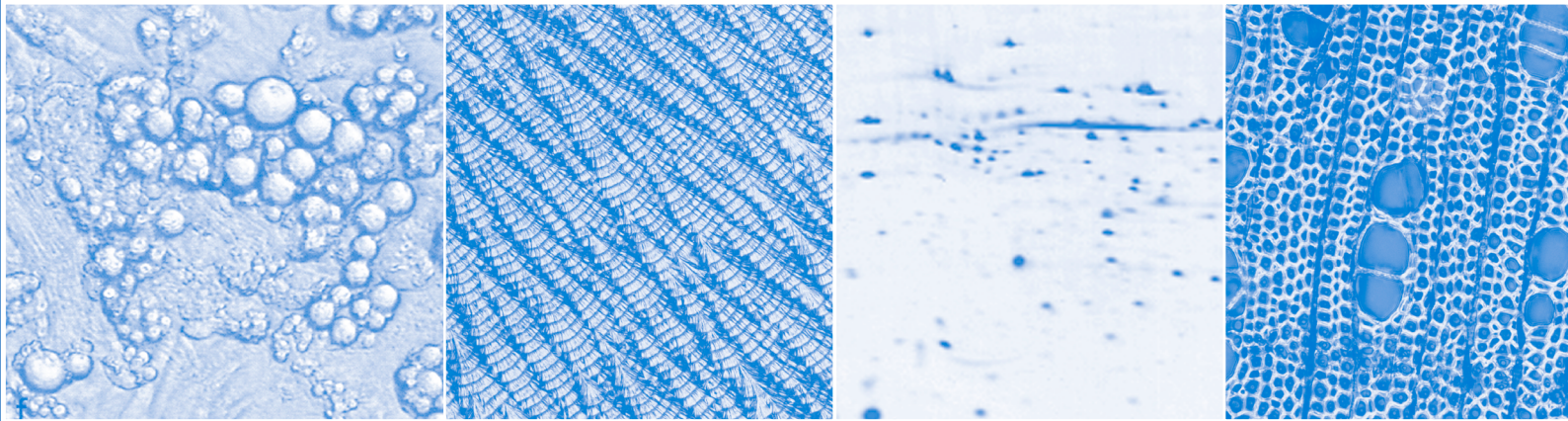


British Journal of Nutrition

Published online by Cambridge University Press

BJN An International Journal of Nutritional Science

Volume 106 Number 12 28 December 2011



Published on behalf of The Nutrition Society by Cambridge University Press

ISSN 0007-1145

British Journal of Nutrition
An International Journal of Nutritional Science
Volume 106, 2011 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 Institute of Nutrition and Health, University of Aberdeen, Aberdeen, UK*

S J Whiting, *College of Pharmacy and Nutrition, University of Saskatchewan, Saskatoon, Sask., Canada*

Reviews Editors

D J Millward, *Faculty of Health and Medical Sciences, University of Surrey, UK*

P Aggett, *School of Medicine and Health, Lancaster University, Lancaster, UK*

Systematic Reviews Editor

M Makrides, *Women's and Children's Health Research Institute and University of Adelaide, Adelaide, Australia*

Supplements Editor

J Woodside, *Nutrition and Metabolism Group, Centre for Public Health, Queen's University, Belfast, UK*

Editorial Board

J J B Anderson, *Chapel Hill, NC, USA*

Y Bao, *Norwich, UK*

J H Beattie, *Aberdeen, UK*

G Bell, *Stirling, UK*

M Blaut, *Bergholz-Rehbrücke, Germany*

S Brix Pedersen, *Lyngby, Denmark*

G C Burdge, *Southampton, UK*

A E Buyken, *Dortmund, Germany*

J Buyse, *Leuven, Belgium*

K D Cashman, *Cork, Ireland*

R S Chapkin, *College Station, TX, USA*

M S Choi, *Daegu, Korea*

A Collins, *Oslo, Norway*

S J Duthie, *Aberdeen, UK*

U Ekelund, *Cambridge, UK*

A Esmailzadeh, *Isfahan, Iran*

B A Fielding, *Oxford, UK*

J L Firkins, *Columbus, OH, USA*

J K Friel, *Winnipeg, MB, Canada*

M Fukushima, *Obihiro City, Japan*

S Garnett, *Sydney, Australia*

B A Griffin, *Surrey, UK*

J C G Halford, *Liverpool, UK*

W Hendriks, *Wageningen, The Netherlands*

E Herrera, *Madrid, Spain*

D J Hoffman, *New Brunswick, NJ, USA*

E J Johnson, *Boston, MA, USA*

S J Kaushik, *Saint Pée-sur-Nivelle, France*

D S Kelley, *Davis, Ca., USA*

C W C Kendall, *Toronto, Ont., Canada*

J P Lallès, *Rennes, France*

A Laviano, *Rome, Italy*

H J Lightowler, *Oxford, UK*

A M López-Sobaler, *Madrid, Spain*

J A Lovegrove, *Reading, UK*

R D Mattes, *West Lafayette, IN, USA*

C Mayer, *Aberdeen, UK*

S McCann, *Buffalo, NY, USA*

J P McClung, *Natick, MA, USA*

N M McKeown, *Boston, MA, USA*

S McMullen, *Nottingham, UK*

D McMurray, *College Station, TX, USA*

S McNaughton, *Burwood, Australia*

J G Mercer, *Aberdeen, UK*

A M Minihane, *Norwich, UK*

T A Mori, *Perth, Australia*

H Mukhtar, *Madison, WI, USA*

M Murphy, *Reus, Spain*

P Nestel, *Southampton, UK*

U Nöthlings, *Kiel, Germany*

C M Nyachoti, *Winnipeg, MB, Canada*

M C Ocké, *Bilthoven, The Netherlands*

P Palozza, *Rome, Italy*

J H Y Park, *Chuncheon, Korea*

E Perissinotto, *Padova, Italy*

C J Petry, *Cambridge, UK*

S M Phillips, *Hamilton, Ont., Canada*

S Proctor, *Edmonton, Alta., Canada*

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, *Nuthenetal, Germany*

T Sheehy, *Cork, Ireland*

A J Sinclair, *Geelong, Australia*

C R Sirtori, *Milan, Italy*

K S Swanson, *Urbana, IL, USA*

D Tomé, *Paris, France*

D Topping, *Adelaide, Australia*

F Visioli, *Madrid, Spain*

M R Yeomans, *Sussex, UK*

Publications Staff

C Goodstein (*Publications Manager*), C Jackson (*Deputy Publications Manager*), L Weeks,
H Zdravics and C T Hughes (*Publications Officers*) and S Hui and D Owen (*Publications Assistants*)

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.nutritionssociety.org>

Contents

Short Communication

- Importance of early nutritional screening in patients with gastric cancer.
C. Gavazzi, S. Colatruglio, A. Sironi, V. Mazzaferro & R. Miceli 1773–1778

Molecular Nutrition

- Mitogen-activated protein kinase mediates the apoptosis of highly metastatic human non-small cell lung cancer cells induced by isothiocyanates.
H. Yan, Y. Zhu, B. Liu, H. Wu, Y. Li, X. Wu, Q. Zhou & K. Xu 1779–1791
- Effect of anthocyanins on expression of matrix metalloproteinase-2 in naproxen-induced gastric ulcers.
S.-J. Kim, Y. S. Park, H.-D. Paik & H. I. Chang 1792–1801
- Bone-protective effects of bioactive fractions and ingredients in *Sambucus williamsii* HANCE.
H.-H. Xiao, Y. Dai, H.-Y. Wan, M.-S. Wong & X.-S. Yao 1802–1809
- Supplement of bamboo extract lowers serum monocyte chemoattractant protein-1 concentration in mice fed a diet containing a high level of saturated fat.
J. K. Higa, W. Liu, M. J. Berry & J. Panee 1810–1813
- Hepatic expression of sodium-dependent vitamin C transporters: ontogeny, subcellular distribution and effect of chronic liver diseases.
R. I. R. Macias, C. Hierro, S. C. de Juan, F. Jimenez, F. G.-S. Martin & J. J. G. Marin 1814–1825
- Effect of the fat composition of a single high-fat meal on inflammatory markers in healthy young women.
M. C. W. Myhrstad, I. Narverud, V. H. Telle-Hansen, T. Karhu, D. B. Lund, K.-H. Herzig, M. Makinen, B. Halvorsen, K. Retterstøl, B. Kirkhus, L. Granlund, K. B. Holven & S. M. Ulven 1826–1835
- Low-molecular-weight fucoidan regulates myogenic differentiation through the mitogen-activated protein kinase pathway in C2C12 cells.
K.-J. Kim, O.-H. Lee & B.-Y. Lee 1836–1844

Metabolism and Metabolic Studies

- Effects of dietary protein content and 2-hydroxy-4-methylthiobutanoic acid or DL-methionine supplementation on performance and oxidative status of broiler chickens.
Q. Swennen, P.-A. Geraert, Y. Mercier, N. Everaert, A. Stinckens, H. Willemsen, Y. Li, E. Decuyper & J. Buyse 1845–1854
- Tannic acid is more effective than clofibrate for the elevation of hepatic β -oxidation and the inhibition of 3-hydroxy-3-methyl-glutaryl-CoA reductase and aortic lesion formation in apo E-deficient mice.
G.-M. Do, E.-Y. Kwon, T.-Y. Ha, Y. B. Park, H.-J. Kim, S.-M. Jeon, M.-K. Lee & M.-S. Choi 1855–1863

Human and Clinical Nutrition

- Digestive physiological outcomes related to polydextrose and soluble maize fibre consumption by healthy adult men.
B. M. V. Boler, M. C. R. Seroa, L. L. Bauer, M. A. Staeger, T. W. Boileau, K. S. Swanson & G. C. Fahey Jr 1864–1871
- Reported zinc, but not copper, intakes influence whole-body bone density, mineral content and T score responses to zinc and copper supplementation in healthy postmenopausal women.
F. H. Nielsen, H. C. Lukaski, L. K. Johnson & Z. K. (Fariba) Roughead 1872–1879
- Health effects of green tea catechins in overweight and obese men: a randomised controlled cross-over trial.
A. L. Brown, J. Lane, C. Holyoak, B. Nicol, A. E. Mayes & T. Dadd 1880–1889
- Structure modification of a milk protein-based model food affects postprandial intestinal peptide release and fullness in healthy young men.
K. R. Juwonen, L. J. Karhunen, E. Vuori, M. E. Lille, T. Karhu, A. Jurado-Acosta, D. E. Laaksonen, H. M. Mykkänen, L. K. Niskanen, K. S. Poutanen & K.-H. Herzig 1890–1898

Dietary Surveys and Nutritional Epidemiology

- National Diet and Nutrition Survey: UK food consumption and nutrient intakes from the first year of the rolling programme and comparisons with previous surveys.
C. Whitton, S. K. Nicholson, C. Roberts, C. J. Prynne, G. K. Pot, A. Olson, E. Fitt, D. Cole, B. Teucher, B. Bates, H. Henderson, S. Pigott, C. Deverill, G. Swan & A. M. Stephen 1899–1914

Estimated dietary intakes of flavonols, flavanones and flavones in the European Prospective Investigation into Cancer and Nutrition (EPIC) 24 hour dietary recall cohort.
R. Zamora-Ros, V. Knaze, L. Luján-Barroso, N. Slimani, I. Romieu, V. Fedirko, M. S. de Magistris, U. Ericson, P. Amiano, A. Trichopoulou, V. Dilis, A. Naska, D. Engeset, G. Skeie, A. Cassidy, K. Overvad, P. H. M. Peeters, J. M. Huerta, M.-J. Sánchez, J. R. Quirós, C. Sacerdote, S. Grioni, R. Tumino, G. Johansson, I. Johansson, I. Drake, F. L. Crowe, A. Barricarte, R. Kaaks, B. Teucher, H. B. Bueno-de-Mesquita, C. T. M. van Rossum, T. Norat, D. Romaguera, A.-C. Vergnaud, A. Tjønneland, J. Halkjær, F. Clavel-Chapelon, M.-C. Boutron-Ruault, M. Touillaud, S. Salvini, K.-T. Khaw, N. Wareham, H. Boeing, J. Förster, E. Riboli & C. A. González

1915–1925