



The American Journal of CLINICAL NUTRITION

VOLUME 87 NUMBER 1 JANUARY 2008

Perspectives

- 1 A role for the glycemic index in preventing or treating diabetes? *JM Miles*
See corresponding articles on pages 114 and 126.
- 3 Glycemic index in early type 2 diabetes. *X Pi-Sunyer*
See corresponding article on page 114.

Editorial

- 5 Fruit and vegetables: think variety, go ahead, eat! *SJ Padayatty and M Levine*
See corresponding article on page 64.

Commentary

- 8 Are there specific treatments for the metabolic syndrome? *D Giugliano, A Ceriello, and K Esposito*

Original Research Communications

Obesity and eating disorders

- 12 Meal-induced compositional changes in blood and saliva in persons with bulimia nervosa. *AW Dynesen, A Bardow, A Astrup, B Petersson, JJ Holst, and B Nauntofte*
- 23 Long-term effects of a high-protein weight-loss diet. *PM Clifton, JB Keogh, and M Noakes*
- 30 A prospective study of weight change and systemic inflammation over 9 y. *AW Fogarty, C Glancy, S Jones, SA Lewis, TM McKeever, and JR Britton*
- 36 Dietary restraint and low bone mass in female adolescent endurance runners. *MT Barrack, MJ Rauh, H-S Barkai, and JF Nichols*
- 44 Effects of a high-protein ketogenic diet on hunger, appetite, and weight loss in obese men feeding ad libitum. *AM Johnstone, GW Horgan, SD Murison, DM Bremner, and GE Lobley*

Lipids

- 56 Subcutaneous adipocyte size and body fat distribution. *YD Tchoukalova, C Koutsari, MV Karpyak, SB Votruba, E Wendland, and MD Jensen*

Cardiovascular disease risk

- 64 Plasma vitamin C concentrations predict risk of incident stroke over 10 y in 20 649 participants of the European Prospective Investigation into Cancer–Norfolk prospective population study. *PK Myint, RN Luben, AA Welch, SA Bingham, NJ Wareham, and K-T Khaw*
See corresponding editorial on page 5.
- 70 A prospective community–population–registry–based cohort study of the association between betel–quid chewing and cardiovascular disease in men in Taiwan (KCIS no. 19). *AM-F Yen, L-S Chen, Y-H Chiu, BJ Boucher, and TH-H Chen*
- 79 The effects of a whole grain–enriched hypocaloric diet on cardiovascular disease risk factors in men and women with metabolic syndrome. *HI Katcher, RS Legro, AR Kunselman, PJ Gillies, LM Demers, DM Bagshaw, and PM Kris-Etherton*

Nutritional status, dietary intake, and body composition

- 91 Molecular analysis of yogurt containing *Lactobacillus delbrueckii* subsp. *bulgaricus* and *Streptococcus thermophilus* in human intestinal microbiota. *R García-Albiach, M José, P de Felipe, S Angulo, M-I Morosini, D Bravo, F Baquero, and R del Campo*
- 97 A low-glycemic-index diet reduces plasma plasminogen activator inhibitor-1 activity, but not tissue inhibitor of proteinases-1 or plasminogen activator inhibitor-1 protein, in overweight women. *L Jensen, B Sloth, I Krog-Mikkelsen, A Flint, A Raben, T Tholstrup, N Brünner, and A Astrup*
- 106 Simplified nutritional screening tools for patients on maintenance hemodialysis. *K Yamada, R Furuya, T Takita, Y Maruyama, Y Yamaguchi, S Ohkawa, and H Kumagai*



(continued)

Carbohydrate metabolism and diabetes

- 114 The Canadian Trial of Carbohydrates in Diabetes (CCD), a 1-y controlled trial of low-glycemic-index dietary carbohydrate in type 2 diabetes: no effect on glycated hemoglobin but reduction in C-reactive protein. *TMS Wolever, AL Gibbs, C Mehling, J-L Chiasson, PW Connelly, RG Josse, LA Leiter, P Maheux, R Rabasa-Lhoret, NW Rodger, and EA Ryan*
See corresponding perspectives on pages 1 and 3.
- 126 Dietary glycemic index and glycemic load and the risk of type 2 diabetes in older adults. *NR Sahyoun, AL Anderson, FA Tylavsky, J Sun Lee, DE Sellmeyer, and TB Harris for the Health, Aging, and Body Composition Study*
See corresponding perspective on page 1 and related perspective on page 3.

Energy and protein metabolism

- 132 Dietary fat oxidation as a function of body fat. *KR Westerterp, A Smeets, MP Lejeune, MPE Wouters-Adriaens, and MS Westerterp-Plantenga*

Vitamins, minerals, and phytochemicals

- 136 Optimal vitamin D status attenuates the age-associated increase in systolic blood pressure in white Americans: results from the third National Health and Nutrition Examination Survey. *SE Judd, MS Nanes, TR Ziegler, PWF Wilson, and V Tangpricha*
- 142 Oral administration of vitamin C decreases muscle mitochondrial biogenesis and hampers training-induced adaptations in endurance performance. *M-C Gomez-Cabrera, E Domenech, M Romagnoli, A Arduini, C Borrás, FV Pallardo, J Sastre, and J Viña*

Aging

- 150 Dietary protein intake is associated with lean mass change in older, community-dwelling adults: the Health, Aging, and Body Composition (Health ABC) Study. *DK Houston, BJ Nicklas, J Ding, TB Harris, FA Tylavsky, AB Newman, J Sun Lee, NR Sahyoun, M Visser, and SB Kritchevsky for the Health ABC Study*
- 156 Effects of intraduodenal glucose, fat, and protein on blood pressure, heart rate, and splanchnic blood flow in healthy older subjects. *D Gentilecore, T Hausken, JH Meyer, IM Chapman, M Horowitz, and KL Jones*

Nutritional epidemiology and public health

- 162 Legume and soy food intake and the incidence of type 2 diabetes in the Shanghai Women's Health Study. *R Villegas, Y-T Gao, G Yang, H-L Li, TA Elasy, W Zheng, and X Ou Shu*
- 168 Interrelation of saturated fat, *trans* fat, alcohol intake, and subclinical atherosclerosis. *AT Merchant, LE Kelemen, L de Koning, E Lonn, V Vuksan, R Jacobs, B Davis, KK Teo, S Yusuf, and SS Anand for the SHARE and SHARE-AP investigators*
- 175 Chocolate consumption and bone density in older women. *JM Hodgson, A Devine, V Burke, IM Dick, and RL Prince*

Gene-nutrient interactions

- 181 Supplementation of healthy volunteers with nutritionally relevant amounts of selenium increases the expression of lymphocyte protein biosynthesis genes. *V Pagmantidis, C Méplan, EM van Schothorst, J Keijer, and JE Hesketh*

Letters to the Editor

- 190 Cholecalciferol and 25-hydroxyvitamin D concentrations in adults with cystic fibrosis. *E Robberecht and S Vandewalle*
- 190 Reply to E Robberecht and S Vandewalle. *A Stephenson*
- 191 Is there a need for vitamin C supplementation of the normal diet? Effects of in vivo ascorbate depletion on adrenal function. *V Bähr, AFH Pfeiffer, and W Oelkers*
- 191 Reply to V Bähr et al. *SJ Padayatty and M Levine*
- 192 Dietary calcium, the 16 α -hydroxyl metabolic pathway of steroids, and sex hormones in blood and urine. *T Remer*
- 193 Reply to T Remer. *R Armamento-Villareal and N Napoli*
- 195 **With Appreciation**

Supplement: Glycemic Response and Health

- 211S Preface. *J Stowell*
- 212S Glycemic response and health: summary of a workshop. *J Howlett and M Ashwell*
- 217S Glucose metabolism and hyperglycemia. *D Giugliano, A Ceriello, and K Esposito*



(continued)

- 223S Glycemic response and health—a systematic review and meta-analysis: the database, study characteristics, and macronutrient intakes. *G Livesey, R Taylor, T Hulshof, and J Howlett*
- 237S Glycemic impact, glycemic glucose equivalents, glycemic index, and glycemic load: definitions, distinctions, and implications. *JA Monro and M Shaw*
- 244S The glycemic index concept in action. *HL Mitchell*
- 247S Measuring the glycemic index of foods: interlaboratory study. *TMS Wolever, JC Brand-Miller, J Abernethy, et al*
- 258S Glycemic response and health—a systematic review and meta-analysis: relations between dietary glycemic properties and health outcomes. *G Livesey, R Taylor, T Hulshof, and J Howlett*
- 269S Role of glycemic index and glycemic load in the healthy state, in prediabetes, and in diabetes. *G Riccardi, AA Rivellese, and R Giacco*

i **Calendar of Events**