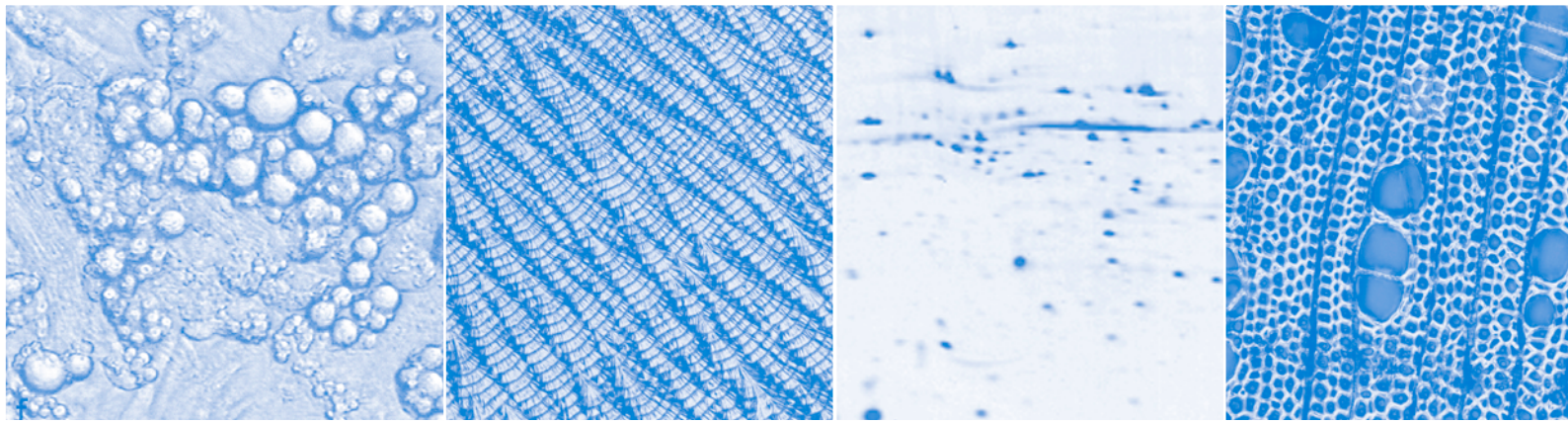


British Journal of Nutrition

Published online by Cambridge University Press

BJN An International Journal of Nutritional Science

Volume 101 Number 4 28 February 2009



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 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 fortnightly 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.nutritionssociety.org>

Contents

Review Article

- South Asian diets and insulin resistance.
A. Misra, L. Khurana, S. Isharwal & S. Bhardwaj 465–473

Short Communication

- Grade of adiposity affects the impact of fat mass on resting energy expenditure in women.
A. Bosy-Westphal, M. J. Müller, M. Boschmann, S. Klaus, G. Kreymann, P. M. Lührmann,
M. Neuhäuser-Berthold, R. Noack, K. M. Pirke, P. Platte, O. Selberg & J. Steiniger 474–477
- Whole-grain consumption and transcription factor-7-like 2 (*TCF7L2*) rs7903146: gene–diet
interaction in modulating type 2 diabetes risk.
E. Fisher, H. Boeing, A. Fritsche, F. Doering, H.-G. Joost & M. B. Schulze 478–481
- Human milk oligosaccharides reduce HIV-1-gp120 binding to dendritic cell-specific
ICAM3-grabbing non-integrin (DC-SIGN).
P. Hong, M. R. Ninonuevo, B. Lee, C. Lebrilla & L. Bode 482–486
- Prevalence and predictors of vitamin D inadequacy amongst Lebanese osteoporotic women.
M.-H. Gannagé-Yared, G. Maalouf, S. Khalife, S. Challita, Y. Yaghi, N. Ziade,
A. Chalfoun, J. Norquist & J. Chandler 487–491

Molecular Nutrition

- Cobalamin deficiency results in an abnormal increase in L-methylmalonyl-co-enzyme-A mutase
expression in rat liver and COS-7 cells.
M. Nakao, S. Hironaka, N. Harada, T. Adachi, T. Bito, Y. Yabuta, F. Watanabe, T. Miura,
R. Yamaji, H. Inui & Y. Nakano 492–498

Metabolism and Metabolic Studies

- Consequences of protein supplementation for anorexia, expression of immunity and plasma
leptin concentrations in parasitized ewes of two breeds.
K. Zaralis, B. J. Tolkamp, J. G. M. Houdijk, A. R. G. Wylie & I. Kyriazakis 499–509
- Hepatic metabolism of glucose and linoleic acid varies in relation to susceptibility to fatty
liver in *ad libitum*-fed Muscovy and Pekin ducks.
G. Saez, E. Baéza, S. Davail, D. Durand, D. Bauchart & D. Gruffat 510–517
- Growth hormone improves lipoprotein concentration and arylesterase activity in mice with an
atherogenic lipid profile induced by lactalbumin.
E. López-Oliva, M. Nus, A. Agis-Torres, W. Villaro, J. M. Sánchez-Montero,
E. Muñoz-Martínez & F. J. Sánchez-Muniz 518–526
- Consumption of mate tea (*Ilex paraguariensis*) decreases the oxidation of unsaturated fatty
acids in mouse liver.
F. Martins, A. J. Suzan, S. M. Cerutti, D. P. Arçari, M. L. Ribeiro, D. H. M. Bastos
& P. d. O. Carvalho 527–532

Nutritional Immunology

- Anti-inflammatory effects of long-chain *n*-3 PUFA in rhinovirus-infected cultured airway
epithelial cells.
A. Saedisomeolia, L. G. Wood, M. L. Garg, P. G. Gibson & P. A. B. Wark 533–540

Microbiology

- Effect of inulin on the human gut microbiota: stimulation of *Bifidobacterium adolescentis* and
Faecalibacterium prausnitzii.
C. Ramirez-Farias, K. Slezak, Z. Fuller, A. Duncan, G. Holtrop & P. Louis 541–550

Human and Clinical Nutrition

- Evaluation of equations for fat-free mass based on anthropometry in infants and young children
in South Asia.
B. Sen, D. Mahalanabis, S. Shaikh, A. V. Kurpad & K. Bose 551–557
- Pathways leading to early growth faltering: an investigation into the importance of mucosal
damage and immunostimulation in different socio-economic groups in Nepal.
C. Panter-Brick, P. G. Lunn, R. M. Langford, M. Maharjan & D. S. Manandhar 558–567
- Effects of safflower seed extract supplementation on oxidation and cardiovascular risk markers
in healthy human volunteers.
N. Koyama, K. Suzuki, Y. Furukawa, H. Arisaka, T. Seki, K. Kuribayashi, K. Ishii,
E. Sukegawa & M. Takahashi 568–575

Bioavailability of carotenoids and α -tocopherol from fruit juices in the presence of absorption modifiers: <i>in vitro</i> and <i>in vivo</i> assessment. <i>F. Granado-Lorencio, C. Herrero-Barbudo, I. Blanco-Navarro, B. Pérez-Sacristán & B. Olmedilla-Alonso</i>	576–582
Maternal fatty acid intake and fetal growth: evidence for an association in overweight women. The ‘EDEN mother–child’ cohort (study of pre- and early postnatal determinants of the child’s development and health). <i>P. Drouillet, A. Forhan, B. D. Lauzon-Guillain, O. Thiébauges, V. Goua, G. Magnin, M. Schweitzer, M. Kaminski, P. Ducimetière & M.-A. Charles</i>	583–591
Regular consumption of <i>n</i> -3 fatty acid-enriched pork modifies cardiovascular risk factors. <i>A. M. Coates, S. Sioutis, J. D. Buckley & P. R. C. Howe</i>	592–597
<i>Dietary Surveys and Nutritional Epidemiology</i>	
Comparison of cluster and principal component analysis techniques to derive dietary patterns in Irish adults. <i>Á. P. Hearty & M. J. Gibney</i>	598–608
The effects of age, birth cohort and survey period on leisure-time physical activity by Australian adults: 1990–2005. <i>M. A. Allman-Farinelli, T. Chey, D. Merom, H. Bowles & A. E. Bauman</i>	609–617