

Food Forum
Food and the Aging Brain: Updates on Nutrition and Cognitive Health in Older Adults
Speaker and Moderator Biographical Sketches

Elissa Epel, Ph.D.

University of California, San Francisco

Invited Speaker

Elissa Epel is Professor in the Department of Psychiatry and Behavioral Sciences, at University of California, San Francisco and Vice Chair of Adult Psychology. She is the Director of the Aging, Metabolism, and Emotions Center (www.amecenter.ucsf.edu), Associate Director of the Center for Health and Community, and Associate Director of the NIH-funded UCSF Nutrition and Obesity Research Center (NORC). She studies psychological, social, and behavioral processes related to chronic psychological stress that accelerate biological aging, with a focus on the telomere/telomerase maintenance system. She also studies the interconnections between emotional processes, eating, and metabolism. With her collaborators, she is conducting clinical trials to examine the effect of mindfulness training programs on cellular aging, weight (including during pregnancy) and now on the co-benefits of changes in lifestyle that also reduce carbon pollution. Dr. Epel leads or co-leads studies funded by NIA and NHLBI, including a Stress Measurement Network, and for ten years led a multicampus center on obesity, stress, sugar, and health disparities, funded by UC Office of the President. She has been involved in National Institute of Aging initiatives on role of “stress” in aging, and on reversibility of early life adversity, and now on Science of Behavior Change. She is a member of the National Academy of Medicine, and a fellow of the Association of Psychological Science, and Academy of Behavioral Medicine Research. She is co-chair of steering council for the Mind and Life Institute. Dr. Epel has co-written a book for the public with Elizabeth Blackburn, Nobel laureate, which covers the biological, social, psychological, environmental and nutritional factors associated with or shaping telomere length and rate of aging (a NYT bestseller, “The Telomere Effect: The new science of living younger”). She holds a Ph.D. in clinical and health psychology from Yale University.

Lisa McGuire, Ph.D., M.A.

Centers for Disease Control and Prevention

Invited Speaker

Lisa McGuire is Lead for CDC’s Alzheimer’s Disease and Healthy Aging Program with more than 100 articles and book chapters on aspects of cognition, caregiving, and aging. Dr. McGuire is a member of the National Alzheimer’s Project Act Federal Advisory Council, Board of Directors for the National Alliance for Caregiving, Editorial Board of The Gerontologist, co-lead for Healthy People 2020/2030 Older Adults and Dementia Including Alzheimer’s, and holds Fellow Status in the American Psychological Association and the Gerontological Society of America. As a caregiver for her mother with mixed dementia, Dr. McGuire is professionally and personally passionate about issues related to dementia and caregiving. She earned an M.A. and Ph.D. in developmental psychology from Bowling Green State University.

Simin Nikbin Meydani, D.V.M., Ph.D.

Tufts University

Moderator

Simin Nikbin Meydani is Director of the Immunology Laboratory at the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University, and Professor of nutrition and immunology at Tufts’ Friedman School of Nutrition Science and Policy and Sackler Graduate Program in

Immunology. Her previous positions included Vice Provost for Research at Tufts University, and Director of JM USDA Human Nutrition Research Center on Aging at Tufts. Her scientific interests include the impact of nutrition on aging and age-associated diseases, its role in immune and inflammatory responses and predisposition to infectious diseases. She is an internationally recognized scholar with over 350 publications and continuous federal and non-federal funding. Her honors include the American Aging Association Denham Harman Lifetime Research Achievement Award; American Society of Nutrition Herman Award in clinical nutrition; ASN Lederle Award in Human Nutrition Research; Fellow of Hedwig van Ameringen Executive Leadership in Academic Medicine; American College of Nutrition Grace Goldsmith Award; International HERMES Vitamin Research Award. She was President of the American Society for Nutrition (2014-2015) and President of American Aging Association (2005-2006). She has presented at the World Economic Forum in Davos and contributed to the White House Summit on Aging. Dr. Meydani earned her D.V.M. from the University of Tehran, Iran and Ph.D. in nutrition from Iowa State University.

Barbara Shukitt-Hale, Ph.D.

United States Department of Agriculture

Invited Speaker

Dr. Barbara Shukitt-Hale is USDA Staff Scientist in the Laboratory of Neuroscience and Aging, USDA-ARS, Human Nutrition Research Center on Aging (HNRCA) at Tufts University. Dr. Shukitt-Hale has been involved in research for 39 years, beginning when she was an undergraduate student at Boston University. She investigates motor and cognitive performance changes due to oxidative stress and inflammation and the possible amelioration of these effects with proper nutrition. She has developed and utilized behavioral techniques to examine the motor and cognitive performance changes due to oxidative stress and inflammation during aging and under other oxidative stress/inflammatory conditions (such as radiation), in conjunction with changes in cellular function and signal transduction. She then uses these models to examine the effects of different polyphenolic-rich diets on these age-related behavioral parameters as well as changes in brain function. Notably, she has shown that phenolic compounds have beneficial effects on the brain, including enhanced signaling, autophagy, and neurogenesis and that fruit and vegetable extracts, such as from strawberries, blueberries, and walnuts, can prevent and even reverse age-related changes in brain performance. These findings have had tremendous impact in the popular press. Recently, Dr. Shukitt-Hale has focused on translating these results to humans through the use of clinical trials. She continues to research the mechanisms behind the positive effects of foods. She has published more than 237 manuscripts and selected papers and serves on the Editorial Board of numerous scientific journals. She received her Ph.D. in experimental psychology from Boston University in 1993.

David Vauzour, Ph.D., M.Sc.

University of East Anglia

Invited Speaker

David Vauzour is Senior Research Fellow in Molecular Nutrition at the Norwich Medical School at the University of East Anglia. His research over the last 15 years, based at the University of Reading (2005-2011), and at the Norwich Medical School (2011- present), has focused on investigating the molecular mechanisms that underlie the positive correlation between the consumption of diets rich in fruits and vegetables and a decreased risk of (neuro)degenerative disorders. His work has also lead to the development of novel dietary strategies to delay brain ageing, cognitive decline and cardiovascular disease, including stroke and vascular dementia. In this context, his initial work provided considerable insights into the potential for natural products to promote human vascular function, decrease (neuro)inflammation, enhance memory, learning and neuro-cognitive performances and to slow the progression of Alzheimer's and Parkinson's diseases. In particular,

his major contribution has been to show that phytochemicals and in particular flavonoids exert such diverse biological effects through their modulation of intracellular signaling pathways (MAP kinase, PI3 kinase/Akt and Keap-1/Nrf2), biomarkers of cellular plasticity and resilience to exogenous stimuli. His recent interests concern how food bioactives modulate ApoE genotype-induced neurodegenerative disorders and their underlying mechanisms (including the microbiome). To date, Dr. Vauzour has published over 90 peer-reviewed articles and currently serves as the Associate Editor for the journals *Nutrition and Healthy Aging* and *Frontiers in Nutrition – Nutrition and Brain Health*. In addition, he is a member of the editorial board of *Nature Scientific Reports (Neuroscience)*, *PharmaNutrition*, and *Peer J (Pharmacology)*, and is currently the co-the Chair of the ILSI Europe “Nutrition and Brain Health Task Force”. Dr. Vauzour received his Ph.D. from the Faculty of Pharmacy, University of Montpellier, France, and received his M.Sc. from the Faculty of Pharmacy, University of Bordeaux, France.