



Contents

Articles

■ ISSUES AND OPINIONS

Which Dietary Reference Intake Is Best Suited to Serve as the Basis for Nutrition Labeling for Daily Values?

Allison A. Yates 2457

■ BIOCHEMICAL, MOLECULAR, AND GENETIC MECHANISMS

Alignment of the Transcription Start Site Coincides with Increased Transcriptional Activity from the Human Asparagine Synthetase Gene Following Amino Acid Deprivation of HepG2 Cells

Hong Chen and Michael S. Kilberg 2463

SREBP1 and Thyroid Hormone Responsive Spot 14 (S14) Are Involved in the Regulation of Bovine Mammary Lipid Synthesis during Diet-Induced Milk Fat Depression and Treatment with CLA

Kevin J. Harvatine and Dale E. Bauman 2468

■ NUTRIENT PHYSIOLOGY, METABOLISM, AND NUTRIENT-NUTRIENT INTERACTIONS

Glyceroneogenesis Is Reduced and Glucose Uptake Is Increased in Adipose Tissue from Cafeteria Diet-Fed Rats Independently of Tissue Sympathetic Innervation

Valéria E. Chaves, Danúbia Frasson, Maria E. S. Martins-Santos, Renata P. Boschini, Maria A. R. Garófalo, William T. L. Festuccia, Isis C. Kettelhut, and Renato H. Migliorini 2475

Pomegranate Juice Ellagitannin Metabolites Are Present in Human Plasma and Some Persist in Urine for Up to 48 Hours

Navindra P. Seeram, Susanne M. Henning, Yanjun Zhang, Marc Suchard, Zhaoping Li, and David Heber 2481

Increased Luminal Mucin Does Not Disturb Glucose or Ovalbumin Absorption in Rats Fed Insoluble Dietary Fiber

Tatsuya Morita, Hiroki Tanabe, Hiroyuki Ito, Shunsuke Yuto, Takeshi Matsubara, Tsukasa Matsuda, Kimio Sugiyama, and Shuhachi Kiriyaama 2486

A Combination Therapy Including Psyllium and Plant Sterols Lowers LDL Cholesterol by Modifying Lipoprotein Metabolism in Hypercholesterolemic Individuals

Sudeep Shrestha, Jeff S. Volek, Jay Udani, Richard J. Wood, Christine M. Greene, Dimple Aggarwal, John H. Contois, Ben Kavoussi, and Maria Luz Fernandez 2492

Adolescents with Adequate Birth Weight Newborns Diminish Energy Expenditure and Cease Growth

Esther Casanueva, María Emilia Roselló-Soberón, Luz María De-Regil, María del Carmen Argüelles, and María Isabel Céspedes 2498

Copper Deficiency Does Not Lead to Taurine Deficiency in Rats

Kwang Suk Ko, Cristina L. Tôrres, Andrea J. Fascetti, Martha H. Stipanuk, Lawrence Hirschberger, and Quinton R. Rogers 2502

The Effects of Fat and Protein on Glycemic Responses in Nondiabetic Humans Vary with Waist Circumference, Fasting Plasma Insulin, and Dietary Fiber Intake

Elham Moghaddam, Janet A. Vogt, and Thomas M. S. Wolever

2506

■ **NUTRITION AND DISEASE**

Epigallocatechin Gallate Supplementation Alleviates Diabetes in Rodents

Sven Wolfram, Daniel Raederstorff, Mareike Preller, Ying Wang, Sandra R. Teixeira, Christoph Riegger, and Peter Weber

2512

Consumption of One Egg Per Day Increases Serum Lutein and Zeaxanthin Concentrations in Older Adults without Altering Serum Lipid and Lipoprotein Cholesterol Concentrations

Elizabeth F. Goodrow, Thomas A. Wilson, Susan Crocker Houde, Rohini Vishwanathan, Patrick A. Scollin, Garry Handelman, and Robert J. Nicolosi

2519

Low Plasma Taurine Concentration in Newfoundland Dogs is Associated with Low Plasma Methionine and Cyst(e)ine Concentrations and Low Taurine Synthesis

Robert C. Backus, Kwang Suk Ko, Andrea J. Fascetti, Mark D. Kittleson, Kristin A. MacDonald, David J. Maggs, John R. Berg, and Quinton R. Rogers

2525

Nutritional Status is Altered in the Self-Neglecting Elderly

Scott M. Smith, Susan A. Mathews Oliver, Sara R. Zwart, Geeta Kala, P. Adam Kelly, James S. Goodwin, and Carmel B. Dyer

2534

Resveratrol Is Rapidly Metabolized in Athymic (Nu/Nu) Mice and Does Not Inhibit Human Melanoma Xenograft Tumor Growth

Richard M. Niles, Carla P. Cook, Gary G. Meadows, Ya-Min Fu, Jerry L. McLaughlin, and Gary O. Rankin

2542

Total Parenteral Nutrition Induces Liver Steatosis and Apoptosis in Neonatal Piglets

Hui Wang, Vladimir I. Khaoustov, Buvaneswari Krishnan, Wei Cai, Barbara Stoll, Douglas G. Burrin, and Boris Yoffe

2547

Olive Fruit Extracts Inhibit Proliferation and Induce Apoptosis in HT-29 Human Colon Cancer Cells

M. Emilia Juan, Uwe Wenzel, Valentina Ruiz-Gutierrez, Hannelore Daniel, and Joana M. Planas

2553

■ **NUTRIENT REQUIREMENTS AND OPTIMAL NUTRITION**

Trans Fatty Acids in Human Milk in Canada Declined with the Introduction of Trans Fat Food Labeling

Russell Friesen and Sheila M. Innis

2558

Carotenoid-Biofortified Maize Maintains Adequate Vitamin A Status in Mongolian Gerbils

Julie A. Howe and Sherry A. Tanumihardjo

2562

A 12-Wk Egg Intervention Increases Serum Zeaxanthin and Macular Pigment Optical Density in Women

Adam J. Wenzel, Catherine Gerweck, Damian Barbato, Robert J. Nicolosi, Garry J. Handelman, and Joanne Curran-Celentano

2568

■ **NUTRITIONAL EPIDEMIOLOGY**

α -Tocopherol Intake and Plasma Concentration of Hispanic and Non-Hispanic White Elders Is Associated with Dietary Intake Pattern

Xiang Gao, Antonio Martin, Hai Lin, Odilia I. Bermudez, and Katherine L. Tucker

2574

Longitudinal Changes in Food Patterns Predict Changes in Weight and Body Mass Index and the Effects Are Greatest in Obese Women

P. K. Newby, Christoph Weismayer, Agneta Åkesson, Katherine L. Tucker, and Alicja Wolk

2580

Fruit and Vegetable Consumption and Risk of Coronary Heart Disease: A Meta-Analysis of Cohort Studies

Luc Dauchet, Philippe Amouyel, Serge Hercberg, and Jean Dallongeville

2588

The USDA Automated Multiple-Pass Method Accurately Estimates Group Total Energy and Nutrient Intake

Cynthia A. Blanton, Alanna J. Moshfegh, David J. Baer, and Mary J. Kretsch

2594

■ **NUTRITIONAL IMMUNOLOGY**

Vitamin A Supplementation Reduces the Monocyte Chemoattractant Protein-1 Intestinal Immune Response of Mexican Children

Kurt Z. Long, Jose Ignacio Santos, Teresa Estrada Garcia, Meredith Haas, Mathew Firestone, Jui Bhagwat, Herbert L. DuPont, Ellen Hertzmark, Jorge L. Rosado, and Nanda N. Nanthakumar

2600

Immunity and Antioxidant Capacity in Humans Is Enhanced by Consumption of a Dried, Encapsulated Fruit and Vegetable Juice Concentrate

Meri P. Nantz, Cheryl A. Rowe, Carmelo Nieves, Jr., and Susan S. Percival

2606

Vitamin C Deficiency Increases the Lung Pathology of Influenza Virus-Infected *Gulo*-/- Mice

Wei Li, Nobuyo Maeda, and Melinda A. Beck

2611

■ **COMMUNITY AND INTERNATIONAL NUTRITION**

Milk Folate Secretion Is Not Impaired during Iron Deficiency in Humans

Amina Khambalia, Maria E. Latulippe, Cristina Campos, Claide Merlos, Salvador Villalpando, Mary Frances Picciano, and Deborah L. O'Connor

2617

Dietary Diversity Scores and Nutritional Status of Women Change during the Seasonal Food Shortage in Rural Burkina Faso

Mathilde Savy, Yves Martin-Prével, Pierre Traissac, Sabrina Eymard-Duvernay, and Francis Delpeuch

2625

Fortifying Milk with Ferrous Gluconate and Zinc Oxide in a Public Nutrition Program Reduced the Prevalence of Anemia in Toddlers

Salvador Villalpando, Teresa Shamah, Juan A. Rivera, Yaveth Lara, and Eric Monterrubio

2633

Experiences of Latino Immigrant Families in North Carolina Help Explain Elevated Levels of Food Insecurity and Hunger

Sara A. Quandt, John I. Shoaf, Janeth Tapia, Mercedes Hernández-Pelletier, Heather M. Clark, and Thomas A. Arcury

2638

■ **INGESTIVE BEHAVIOR AND NEUROSCIENCES**

Psychosocial Stimulation Improves the Development of Undernourished Children in Rural Bangladesh

Jena D. Hamadani, Syed N. Huda, Fahmida Khatun, and Sally M. Grantham-McGregor

2645

■ **METHODOLOGY AND MATHEMATICAL MODELING**

A Mathematical Model Gives Insights into Nutritional and Genetic Aspects of Folate-Mediated One-Carbon Metabolism

Michael C. Reed, H. Frederik Nijhout, Marian L. Neuhouser, Jesse F. Gregory III, Barry Shane, S. Jill James, Alanna Boynton, and Cornelia M. Ulrich

2653

Announcements

2662

Supplement: Biomarkers as Indicators of Cancer Risk Reduction Following Dietary Manipulation

2663S

Cover image: Liver tissues from piglets fed by total parenteral nutrition (TPN), showing steatosis and elevated immunostaining for the proapoptotic factor Bax (red stain). See related article by Wang et al. on page 2547 (J. Nutr. 136: 2547–2552, 2006). Copyright © 2006 American Society for Nutrition.