

British Journal of Nutrition
Volume 105, 2011 ISSN: 0007-1145

Publishing, Production, Marketing, and Subscription Sales Office:

Cambridge University Press
The Edinburgh Building
Shaftesbury Road
Cambridge CB2 8RU, UK

For Customers in North America:

Cambridge University Press
Journals Fulfillment Department
100 Brook Hill Drive
West Nyack
New York 10994-2133
USA

Publisher: Katy Christomanou

Special sales and supplements:

This Journal accepts relevant advertisements and inserts. We also provide bulk reprints of suitable papers to meet teaching or promotional requirements. The journal also publishes supplements on behalf of academic and corporate collaborators. Please contact Katy Christomanou at the Cambridge address for further details. E-mail: kchristomanou@cambridge.org

Subscription information:

British Journal of Nutrition is an international journal published by Cambridge University Press on behalf of The Nutrition Society. The twelve issues starting January 2011 comprise Volume 105, the twelve issues starting July 2011 comprise Volume 106.

Annual subscription rates:

Volumes 105/106 (24 issues):
Internet/print package £1021/\$1990/€1635
Internet only: £835/\$1630/€1334
Print only: £973/\$1895/€1580

Any **supplements** to this journal published in the course of the annual volume are normally supplied to subscribers at no extra charge.

Back volumes are available. Please contact Cambridge University Press for further information.

Claims for non-receipt of journal issues will be considered on their merit and only if the claim is received within six months of publication. Replacement copies supplied after this date will be chargeable.

US POSTMASTERS: please send address corrections to *British Journal of Nutrition*, Cambridge University Press, 100 Brook Hill Drive, West Nyack, New York 10994-2133.

Directions to Contributors are available from the Society at the address below or can be found on the Society's website at <http://www.nutritionociety.org> (an abbreviated Notes for Authors can be found inside the back cover).

Offprints: The author (or main author) of an accepted paper will receive a copy of the PDF file and a voucher copy of the issue in which their paper has been published. There will be an option to purchase paper offprints, these should be ordered at proof stage. No page charges are levied by this journal.

Copyright: As of 1 July 2000 the copyright of all articles submitted to *British Journal of Nutrition* are retained by the authors or their institutions. For articles prior to this date permission for reproduction of any part of the journal (text, figures, tables or other matter) in any form (on paper, microfiche or electronically) should be sought directly from the Society, at: The Publications Office, The Nutrition Society, 10 Cambridge Court, 210 Shepherds Bush Road, Hammersmith, London W6 7NJ, UK.

Disclaimer: The information contained herein, including any expression of opinion and any projection or forecast, has been obtained from or is based upon sources believed by us to be reliable, but is not guaranteed as to accuracy or completeness. The information is supplied without obligation and on the understanding that any person who acts upon it or otherwise changes his/her position in reliance thereon does so entirely at his/her own risk. Neither the Society nor Cambridge University Press accepts responsibility for any trade advertisement included in this publication.

This journal is printed on acid-free paper from renewable sources. Printed in the UK by Bell & Bain Ltd., Glasgow.

This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. Please see www.fsc.org for information.

British Journal of Nutrition is covered in Current Contents®/Agriculture, Biology & Environmental Sciences, SciSearch®, Research Alert®, Current Contents®/Life Sciences, Index Medicus® (MEDLINE®), AGRICOLA®, CAB Abstracts™, Global Health, BIOSIS® Database, EMBASE/Excerpta Medica and Elsevier BIOBASE/Current Awareness in Biological Sciences, CINAHL, and Chemical Abstracts Service.



7th Asia Pacific Conference on Clinical Nutrition
APCCN2011
June 5 - 9, 2011 • Bangkok, Thailand

Theme: Clinical Nutrition: From Theory to Practice



The 7th Asia Pacific Conference on Clinical Nutrition (APCCN 2011) will be held from June 5-9, 2011 at the Queen Sirikit National Convention Centre in Bangkok, Thailand. The theme of the conference is "Clinical Nutrition: From Theory to Practice" covering three major areas: clinical nutrition in adults, in pediatrics, and dietary supplements.

APCCN 2011 will provide clinicians, dietitians, nutritionists, doctors, hospital pharmacists, nursing staff, and other participants interested in patient nutrition, with a comprehensive scientific program on the most current topics in the field.

Register before 5 March 2011 and enjoy a 20% reduction from regular registration fees.



APCCN 2011 Conference Secretariat



Kenes Asia
2nd Floor, PICO Creative Centre
20 Kallang Avenue, Singapore 339411
Tel: +65 62924710; Fax: +65 6292 4721
E-mail: apccn2011@kenes.com
Website: www.apccn2011.org

www.apccn2011.org

CAMBRIDGE

JOURNALS



Nutrition Research Reviews

Published on behalf of The Nutrition Society

Nutrition Research Reviews

is available online at:
<http://journals.cambridge.org/nrr>

**To subscribe contact
Customer Services**

in Cambridge:

Phone +44 (0)1223 326070
Fax +44 (0)1223 325150
Email journals@cambridge.org

in New York:

Phone +1 (845) 353 7500
Fax +1 (845) 353 4141
Email
subscriptions_newyork@cambridge.org

Editor-in-chief

K. Younger, Dublin Institute of Technology, Ireland

Nutrition Research Reviews presents up-to-date, concise, critical reviews of key topics in nutritional science in order to advance new concepts and hypotheses. The journal encourages the exchange of fundamental ideas on nutritional well-being in both humans and animals.

Price information is available at:
<http://journals.cambridge.org/nrr>

Free email alerts

Keep up-to-date with new material – sign up at
<http://journals.cambridge.org/alerts>

For free online content visit:
<http://journals.cambridge.org/nrr>



**CAMBRIDGE
UNIVERSITY PRESS**

(Contents continued from back cover)

Dietary Surveys and Nutritional Epidemiology

Influences on the quality of young children's diets: the importance of maternal food choices.
C. M. Fisk, S. R. Crozier, H. M. Inskip, K. M. Godfrey, C. Cooper, S. M. Robinson
& The Southampton Women's Survey Study Group 287–296

Nutrient intakes and dysglycaemia in populations of West African origin.
S. G. Anderson, N. Younger, A. H. Heald, M. K. Tulloch-Reid, W. P. Simukonda,
J.-C. Mbanya, M. D. Jackson, B. Balkau, S. Sharma, A. Tanya, T. Forrester, R. Wilks
& J. K. Cruickshank 297–306

Behaviour, Appetite and Obesity

Effects of bite size and duration of oral processing on retro-nasal aroma release – features contributing to meal termination.
R. M. A. J. Ruijschop, N. Zijlstra, A. E. M. Boelrijk, A. Dijkstra, M. J. M. Burgering,
C. de Graaf & M. S. Westerterp-Plantenga 307–315

Breakfast consumption and physical activity in British adolescents.
K. Corder, E. M. F. van Sluijs, R. M. Steele, A. M. Stephen, V. Dunn, D. Bamber,
I. Goodyer, S. J. Griffin & U. Ekelund 316–321

Workshop Report

Food & health forum meeting: evidence-based nutrition.
H. L. Mitchell, P. J. Aggett, D. P. Richardson & J. D. Stowell 322–328

Directions to Contributors - Concise Version*(Revised August 2007)*

The *British Journal of Nutrition* is an international peer-reviewed journal that publishes original papers, review articles, technical notes and short communications in English in all branches of nutritional science. **Prospective authors should note that they (or their institutions) now retain the copyright of their material published in the *British Journal of Nutrition*.** As a contributor you are asked to follow the guidelines set out below. For detailed information on the presentation of the technical content of your paper please see the full version of the **Directions to Contributors**, which can be downloaded from the Nutrition Society website (<http://www.nutrition-society.org>). Prospective authors may also contact the Publications Office directly on + 44 (0)20 7605 6555 (telephone), +44 20 7602 1756 (fax), or edoffice@nutsoc.org.uk (email).

Papers should be accompanied by a statement to the effect that the conditions laid down in the full Directions to Contributors are accepted. The statement should affirm that the submission represents original work that has not been published previously and which is not currently being considered by another journal. It should also confirm that each author has seen and approved the contents of the submitted paper. At the time of acceptance the authors should provide a completed copy of the 'Licence to Publish' (in lieu of copyright transfer). The Licence to Publish is available on the Nutrition Society website (<http://www.nutrition-society.org>). All relevant financial interests should be declared.

Text. Papers should be submitted with 1.5 line spacing and margins of at least 2 cm on each side. Text should be printed without underlining, bold or italics (except for scientific names). Standard abbreviations (e.g. Fig. and Figs.) and SI units should be used. **Typescripts can be submitted as Word, WordPerfect, EPS, Text, Postscript or RTF files. A Word processing format is required for production purposes once papers have been accepted. When substantial revisions are required to typescripts, authors are given the opportunity to do this once only, the need for any further changes should at most reflect any minor issues.**

Title Page. The first page should include a concise, informative title together with the names and addresses of the authors. A contact name for correspondence should be given and telephone, fax and email addresses provided. Authors should supply three or four key words or phrases (each containing up to three words). A short title of up to 45 characters is required as a running head.

Abstract. Each paper should commence with an accurate and informative abstract, written as a single paragraph. It should be complete in itself and intelligible without reference to the text or figures, and should not exceed 250 words.

Tables. Tables should be reduced to the simplest form, and should not duplicate information in the text or figures. They should be typed on separate pages, one page for each Table, at the end of the article and carry headings describing their content.

Illustrations. The original illustrations should accompany the submitted typescript. Text figures, line drawings, computer-generated figures and graphs should be of sufficient size and quality to allow for reduction by half or two-thirds. Half-tone photographs are acceptable where they clearly contribute to the text. All figures should be numbered and legends should be provided.

Note that authors will be charged 350 GBP for the publication of colour figures. Authors from countries entitled to free journal access through HINARI will be exempt from these charges.

References. References should be based on the numbered (Vancouver) system. **When an article has more than ten authors, only the names of the first three should be given followed by *et al.*; give abbreviated journal titles and conform to the following styles:**

- Goel V, Cheema SK, Agellon LB, Ooraikul B & Basu TK (1999) Dietary rhubarb (*Rheum rhabarbarum*) stalk fibre stimulates cholesterol 7 α -hydroxylase gene expression and bile acid excretion in cholesterol-fed C57BL/6J mice. *Br J Nutr* **81**, 65–71.
- Jenkins DJ, Kendall CW, Marchie A, *et al.* (2003) The effect of combining plant sterols, soy protein, viscous fibres, and almonds in treating hypercholesterolemia. *Metabolism* **52**, 1478–1483.
- Brandtzaeg P (2003) Role of local immunity and breast-feeding in mucosal homeostasis and defence against infections. In *Nutrition and Immune Function*, pp. 273–320 [PC Calder, CJ Field and HS Gill, editors]. Wallingford, Oxon: CAB International.
- Stock M & Rothwell NJ (1982) *Obesity and Leanness: Basic Aspects*. London: John Libbey.

Citations should be numbered consecutively in the order in which they first appear in the text using superscript Arabic numerals in parentheses, e.g. 'The conceptual difficulty of this approach has recently been highlighted^(1,2-4). If a reference is cited more than once the same number should be used each time.

Referees. Authors are asked to submit the names of up to four scientists who would be well-qualified to review the paper; however, no more than one such reviewer will be used. The email addresses and institutions of the named reviewers should be given.

Proofs. PDF page proofs will be emailed to authors for checking, and should be returned within 3 days (by fax or Express mail) to the BJN Production Editor, Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, UK; fax +44 1223 325802, email bjnproduction@cambridge.org

Typescripts. The *British Journal of Nutrition* operates an on-line submission and reviewing system (eJournalPress). **Authors should submit to the following address: <http://bjn.msubmit.net/>** If any difficulties are encountered please contact the Publications Office (details above) immediately.

Professor Philip Calder
Editor-in-Chief
British Journal of Nutrition
The Nutrition Society
10 Cambridge Court
210 Shepherds Bush Road
London W6 7NJ
UK

Tel: +44 (0)20 7605 6555
Fax: +44 20 7602 1756
Email: edoffice@nutsoc.org.uk

Contents

Short Communication

- Curcumin induces paraoxonase I in cultured hepatocytes *in vitro* but not in mouse liver *in vivo*.
C. Schrader, C. Schiborr, J. Frank & G. Rimbach 167–170

Molecular Nutrition

- Genoprotective effects of green tea (*Camellia sinensis*) in human subjects: results of a controlled supplementation trial.
K. C. Han, W. C. Wong & I. F. F. Benzie 171–179
- Total flavonoid fraction of the *Herba epimedii* extract suppresses urinary calcium excretion and improves bone properties in ovariectomised mice.
W.-F. Chen, S.-K. Mok, X.-L. Wang, K.-H. Lai, W.-P. Lai, H.-K. Luk, P.-C. Leung, X.-S. Yao & M.-S. Wong 180–189
- Feeding a thermally oxidised fat inhibits atherosclerotic plaque formation in the aortic root of LDL receptor-deficient mice.
I. Kämmerer, R. Ringseis & K. Eder 190–199

Metabolism and Metabolic Studies

- Effects of pepsin and trypsin on the anti-adipogenic action of lactoferrin against pre-adipocytes derived from rat mesenteric fat.
T. Ono, S. Morishita, C. Fujisaki, M. Ohdera, M. Murakoshi, N. Iida, H. Kato, K. Miyashita, M. Iigo, T. Yoshida, K. Sugiyama & H. Nishino 200–211
- β -Cryptoxanthin- and α -carotene-rich foods have greater apparent bioavailability than β -carotene-rich foods in Western diets.
B. J. Burri, J. S. T. Chang & T. R. Neidlinger 212–219
- Pharmacokinetics and first-pass metabolism of astaxanthin in rats.
H. D. Choi, H. E. Kang, S. H. Yang, M. G. Lee & W. G. Shin 220–227

Developmental Biology

- Characterisation and expression of secretory phospholipase A₂ group IB during ontogeny of Atlantic cod (*Gadus morhua*).
Ø. Sæle, A. Nordgreen, P. A. Olsvik & K. Hamre 228–237

Nutritional Endocrinology

- Adrenocorticotrophic hormone-stimulated cortisol release by the head kidney inter-renal tissue from sea bream (*Sparus aurata*) fed with linseed oil and soyabean oil.
R. Ganga, J. G. Bell, D. Montero, E. Atalah, Y. Vraskou, L. Tort, A. Fernandez & M. S. Izquierdo 238–247

Human and Clinical Nutrition

- Influence of dietary modifications on the blood pressure response to antihypertensive medication.
C. E. Huggins, C. Margerison, A. Worsley & C. A. Nowson 248–255
- Controlling energetic intake based on a novel logistic regression model for the metabolic syndrome in a Chinese population.
L. Yangmei, M. Yanxia, Q. Liangmei, Z. Jinhui, H. Yu & Z. Minwen 256–262
- Lack of effects of tomato products on endothelial function in human subjects: results of a randomised, placebo-controlled cross-over study.
V. Stangl, C. Kuhn, S. Hentschel, N. Jochmann, C. Jacob, V. Böhm, K. Fröhlich, L. Müller, C. Gericke & M. Lorenz 263–267
- The effect of enteral supplementation of a prebiotic mixture of non-human milk galacto-, fructo- and acidic oligosaccharides on intestinal permeability in preterm infants.
E. A. M. Westerbeek, A. van den Berg, H. N. Lafeber, W. P. F. Fetter & R. M. van Elburg 268–274
- The effectiveness of BMI, calf circumference and mid-arm circumference in predicting subsequent mortality risk in elderly Taiwanese.
A. C. Tsai & T.-L. Chang 275–281
- Fermentation of calcium-fortified soya milk does not appear to enhance acute calcium absorption in osteopenic post-menopausal women.
A. L. T. F. Cheung, G. Wilcox, K. Z. Walker, N. P. Shah, B. Strauss, J. F. Ashton & L. Stojanovska 282–286

(Contents continued facing inside back cover)