

Antioxidant defense/oxidative damage and Nutrition

Session Description:

This symposium session will provide the most recent advances in biomarker measurement of antioxidant activity/oxidative stress. The session will include practical applications for the identification of biological functions of antioxidant nutrients and the implications of the various assays for achieving good health and for the prevention of chronic diseases of aging.

Session Chair & Co-Chair:

Chair: Robert M Russell, M.D. , Visiting Scientist, Office of Director, National Institutes of Health, Washington D.C. , and Friedman School of Nutrition Science and Policy and Medical School, Tufts University, USA

Co-chair: Kyung-Jin Yeum, Ph.D., Scientist, Jean Mayer USDA-Human Nutrition Research Center on Aging, Tufts University, USA and Honorary Scientist, National Academy of Agricultural Science, Rural Development Administration, Suwon, South Korea

Session Topics and Speakers:

Topic 1: *Overview: Key considerations regarding antioxidant research*

Speaker: Robert M. Russell, M.D., Office of Director, National Institutes of Health, Washington D.C., and Friedman School of Nutrition Science and Policy and Medical School, Tufts University, USA

Topic 2: *The basic science and biological significance of oxidative damage.*

Speaker: Etsuo Niki, Ph.D., Health Technology Research Center, National Institute of Advanced Industrial Science and Technology, Japan

Topic 3: *How effective is diet for impacting antioxidant status/oxidative stress?*

Speaker: Kyung-Jin Yeum, Ph.D., Jean Mayer USDA-Human Nutrition Research Center on Aging and Friedman School of Nutrition Science and Policy, Tufts University, USA

Topic 4: *The newest biomarkers of oxidative damage: peptidomics and albuminomics*

Speaker: Giancarlo Aldini, Ph.D., Istituto di Chimica Farmaceutica Tossicologica "Pietro Pratesi", Italy

Topic 5: *Heme iron and lipid oxidation products in foodstuffs and colon cancer*

Speaker: Françoise Guéraud D.V.M., Ph.D., INRA, UMR 1089 Xénobiotiques, Toulouse, France.

Topic 6: *Oxidative stress in disease states and obesity*

Speaker: Naline Chongviriyaphan, M.D., Ph.D., Faculty of Medicine, Ramathibodi Hospital, Thailand