Contents

Articles

■ RECENT ADVANCES IN NUTRITIONAL SCIENCES

Dietary Lipids Inform the Gut and Brain about Meal Arrival via CD36-Mediated Signal Transduction
Sinju Sundaresan and Nada A Abumrad 2195

■ BIOCHEMICAL, MOLECULAR, AND GENETIC MECHANISMS

The Intestinal Transport of Bovine Milk Exosomes Is Mediated by Endocytosis in Human Colon Carcinoma Caco-2 Cells and Rat Small Intestinal IEC-6 Cells
Tovah Wolf, Scott R Baier, and Janos Zempleni 2201

The Dihydrofolate Reductase 19 bp Polymorphism Is Not Associated with Biomarkers of Folate Status in Healthy Young Adults, Irrespective of Folic Acid Intake
Mari Ozaki, Anne M Molloy, James L Mills, Ruzong Fan, Yifan Wang, Eileen R Gibney, Barry Shane, Lawrence C Brody, and Anne Parle-McDermott 2207

■ GENOMICS, PROTEOMICS, AND METABOLICS

Maternal N-Carbamylglutamate Supplementation during Early Pregnancy Enhances Embryonic Survival and Development through Modulation of the Endometrial Proteome in Gilts
Jinlong Zhu, Xiangfang Zeng, Qian Peng, Shenming Zeng, Haiyi Zhao, Hexiao Shen, and Shiyan Qiao 2212

■ NUTRIENT PHYSIOLOGY, METABOLISM, AND NUTRIENT-NUTRIENT INTERACTIONS

High True Ileal Digestibility but Not Postprandial Utilization of Nitrogen from Bovine Meat Protein in Humans Is Moderately Decreased by High-Temperature, Long-Duration Cooking
Marion Oberli, Agnès Marsset-Baglieri, Gheorghe Airinei, Véronique Santé-Lhoutellier, Nadezda Khodorova, Didier Rémond, Angélique Foucault-Simonin, Julien Piedcoq, Daniel Tomé, Gilles Fromentin, Robert Benamouzig, and Claire Gaudichon 2221

Breakfasts Higher in Protein Increase Postprandial Energy Expenditure, Increase Fat Oxidation, and Reduce Hunger in Overweight Children from 8 to 12 Years of Age
Jamie I Baum, Michelle Gray, and Ashley Binns 2229

Dietary Whey and Casein Differentially Affect Energy Balance, Gut Hormones, Glucose Metabolism, and Taste Preference in Diet-Induced Obese Rats
Adel Pezeshki, Andrew Fahim, and Prasanth K Chelikani 2236

Low-Dose Creatine Supplementation Lowers Plasma Guanidinoacetate, but Not Plasma Homocysteine, in a Double-Blind, Randomized, Placebo-Controlled Trial
Brandilyn A Peters, Megan N Hall, Xinhua Liu, Faruque Parvez, Abu B Siddique, Hasan Shahriar, Mohammad Nasir Uddin, Tariqul Islam, Vesna Ilievski, Joseph H Graziano, and Mary V Gamble 2245
Iron Absorption from an Intrinsically Labeled Lentil Meal Is Low but Upregulated in Women with Poor Iron Status
Diane M DellaValle, Raymond P Glahn, Jon E Shaff, and Kimberly O’Brien 2253

L-Glutamate Enhances Barrier and Antioxidative Functions in Intestinal Porcine Epithelial Cells
Ning Jiao, Zhenlong Wu, Yun Ji, Bin Wang, Zhaolai Dai, and Guoyao Wu 2258

Consumption of Honey, Sucrose, and High-Fructose Corn Syrup Produces Similar Metabolic Effects in Glucose-Tolerant and -Intolerant Individuals
Susan K Raatz, LuAnn K Johnson, and Matthew J Picklo 2265

Citrulline and Nonessential Amino Acids Prevent Fructose-Induced Nonalcoholic Fatty Liver Disease in Rats
Prasanthi Jegatheesan, Stéphanie Beutheu, Gabrielle Ventura, Esther Nubret, Gilles Sarfati, Ina Bergheim, and Jean-Pascal De Bandt 2273

Oral Glutamine Supplementation Protects Female Mice from Nonalcoholic Steatohepatitis
Cathrin Sellmann, Cheng Jun Jin, Christian Degen, Jean-Pascal De Bandt, and Ina Bergheim 2280

Dietary Almonds Increase Serum HDL Cholesterol in Coronary Artery Disease Patients in a Randomized Controlled Trial
Humaira Jamshed, Fathe Ali Tipoo Sultan, Romaina Iqbal, and Anwar Hassan Gilani 2287

Plasma Selenium Concentrations Are Sufficient and Associated with Protease Inhibitor Use in Treated HIV-Infected Adults
Corrlynn O Hileman, Sahera Dirajlal-Fargo, Suet Kam Lam, Jessica Kumar, Craig Lacher, Gerald F Combs Jr., and Grace A McComsey 2293

Short-Term Curcumin Gavage Sensitizes Insulin Signaling in Dexamethasone-Treated C57BL/6 Mice
Lili Tian, Kejing Zeng, Weijuan Shao, Burton B Yang, I George Fantus, Jianping Weng, and Tianru Jin 2300

Consumption of Yogurt, Low-Fat Milk, and Other Low-Fat Dairy Products Is Associated with Lower Risk of Metabolic Syndrome Incidence in an Elderly Mediterranean Population
Nancy Babio, Nerea Becerra-Tomás, Miguel Ángel Martínez-González, Dolores Corella, Ramon Estruch, Emilio Ros, Carmen Sayón-Orea,Montserrat Fitó, Lluís Serra-Majem, Fernando Arós, Rosa M Lamuela-Raventós, José Lapetra, Enrique Gómez-Gracia, Miguel Fiol, Andrés Díaz-López, José V Sorli, J Alfredo Martínez, and Jordi Salas-Salvadó, on behalf of the PREDIMED Investigators 2308

Higher Plasma Phospholipid n–3 PUFAs, but Lower n–6 PUFAs, Are Associated with Lower Pulse Wave Velocity among Older Adults
Ilse Reinders, Rachel A Murphy, Xiaolong Song, Gary F Mitchell, Marjolein Visser, Mary Frances Cotch, Melissa E Garcia, Lenore J Launer, Gudny Einarsdottir, Vilmundur Gudnason, Tamara B Harris, and Ingelborg A Brouwer 2317

Acute Cocoa Supplementation Increases Postprandial HDL Cholesterol and Insulin in Obese Adults with Type 2 Diabetes after Consumption of a High-Fat Breakfast
Arpita Basu, Nancy M Betts, Misti J Leyva, Dongxu Fu, Christopher E Aston, and Timothy J Lyons 2325

Oral Vitamin D Supplements Increase Serum 25-Hydroxyvitamin D in Postmenopausal Women and Reduce Bone Calcium Flux Measured by $^{41}$Ca Skeletal Labeling

Growth Responses of Juvenile Red Drum Sciaenops ocellatus to Dietary Phenylalanine and Tyrosine Can Be Used to Calculate the Total Aromatic Amino Acid Requirement
Sergio Castillo, Shelby Halligan, and Delbert M Gatlin III 2341
NUTRITIONAL EPIDEMIOLOGY

The Nutrient Profile of Foods Consumed Using the British Food Standards Agency Nutrient Profiling System Is Associated with Metabolic Syndrome in the SU.VI.MAX Cohort
Chantal Julia, Léopold K Fézeu, Pauline Ducrot, Caroline Méjean, Sandrine Péneau, Mathilde Touvier, Serge Hercberg, and Emmanuelle Kesse-Guyot

Higher Maternal Plasma n–3 PUFA and Lower n–6 PUFA Concentrations in Pregnancy Are Associated with Lower Childhood Systolic Blood Pressure
Aleksandra Jelena Vidakovic, Olta Gishti, Jolien Steenweg-de Graaff, Michelle A Williams, Liesbeth Duijts, Janine F Felix, Albert Hofman, Henning Tiemeier, Vincent WV Jaddoe, and Romy Gaillard

Early Breastfeeding Problems Mediate the Negative Association between Maternal Obesity and Exclusive Breastfeeding at 1 and 2 Months Postpartum
Elizabeth J O’Sullivan, Cria G Perrine, and Kathleen M Rasmussen

COMMUNITY AND INTERNATIONAL NUTRITION

Participation in the Juntos Conditional Cash Transfer Program in Peru Is Associated with Changes in Child Anthropometric Status but Not Language Development or School Achievement
Christopher T Andersen, Sarah A Reynolds, Jere R Behrman, Benjamin T Crookston, Kirk A Dearden, Javier Escobal, Subha Mani, Alan Sánchez, Aryeh D Stein, and Lia CH Fernald

INGESTIVE BEHAVIOR AND NEUROSCIENCES

Dietary Macronutrient Composition Affects the Influence of Exogenous Prolactin-Releasing Peptide on Appetite Responses and Hypothalamic Gene Expression in Chickens
Guoqing Wang, Tetsuya Tachibana, Elizabeth R Gilbert, and Mark A Cline

Elevated BMI and Male Sex Are Associated with Greater Underreporting of Caloric Intake as Assessed by Doubly Labeled Water
Eric Stice, Christina A Palmrose, and Kyle S Burger

METHODOLOGY AND MATHEMATICAL MODELING

Kevin D Cashman, Andreas Kazantzidis, Ann R Webb, and Mairead Kiely

From the American Society for Nutrition

Calendar of Events