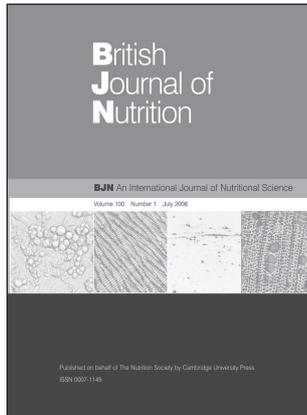


INDEX OF AUTHORS

Buttriss, J. L.	38	Hardie, D. G.	92	Phillips, S. M.	100
Collings, R.	1	Harvey, L. J.	1	Pinnick, K. E.	57
Darzi, J.	119	Karpe, F.	57	Popkin, B. M.	82
Dean, M.	19	Koopman, R.	104	Robertson, M. D.	119
Duthie, S. J.	47	Lähteenmäki, L.	19	Scannell, A.	135
Fairweather-Tait, S. J.	1	Lillycrop, K. A.	64	Shepherd, R.	19
Feeney, E.	135	Magee, P. J.	10	Simmons, R.	73
Frost, G. S.	119	Markey, A.	135	Sliwa, S. A.	26
Gibney, E. R.	135	O'Brien, S.	135	Visser, M.	114
Goldberg, J. P.	26				
Grace, C.	129				

CAMBRIDGE

JOURNALS



British Journal of Nutrition

Published on behalf of The Nutrition Society

British Journal of Nutrition

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

**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

P.C. Calder, University of Southampton, UK

British Journal of Nutrition is a leading international peer-reviewed journal covering research on human and clinical nutrition, animal nutrition and basic science as applied to nutrition. The journal recognises the multidisciplinary nature of nutritional science and includes material from all of the specialities involved in nutrition research, including molecular and cell biology and the emerging area of nutritional genomics.

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

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/bjn>



**CAMBRIDGE
UNIVERSITY PRESS**

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

Graham C. Burdge, University of Southampton, UK

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>

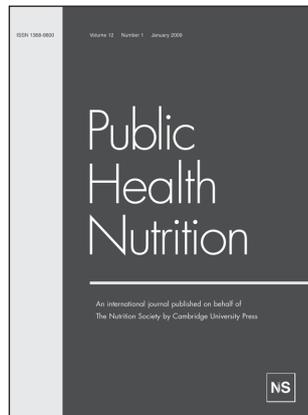
For free online content visit:
<http://journals.cambridge.org/nrr>



**CAMBRIDGE
UNIVERSITY PRESS**

CAMBRIDGE

JOURNALS



Public Health Nutrition

Published on behalf of The Nutrition Society

Public Health Nutrition

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

**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

Agneta Yngve, Karolinska Institutet, Sweden

Public Health Nutrition provides an international peer-reviewed forum for the publication and dissemination of research and scholarship aimed at understanding the causes of, and approaches and solutions to nutrition-related public health achievements, situations and problems around the world. The journal publishes original and commissioned articles, commentaries and discussion papers for debate.

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

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/phn>



**CAMBRIDGE
UNIVERSITY PRESS**

Rank Prize Lecture

Chair: M. Peaker, The Rank Prize Fund

- Contemporary nutritional transition: determinants of diet and its impact
on body composition
B. M. Popkin 82–91

Plenary Lecture

**Chairs: H. McArdle, Rowett Institute of Nutrition and Health; D. Sewell,
Heriot-Watt University, Edinburgh**

- Energy sensing by the AMP-activated protein kinase and its effects
on muscle metabolism
D. G. Hardie 92–99

Symposium 2: Exercise and protein nutrition

**Chairs: H. McArdle, Rowett Institute of Nutrition and Health; D. Sewell,
Heriot-Watt University, Edinburgh**

- The science of muscle hypertrophy: making dietary protein count
S. M. Phillips 100–103
Dietary protein and exercise training in ageing
R. Koopman 104–113
Obesity, sarcopenia and their functional consequences in old age
M. Visser 114–118

Postgraduate Symposium

Chairs: S. Drummond, Queen Margaret University; S. Bath, University of Surrey

- Do SCFA have a role in appetite regulation?
J. Darzi, G. S. Frost & M. D. Robertson 119–128

Symposium 3 (Jointly with the British Dietetic Association):

Nutrition management in special populations

Chairs: J. Gandy, British Dietetic Association; G. Frost, Imperial College, London

- Nutrition-related health management in a Bangladeshi community
C. Grace 129–134

**University College Dublin, Dublin, Republic of Ireland,
17–19 February 2010**

Irish Section Postgraduate Symposium

Chair: S. Bannon, University College Cork, Republic of Ireland

- Genetic variation in taste perception: does it have a role in healthy eating?
E. Feeney, S. O'Brien, A. Scannell, A. Markey & E. R. Gibney 135–143

Proceedings of the Nutrition Society

Directions to Contributors – Concise Version

The *Proceedings of the Nutrition Society* publishes papers presented by invitation and original communications given at the symposia and meetings of the Society. The geographical scope of the journal is international. As a contributor you should note and follow the guidelines set out below. Further information on how the technical content of your paper should be presented is given in the **Directions to Contributors** on the Nutrition Society web pages at <http://www.nutrition-society.org> or contact the Publications Office on +44 20 7605 6555 (telephone), +44 20 7602 1756 (fax) or edoffice@nutsoc.org.uk (email).

Authors are reminded that their papers will be read by a wide cross-section of the Society's members, many of whom were neither at the meeting nor are they specialists in the subject area. Authors should thus seek to provide an introduction and context to the subject and are encouraged to provide extensive references to allow the reader to further explore the subject, in addition to summarizing the more recent findings, conclusions and hypotheses of their own and other research groups. Authors should avoid unnecessary use of 'jargon' and acronyms and ensure that as far as possible acronyms and abbreviations are defined and explained in the text.

Papers should be accompanied by a signed statement to the effect that the author accepts the conditions laid down in the full Directions to Contributors. Contributors of Symposium papers will be asked to complete a copy of the 'Licence to Publish' (in lieu of copyright transfer) at the proof stage.

Page format. The *Proceedings of the Nutrition Society* is printed in double-column format (column width of 85 mm) with a text area of 235 × 177 mm.

Text. Word-processed text provided electronically is required. Text files must be compatible with Microsoft Word 2000 (either in Word format or saved as rich text (.rtf) files. The typescript should be prepared with 1.5 line spacing and margins (at least 1.5 cm) on each side and with no underlining, bold or italics (except for scientific names). Standard abbreviations (e.g. Fig. and Figs.) and SI units should be used. **This will enable papers to be handled rapidly, and with fewer typesetting errors. All relevant financial and other interests should be declared.**

Synopsis. Each paper must commence with a carefully prepared, accurate, informative synopsis, in one paragraph, that is complete in itself and intelligible without reference to text or figures. It should not exceed 250 words.

Key Words. Authors should supply two or three key words or phrases (each containing up to three words) for the subject index of the volume.

Tables. Tables should be reduced to the simplest form, and should not be used where text or illustrations give the same information. They should be submitted on separate sheets at the end of the article and must carry headings describing their content that are comprehensible without reference to the text.

Illustrations. All figures should be of sufficient size and quality to allow for reduction by half or two-thirds. Half-tone photographs are acceptable where they make a real contribution to the text. Colour illustrations can be used at the discretion of the Editor. Figure captions should be typed separately at the end of the main text and numbered corresponding to the relevant figures. For illustrations, preferred software packages are Adobe Illustrator, Adobe Photoshop, Aldus Freehand, Chemdraw or CorelDraw. Preferred formats are TIFF or JPEG, if a TIFF file is not possible save as an EPS or a Windows metafile. Microsoft PowerPoint files are also acceptable.

References. References must 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:**

1. Goel V, Cheema SK, Agellon LB, Ooraikul B & Basu TK (1999) Dietary rhubarb (*Rheum rhaponticum*) 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.
2. 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.
3. 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.
4. 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.

Proofs. PDF page proofs will be accessible to authors from the typesetter's website and should be returned within 48 hours (by email or Express mail) to:

Monica Nelson
2 Leicester Road, Wanstead
London
E11 2DP
UK
email_nelsonline@btinternet.com

Typescripts. The electronic version of the paper should be emailed to:

pns@nutsoc.org.uk
The Nutrition Society
10 Cambridge Court
210 Shepherds Bush Road
London W6 7NJ
UK
email_edoffice@nutsoc.org.uk

Vol. 70 No. 1 February 2011

Contents

University of Ulster, Coleraine, 16–18 June 2010

Conference on ‘Nutrition: getting the balance right in 2010’

Session 2: Balancing benefits and risks of micronutrient intakes

Chairs: S. Strain, University of Ulster; N. Binns, NMB Consulting

Risk–benefit analysis of mineral intakes: case studies on copper and iron
S. J. Fairweather-Tait, L. J. Harvey & R. Collings 1–9

Session 3: Influences of food constituents on gut health

Chairs: C. Gill, University of Ulster; A. Nugent, University College Dublin

Is equol production beneficial to health?
P. J. Magee 10–18

Session 4: Getting balanced nutrition messages across

Chairs: M. Gibney, University College Dublin; M. Faughnan, SafeFood

Nutrition communication: consumer perceptions and predicting intentions
M. Dean, L. Lähteenmäki & R. Shepherd 19–25

Communicating actionable nutrition messages: challenges and opportunities
J. P. Goldberg & S. A. Sliwa 26–37

Translating complex science into life-course health promoting strategies
J. L. Buttriss 38–46

Heriot-Watt University, Edinburgh, 28 June–1 July 2010

Conference on ‘Nutrition and health: cell to community’

Symposium 1: Nutrition and epigenetics

Chairs: M. Symonds, University of Nottingham; E. Williams, University of Sheffield

Epigenetic modifications and human pathologies: cancer and CVD
S. J. Duthie 47–56

DNA methylation of genes in adipose tissue
K. E. Pinnick & F. Karpe 57–63

Effect of maternal diet on the epigenome: implications for human metabolic disease
K. A. Lillycrop 64–72

Boyd Orr Lecture

Chair: I. Macdonald, University of Nottingham

Epigenetics and maternal nutrition: nature *v.* nurture
R. Simmons 73–81

(Contents continued facing inside back cover)