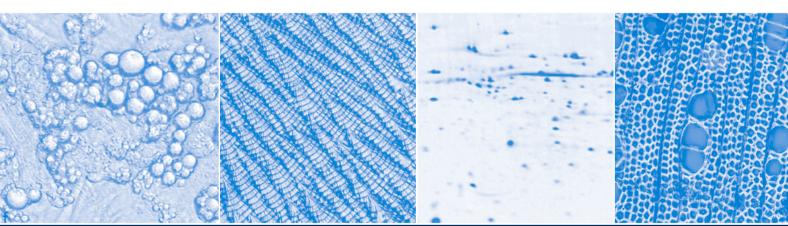
ublished online by Cambridge University Press

British Journal of Nutrition

BJN An International Journal of Nutritional Science

Volume 101 Number 11 14 June 2009



British Journal of Nutrition

An International Journal of Nutritional Science *Volume 101, 2009 ISSN: 0007-1145*

Aims and Scope

The *British Journal of Nutrition* is an international, peer-reviewed journal publishing original papers, review articles, short communications and technical notes on human and clinical nutrition, animal nutrition and basic science as applied to nutrition. Correspondence is encouraged in a Nutrition Discussion Forum. The Journal recognizes the multidisciplinary nature of nutritional science and encourages the submission of material from all of the specialities involved in research and clinical practice. The Journal also publishes supplements on topics of particular interest.

The *British Journal of Nutrition* is published twice monthly by Cambridge University Press on behalf of The Nutrition Society.

The *British Journal of Nutrition* is available online to subscribers at journals.cambridge.org/bjn Tables of contents and abstracts are available free at the same website.

Editor-in-Chief

P C Calder, School of Medicine, University of Southampton, Southampton, UK

Deputy Editors

F Bellisle, INRA, University of Paris, Bobigny, France
D R Jacobs Jr, School of Public Health, University of Minnesota, Minneapolis, MN, USA
R J Wallace, Gut Health Programme, Rowett Research Institute, Aberdeen, UK
S J Whiting, College of Pharmacy and Nutrition, University of Saskatchewan, Saskatoon, Sask., Canada

Reviews Editor

J C Mathers, School of Clinical Medical Sciences, University of Newcastle upon Tyne, Newcastle upon Tyne, UK

Supplements Editor

C Seal, School of Agriculture, Food and Rural Development, University of Newcastle upon Tyne, Newcastle upon Tyne, UK

Book Reviews Editor

O B Kennedy, School of Food Biosciences, University of Reading, Reading, UK

Editorial Board

J J B Anderson, Chapel Hill, NC, USA J R Arthur, Aberdeen, UK S B Astley, Norwich, UK D Attaix, Ceyrat, France Y Bao, Norwich, UK G Bell, Stirling, UK M Blaut, Bergholz-Rehbrücke, Germany K Botham, London, UK G C Burdge, Southampton, UK J Buyse, Leuven, Belgium M D Carro, León, Spain M S Choi, Daegu, Korea A Chwalibog, Frederiksberg, Denmark K Eder, Halle/Saale, Germany G C Fahey Jr, Urbana, IL, USA C J Field, Edmonton, Alta., Canada J K Friel, Winnipeg, MB, Canada S Garnett, Sydney, Australia F Ginty, Niskayuna, NY, USA B A Griffin, Surrey, UK

E Herrera, Madrid, Spain M M Hetherington, Liverpool, UK G Holtrop, Aberdeen, UK S J Kaushik, Saint Pée-sur-Nivelle, France D S Kelley, Davis, Ca., USA I Kyriazakis, Karditsa, Greece H J Lightowler, Oxford, UK A M López-Sobaler, Madrid, Spain H C Lukaski, Grand Forks, ND, USA H J McArdle, Aberdeen, UK N M McKeown, Boston, MA, USA E L Miller, Cambridge, UK C Moinard, Paris, France A M Molloy, Dublin, Ireland T A Mori, Perth, Australia P Nestel, Southampton, UK J H Y Park, Chuncheon, Korea M A Pereira, Minneapolis, MN USA C J Petry, Cambridge, UK V Ravindran, Palmerston North, New Zealand

W D Rees, Aberdeen, UK G Rimbach, Kiel, Germany S M Robinson, Southampton, UK E Ros, Barcelona, Spain S Salminen, Turku, Finland M B Schulze, Nuthetal, Germany C R Sirtori, Milan, Italy I Tetens, Søborg, Denmark K Tucker, Boston, MA, USA M van Baak, Maastricht, The Netherlands M W A Verstegen, Wageningen, The Netherlands F Visioli, Paris, France M S Westerterp-Plantenga, Maastricht, The Netherlands I S Wood, Liverpool, UK B Woodward, Guelph, Ont., Canada P Yaqoob, *Reading*, *UK*

Publications Staff

C Goodstein (*Publications Manager*), C Jackson (*Deputy Publications Manager*), J Norton, L Weeks H Zdravics and C Isherwood (*Publications Officers*), C T Hughes (*Sub-editor*)

The Nutrition Society has as its objective the advancement of the scientific study of nutrition and its applications to the maintenance of human and animal health.

Application of membership is invited from anyone whose work has contributed to the scientific knowledge of nutrition, whether such work has been in the laboratory, the field or the clinic, and whether experimental, clinical, agricultural or statistical in nature. There is also a student membership scheme with reduced subscriptions.

Particulars of The Nutrition Society and application forms for membership are available from The Nutrition Society, 10 Cambridge Court, 210 Shepherds Bush Road, London W6 7NJ, UK. Tel: +44 (0)20 7602 0228, Fax: +44 (0)20 7602 1756, Email: office@nutsoc.org.uk

The Nutrition Society Home Page is at http://www.nutritionsociety.org

British Journal of Nutrition

Contents

Invited Commentary	
Gut microbiota and pregnancy, a matter of inner life. P. D. Cani	1579-1580
 Review Article Minerals and vitamins in bone health: the potential value of dietary enhancement. JP. Bonjour, L. Guéguen, C. Palacios, M. J. Shearer & C. M. Weaver Ageing and vitamin D deficiency: effects on calcium homeostasis and considerations for vitamin D supplementation. C. Oudshoorn, T. J. M. van der Cammen, M. E. T. McMurdo, 	1581-1596
J. P. T. M. van Leeuwen & E. M. Colin	1597–1606
 Short Communication Long-term plant stanol and sterol ester-enriched functional food consumption, serum lutein/zeaxanthin concentration and macular pigment optical density. T. T. J. M. Berendschot, J. Plat, A. d. Jong & R. P. Mensink Dietary strategies for improving folate status in institutionalized elderly persons. 	1607-1610
L. M. Bermejo, A. Aparicio, E. Rodríguez-Rodríguez, A. M. López-Sobaler, P. Andrés & R. M. Ortega Improved bone status by the β-blocker propranolol in an animal model of nutritional growth	1611–1615
retardation. C. E. Lezón, M. I. Olivera, C. Bozzini, P. Mandalunis, R. M. Alippi & P. M. Boyer	1616-1620
Molecular Nutrition Dietary garlic and onion reduce the incidence of atherogenic diet-induced cholesterol gallstones in experimental mice.	1621 1620
 S. Vidyashankar, K. Sambaiah & K. Srinivasan Effect of dietary conjugated linoleic acid isomers on lipid metabolism in hamsters fed high-carbohydrate and high-fat diets. E. J. Tarling, K. J. P. Ryan, A. J. Bennett & A. M. Salter 	1621–1629 1630–1638
Metabolism and metabolic studies	1030 1030
Evaluation of body development, fat mass and lipid profile in rats fed with high-PUFA and -MUFA diets, after neonatal malnutrition.	
C. A. S. d. Costa, E. G. Alves, G. d. P. L. Gonzalez, T. B. C. Barbosa, A. S. Carlos, V. D. Lima, R. Nascimento, E. G. d. Moura & C. C. A. d. Nascimento-Saba Effects of dietary amines on the gut and its vasculature.	1639–1644
K. J. Broadley, M. A. Anwar, A. A. Herbert, M. Fehler, E. M. Jones, W. E. Davies, E. J. Kidd & W. R. Ford	1645-1652
Nutritional Immunology Long-chain inulin increases dendritic cells in the Peyer's patches and increases ex vivo cytokine secretion in the spleen and mesenteric lymph nodes of growing female rats, independent of zinc status.	
N. R. Ryz, J. B. Meddings & C. G. Taylor	1653–1663
Human and Clinical Nutrition Bioavailability and nutritional effects of carotenoids from organically and conventionally produced carrots in healthy men.	
B. A. Stracke, C. E. Rüfer, A. Bub, K. Briviba, S. Seifert, C. Kunz & B. Watzl Panax ginseng has no effect on indices of glucose regulation following acute or chronic ingestion in healthy volunteers.	1664–1672
J. L. Reay, A. B. Scholey, A. Milne, J. Fenwick & D. O. KennedyProbiotics and dietary counselling contribute to glucose regulation during and after pregnancy: a randomised controlled trial.	1673–1678
 K. Laitinen, T. Poussa, E. Isolauri & the Nutrition, Allergy, Mucosal Immunology and Intestinal Microbiota Group Long-term consumption of plant stanol and sterol esters, vascular function and genetic regulation. 	1679–1687
H. Gylling, M. Hallikainen, O. T. Raitakari, M. Laakso, E. Vartiainen, P. Salo, V. Korpelainen, J. Sundvall & T. A. Miettinen	1688-1695

Dietary Surveys and Nutritional Epidemiology	
A Japanese diet and 19-year mortality: National Integrated Project for Prospective Observation	
of Non-Communicable Diseases and its Trends in the Aged, 1980.	
Y. Nakamura, H. Ueshima, T. Okamura, T. Kadowaki, T. Hayakawa, Y. Kita, R. D. Abbott,	
A. Okayama & for National Integrated Project for Prospective Observation of	
Non-Communicable Diseases and its Trends in the Aged, 1980 Research Group	1696-1705
Nutritional Supplementation	
Safety of supplementing infant formula with long-chain polyunsaturated fatty acids and	
Bifidobacterium lactis in term infants: a randomised controlled trial.	
R. A. Gibson, D. Barclay, H. Marshall, J. Moulin, JC. Maire & M. Makrides	1706-1713
Prevention of non-enzymic glycation of proteins by dietary agents: prospects for alleviating	
diabetic complications.	
M. Saraswat, P. Y. Reddy, P. Muthenna & G. B. Reddy	1714-1721
Specific probiotics in reducing the risk of acute infections in infancy – a randomised,	
double-blind, placebo-controlled study.	
S. Rautava, S. Salminen & E. Isolauri	1722 - 1726
Book review	
A. M. Minihane	1727