forum. She received her D.Sc. in nutritional biochemistry from Harvard School of Public health and received postdoctoral training in the field of lipid metabolism at the Cardiovascular Institute at Boston University School of Medicine.

Joseph V. Rodricks

Member

Joseph V. Rodricks, Ph.D., is a Founding Principal (1982) of Ramboll Environ. An expert in toxicology and risk analysis, Dr. Rodricks has consulted for hundreds of manufacturers and government agencies and for the World Health Organization in the evaluation of health risks associated with human exposure to chemical substances of all types. Before Ramboll, Rodricks served 15 years as a scientist at the FDA; in his last four years he served as Associate Commissioner for Health Affairs. His experience extends from pharmaceuticals, medical devices, consumer products and foods, to occupational chemicals and environmental contaminants. He has served on the National Academies' Board on Environmental Studies and Toxicology and on 36 committees of the National Academies of Sciences, Engineering, and Medicine, including the committees that produced the seminal works Risk Assessment in the Federal Government: Managing the Process (1983) and Science and Decisions: Advancing Risk Assessment (2009). He served for eight years on the National Academies' Committees on Dietary Reference Intakes and on the committee that produced the report: Guiding Principles for Developing Dietary Reference Intakes Based on Chronic Disease (2017). Dr. Rodricks has 150 scientific publications and has received honorary awards from three professional societies for his contributions to toxicology and risk analysis. Dr. Rodricks earned his Ph.D. in biochemistry from the University of Maryland, College Park and was a post-doctoral scholar at University of California, Berkeley.

Janet Tooze

Member

Janet Tooze, Ph.D., M.P.H., is Professor in the Department of Biostatistical Sciences, Division of Public Health Sciences, at Wake Forest School of Medicine. She is a biostatistician with expertise in longitudinal data analysis and nonlinear mixed effects models. She has developed methods for estimating the usual intake of foods and nutrients in a unified framework with applications to nutritional surveillance and epidemiology, termed the "NCI Method," the foundation of which is a statistical model developed by Dr. Tooze for repeated measures data with excess zeroes. She developed a SAS macro to fit this model, which has been used by researchers across America and in 13 foreign countries. Dr. Tooze is the Associate Director of the Biostatistics Shared Resource of the Wake Forest Baptist Comprehensive Cancer Center. In addition, she provides design, analytic support, and subject-matter expertise on other research studies in the areas of nutrition, obesity, aging and cancer control and prevention. Dr. Tooze received a M.P.H from Harvard School of Public Health and a Ph.D. in biometrics from the University of Colorado.

George A. Wells

Member

George A. Wells, Ph.D., is a Professor of the School of Epidemiology, Public Health and Preventive Medicine at the University of Ottawa. He is also a Professor in the Department of Medicine, Senior Scientist at the Ottawa Health Research Institute and Director, Cardiovascular Research Methods Centre at the University of Ottawa Heart Institute. Dr. Wells' research interests are in the design and analysis of clinical trials, statistical methodology related to disease processes and health care delivery, systematic reviews and meta-analysis, economic evaluations and the development and assessment of decision support technologies for patients and practitioners. Dr. Wells has worked extensively with national and international government and non-government research organizations, as well as private pharmaceutical and biotechnology industries. He has been on the executive and steering committees of national and international research programs as well as on committees with the following focus: external safety and efficacy monitoring, scientific grant review, editorial, and scientific advisory. He is currently an Associate Editor of the Journal of Clinical Epidemiology and on the Editorial Committee for the Canadian Medical Association Journal. He received the University of Ottawa Excellence in Research Award in 2014 and the Canadian Society for Clinical Investigation Distinguished Scientist Award in 2007. Dr. Wells received his B.Sc. in mathematics and his M.Sc. in mathematical statistics from McMaster University and his Ph.D. in epidemiology and biostatistics from the University of Western Ontario.

Elizabeth A. Yetley

Member

Elizabeth A. Yetley, Ph.D., joined the Office of Dietary Supplements (ODS) at the NIH in February 2004 as a Senior Nutrition Research Scientist and retired in June 2008. Subsequently, she served as a nutrition science consultant to this office (2009 to 2017). Her responsibilities included: a) the development of a research and science-based strategy for the role of nutrients in health promotion and disease prevention and b) collaboration with other national and international agencies to facilitate the application of science-based approaches to evaluations of nutrient safety and adequacy. Prior to joining the ODS, Dr. Yetley was employed by the Center for Food Safety and Applied Nutrition (CFSAN) of the FDA. Dr. Yetley joined CFSAN as a senior staff fellow in 1980. She held subsequent positions as Section and Branch Chiefs and as Deputy Director for the Office of Nutrition and Food Sciences. In 1992, Dr. Yetley was appointed as Director of the Office of Special Nutritionals where she had regulatory and scientific responsibilities for three product areas: dietary supplements, medical foods, and infant formulas. Between January of 2000 and February of 2004, Dr. Yetley served as FDA's Lead Scientist for Nutrition. In 1996, Dr. Yetley became the first member of CFSAN to receive an appointment to FDA's Senior Biomedical Research Service. She also served for almost 10 years as the lead of the U.S. delegation to the United Nations-sponsored Codex Committee on Nutrition and Foods for Special Dietary Uses. Dr. Yetley is the recipient of numerous awards from the NIH, FDA and the Department of Health and Human Services. She is also the recipient of the Bernice K. Watt endowed lectureship at Iowa State University and the Virginia A. Beal honorarium at the University of Massachusetts. She was appointed a Fellow of the American Society for Nutrition (ASN) in 2009 and received the ASN's Conrad Elvehjem Award for Public Service in Nutrition in 2010. Dr. Yetley received her B.S., M.S., and Ph.D. degrees in human nutrition from Iowa State University.