Contents

Articles

COMMENTARY
Iron Supplementation in Children with Malaria: Timing the Treatment
James P McClung 1623
See corresponding article on page 1769.

BIOCHEMICAL, MOLECULAR, AND GENETIC MECHANISMS
High Dietary Selenium Intake Alters Lipid Metabolism and Protein Synthesis in Liver and Muscle of Pigs
Zeping Zhao, Matthew Barcus, Jonggun Kim, Krystal L Lum, Courtney Mills, and Xin Gen Lei 1625
PPARα Downregulates Hepatic Glutaminase Expression in Mice Fed Diets with Different Protein:Carbohydrate Ratios
Laura A Velázquez-Villegas, Tania Charabati, Alejandra V Contreras, Gabriela Alemán, Nimbe Torres, and Armando R Tovar 1634

GENOMICS, PROTEOMICS, AND METABOLOMICS
Consumption of Walnuts in Combination with Other Whole Foods Produces Physiologic, Metabolic, and Gene Expression Changes in Obese C57BL/6J High-Fat-Fed Male Mice
Ting Luo, Omar Miranda-García, Allysa Adamson, Jill Hamilton-Reeves, Debra K Sullivan, Jason M Kinchen, and Neil F Shay 1641

NUTRIENT PHYSIOLOGY, METABOLISM, AND NUTRIENT-NUTRIENT INTERACTIONS
Ingestion of Wheat Protein Increases In Vivo Muscle Protein Synthesis Rates in Healthy Older Men in a Randomized Trial
Stefan HM Gorissen, Astrid MH Horstman, Rinske Franssen, Julie JR Crombag, Henning Langer, Jörgen Bierau, Frederique Respondek, and Luc JC van Loon 1651
Protein Supplementation Has Minimal Effects on Muscle Adaptations during Resistance Exercise Training in Young Men: A Double-Blind Randomized Clinical Trial
Paul T Reidy, Michael S Borack, Melissa M Markofski, Jared M Dickinson, Rachel R Deer, Syed H Husaini, Dillon K Walker, Sherry Igbinigie, Shay M Robertson, Mark B Cope, Ratna Mukherjea, Janine M Hall-Porter, Kristofer Jennings, Elena Volpi, and Blake B Rasmussen 1660
Serum Zinc Is a Major Predictor of Anemia and Mediates the Effect of Selenium on Hemoglobin in School-Aged Children in a Nationally Representative Survey in New Zealand
Lisa A Houghton, Winsome R Parnell, Christine D Thomson, Timothy J Green, and Rosalind S Gibson 1670
Vitamin A Supplementation Increases the Uptake of Chylomicron Retinyl Esters into the Brain of Neonatal Rats Raised under Vitamin A–Marginal Conditions
Joanna K Hodges, Libo Tan, Michael H Green, and A Catharine Ross 1677
NUTRITION AND DISEASE

Long-Term Immunomodulatory Effects of a Mediterranean Diet in Adults at High Risk of Cardiovascular Disease in the PREvención con Dieta MEDiterránea (PREDIMED) Randomized Controlled Trial

Rosa Casas, Emilio Sacanella, Mireia Urpi-Sardà, Dolores Corella, Olga Castañer, Rosa-María Lamuela-Raventós, Jordi Salas-Salvadó, Miguel-Angel Martínez-González, Emilio Ros, and Ramon Estruch

Gut Microbiota Richness and Composition and Dietary Intake of Overweight Pregnant Women Are Related to Serum Zonulin Concentration, a Marker for Intestinal Permeability

Kati Mokkala, Henna Roütö, Eveliina Munukka, Sami Pietilä, Ulla Ekblad, Tapani Rönnermäa, Erkki Eerola, Asta Laiho, and Kirsi Laitinen

Intake of Caffeinated Soft Drinks before and during Pregnancy, but Not Total Caffeine Intake, Is Associated with Increased Cerebral Palsy Risk in the Norwegian Mother and Child Cohort Study

Mette C Tollanès, Katrine Strandberg-Larsen, Kacey Y Eichelberger, Dag Moster, Rolv Terje Lie, Anne Lise Brantsæter, Helle Margrete Meltzer, Camilla Stoltenberg, and Allen J Wilcox

Prolonged Exclusive Breastfeeding Duration Is Positively Associated with Risk of Anemia in Infants Aged 12 Months

Fenglei Wang, Huijuan Liu, Yi Wan, Jing Li, Yu Chen, Jusheng Zheng, Tao Huang, and Duo Li

NUTRIENT REQUIREMENTS AND OPTIMAL NUTRITION

Shifts in Rumen Fermentation and Microbiota Are Associated with Dissolved Ruminal Hydrogen Concentrations in Lactating Dairy Cows Fed Different Types of Carbohydrates

Min Wang, Rong Wang, Tian Yu Xie, Peter H Janssen, Xue Zhao Sun, Karen A Beauchemin, Zhi Liang Tan, and Min Gao

NUTRITIONAL EPIDEMIOLOGY

Highly Processed and Ready-to-Eat Packaged Food and Beverage Purchases Differ by Race/Ethnicity among US Households

Jennifer M Poti, Michelle A Mendez, Shu Wen Ng, and Barry M Popkin

Intake of High-Fat Yogurt, but Not of Low-Fat Yogurt or Prebiotics, Is Related to Lower Risk of Depression in Women of the SUN Cohort Study

Aurora Perez-Cornago, Almudena Sanchez-Villegas, Maira Bes-Rastrollo, Alfredo Gea, Patricio Molero, Francisca Lahortiga-Ramos, and Miguel Angel Martinez-González

Food Insecurity Is Associated with Subsequent Cognitive Decline in the Boston Puerto Rican Health Study

Janice C Wong, Tammy Scott, Parke Wilde, Yin-Ge Li, Katherine L Tucker, and Xiang Gao

Among 4 Diet Quality Indexes, Only the Alternate Mediterranean Diet Score Is Associated with Better Colorectal Cancer Survival and Only in African American Women in the Multiethnic Cohort

Simone Jacobs, Brook E Harmon, Nicholas J Ollberding, Lynne R Wilkens, Kristine R Monroe, Laurence N Kolonel, Loic Le Marchand, Carol J Boushey, and Gertraud Maskarinec

Plasma Concentrations of Ferritin in Early Pregnancy Are Associated with Risk of Gestational Diabetes Mellitus in Women in the Danish National Birth Cohort

Katherine A Bowers, Sjurur F Olsen, Wei Bao, Thorhallur I Halldorsson, Marin Strem, and Cuilin Zhang

Coffee Drinking Is Widespread in the United States, but Usual Intake Varies by Key Demographic and Lifestyle Factors

Erikka Loftfield, Neal D Freedman, Kevin W Dodd, Emily Vogtmann, Qian Xiao, Rashmi Sinha, and Barry I Graubard

COMMUNITY AND INTERNATIONAL NUTRITION

Delaying Iron Therapy until 28 Days after Antimalarial Treatment Is Associated with Greater Iron Incorporation and Equivalent Hematologic Recovery after 56 Days in Children: A Randomized Controlled Trial

Sarah E Cusick, Robert O Opoka, Steven A Abrams, Chandy C John, Michael K Georgieff, and Ezekiel Mupere

See corresponding commentary on page 1623.
Prenatal Lipid-Based Nutrient Supplements Affect Maternal Anthropometric Indicators Only in Certain Subgroups of Rural Bangladeshi Women

Short-Term Daily Consumption of Provitamin A Carotenoid–Biofortified Maize Has Limited Impact on Breast Milk Retinol Concentrations in Zambian Women Enrolled in a Randomized Controlled Feeding Trial
Amanda C Palmer, Justin Chileshe, Andrew G Hall, Maxwell A Barffour, Ngosa Molobeka, Keith P West Jr., and Marjorie J Haskell

A Conditional Cash Transfer Program in the Philippines Reduces Severe Stunting
Eeshani Kandpal, Harold Alderman, Jed Friedman, Deon Filmer, Junko Onishi, and Jorge Avalos

NUTRITIONAL IMMUNOLOGY
Serum Immune System Biomarkers Neopterin and Interleukin-10 Are Strongly Related to Tryptophan Metabolism in Healthy Young Adults
Oana M Deac, James L Mills, Clair M Gardiner, Barry Shane, Louise Quinn, Øivind Midttun, Adrian McCann, Klaus Meyer, Per M Ueland, Ruzong Fan, Zhaohui Lu, Lawrence C Brody, and Anne M Molloy

INGESTIVE BEHAVIOR AND NEUROSCIENCES
Hedonic Hunger Is Related to Increased Neural and Perceptual Responses to Cues of Palatable Food and Motivation to Consume: Evidence from 3 Independent Investigations
Kyle S Burger, Abigail J Sanders, and Jennifer R Gilbert

ERRATA


Supplement—The Dietary Intake and Eating Habits of the Mexican Population: Results from the National Health and Nutrition Survey 2012

From the American Society for Nutrition
Calendar of Events

Cover image: In this issue, Luo et al. (pages 1641–50) examine the ability of walnut consumption, in combination with other whole foods, to modulate the development of obesity and other metabolic dysfunction in mice fed a high-fat, obesogenic diet. Photo credit: Copyright © Dionisvera/Shutterstock.com.