

Contents

Articles

■ BIOCHEMICAL, MOLECULAR, AND GENETIC MECHANISMS

Chylomicron Remnants and Nonesterified Fatty Acids Differ in Their Ability to Inhibit Genes Involved in Lipogenesis in Rats

Allison B. Kohan, Yang Qing, Holly A. Cyphert, Patrick Tso, and Lisa M. Salati 171

A Two-Step Association Study Identifies CAV2 rs2270188 Single Nucleotide Polymorphism Interaction with Fat Intake in Type 2 Diabetes Risk

Eva Fisher, Stefan Schreiber, Hans-Georg Joost, Heiner Boeing, and Frank Döring 177

■ NUTRIENT PHYSIOLOGY, METABOLISM, AND NUTRIENT-NUTRIENT INTERACTIONS

Reduction of Dietary Energy Density Reduces Body Mass Regain Following Energy Restriction in Female Mice

Kerry M. Cameron and John R. Speakman 182

Dietary Manganese Modulates Expression of the Manganese-Containing Superoxide Dismutase Gene in Chickens

Sufen Li, Lin Lu, Shoufeng Hao, Yanping Wang, Liyang Zhang, Songbai Liu, Bin Liu, Kui Li, and Xugang Luo 189

Bolus Arginine Supplementation Affects neither Muscle Blood Flow nor Muscle Protein Synthesis in Young Men at Rest or After Resistance Exercise

Jason E. Tang, Paul J. Lysecki, Joshua J. Manolagos, Maureen J. MacDonald, Mark A. Tarnopolsky, and Stuart M. Phillips 195

■ NUTRITION AND DISEASE

Marine Fatty Acid Intake Is Associated with Breast Cancer Prognosis

Ruth E. Patterson, Shirley W. Flatt, Vicky A. Newman, Loki Natarajan, Cheryl L. Rock, Cynthia A. Thomson, Bette J. Caan, Barbara A. Parker, and John P. Pierce 201

Algal Docosahexaenoic Acid Affects Plasma Lipoprotein Particle Size Distribution in Overweight and Obese Adults

Lisa M. Neff, Jill Culiner, Susanna Cunningham-Rundles, Cynthia Seidman, Diane Meehan, Janet Maturi, Knut M. Wittkowski, Barbara Levine, and Jan L. Breslow 207

Maternal Docosahexaenoic Acid Supplementation Decreases Lung Inflammation in Hyperoxia-Exposed Newborn Mice

Lynette K. Rogers, Christina J. Valentine, Michael Pennell, Markus Velten, Rodney D. Britt, Kelly Dingess, Xuilan Zhao, Stephen E. Welty, and Trent E. Tipple 214

The Incidence of Necrotizing Enterocolitis Is Increased Following Probiotic Administration to Preterm Pigs

Malene S. Cilleborg, Thomas Thymann, Richard Siggers, Mette Boye, Stine B. Bering, Bent B. Jensen, and Per T. Sangild 223

■ NUTRIENT REQUIREMENTS AND OPTIMAL NUTRITION

Early Docosahexaenoic Acid Supplementation of Mothers during Lactation Leads to High Plasma Concentrations in Very Preterm Infants

Isabelle Marc, Mélanie Plourde, Michel Lucas, Anca Sterescu, Bruno Piedboeuf, Alexandra Dufresne, Anne Monique Nuyt, Émile Lévy, and Sylvie Dodin 231

A Micronutrient Powder with Low Doses of Highly Absorbable Iron and Zinc Reduces Iron and Zinc Deficiency and Improves Weight-For-Age Z-Scores in South African Children

Barbara Troesch, Martha E. van Stuijvenberg, Cornelius M. Smuts, H. Salomé Kruger, Ralf Biebinger, Richard F. Hurrell, Jeannine Baumgartner, and Michael B. Zimmermann 237

Dry Cereals Fortified with Electrolytic Iron or Ferrous Fumarate Are Equally Effective in Breast-fed Infants

Ekhard E. Ziegler, Samuel J. Fomon, Steven E. Nelson, Janice M. Jeter, and Richard C. Theuer 243

■ NUTRITIONAL EPIDEMIOLOGY

Higher Branched-Chain Amino Acid Intake Is Associated with a Lower Prevalence of Being Overweight or Obese in Middle-Aged East Asian and Western Adults

Li-Qiang Qin, Pengcheng Xun, Deborah Bujnowski, Martha L. Daviglius, Linda Van Horn, Jeremiah Stamler, and Ka He, for the INTERMAP Cooperative Research Group 249

Polymorphisms in Serine Hydroxymethyltransferase 1 and Methylenetetrahydrofolate Reductase Interact to Increase Cardiovascular Disease Risk in Humans

Susan M. Wernimont, Farbod Raiszadeh, Patrick J. Stover, Eric B. Rimm, David J. Hunter, Wenbo Tang, and Patricia A. Cassano 255

Dietary Supplement Use in the United States, 2003–2006

Regan L. Bailey, Jaime J. Gahche, Cindy V. Lentino, Johanna T. Dwyer, Jody S. Engel, Paul R. Thomas, Joseph M. Betz, Christopher T. Sempos, and Mary Frances Picciano 261

Dietary, but Not Supplemental, Intakes of Carotenoids and Vitamin C Are Associated with Decreased Odds of Lower Urinary Tract Symptoms in Men

Nancy N. Maserejian, Edward L. Giovannucci, Kevin T. McVary, and John B. McKinlay 267

High Intake of Folate from Food Sources Is Associated with Reduced Risk of Esophageal Cancer in an Australian Population

Torukiri I. Ibiebele, Maria Celia Hughes, Nirmala Pandeya, Zhen Zhao, Grant Montgomery, Nick Hayward, Adèle C. Green, David C. Whiteman, and Penelope M. Webb, for the Study of Digestive Health and Australian Cancer Study 274

Neighborhood Socioeconomic Status Is Associated with Serum Carotenoid Concentrations in Older, Community-Dwelling Women

Emily J. Nicklett, Sarah Szanton, Kai Sun, Luigi Ferrucci, Linda P. Fried, Jack M. Guralnik, and Richard D. Semba 284

Serum 25-Hydroxyvitamin D Is not Associated with Insulin Resistance or Beta Cell Function in Canadian Cree

Liana C. Del Gobbo, Yiqing Song, David A. Dannenbaum, Eric Dewailly, and Grace M. Egeland 290

Race and Region Are Associated with Nutrient Intakes among Black and White Men in the United States

P. K. Newby, Sabrina E. Noel, Rachael Grant, Suzanne Judd, James M. Shikany, and Jamy Ard 296

Food Prices Are Associated with Dietary Quality, Fast Food Consumption, and Body Mass Index among U.S. Children and Adolescents

May A. Beydoun, Lisa M. Powell, Xiaoli Chen, and Youfa Wang 304

■ COMMUNITY AND INTERNATIONAL NUTRITION

Zinc Treatment for 5 or 10 Days Is Equally Efficacious in Preventing Diarrhea in the Subsequent 3 Months among Bangladeshi Children

Dewan S. Alam, Mohammad Yunus, Shams El Arifeen, Hafizur R. Chowdury, Charles P. Larson, David A. Sack, Abdullah H. Baqui, and Robert E. Black 312

Growth to Age 18 Months Following Prenatal Supplementation with Docosahexaenoic Acid Differs by Maternal Gravidity in Mexico

Aryeh D. Stein, Meng Wang, Reynaldo Martorell, Lynnette M. Neufeld, Rafael Flores-Ayala, Juan A. Rivera, and Usha Ramakrishnan 316

Docosahexaenoic Acid Supplementation from Mid-Pregnancy to Parturition Influenced Breast Milk Fatty Acid Concentrations at 1 Month Postpartum in Mexican Women

Beth Imhoff-Kunsch, Aryeh D. Stein, Salvador Villalpando, Reynaldo Martorell, and Usha Ramakrishnan 321

Maternal Zinc Supplementation during Pregnancy Affects Autonomic Function of Peruvian Children Assessed at 54 Months of Age

Laura E. Caulfield, Nelly Zavaleta, Ping Chen, Fabiola Lazarte, Carla Albornoz, Diane L. Putnick, Marc H. Bornstein, and Janet A. DiPietro 327

■ **METHODOLOGY AND MATHEMATICAL MODELING**

Energy Allowances for Solid Fats and Added Sugars in Nutritionally Adequate U.S. Diets Estimated at 17–33% by a Linear Programming Model

Matthieu Maillot and Adam Drewnowski 333

A Minimum of Six Days of Diet Recording Is Needed to Assess Usual Vitamin K Intake among Older Adults

Nancy Presse, H el ene Payette, Bryna Shatenstein, Carol E. Greenwood, Marie-Jeanne Kergoat, and Guylaine Ferland 341

Announcements 347

The Journal of Nutrition Reviewer Acknowledgment 348
