CAMBRIDGE

JOURNALS

Nutrition Research Reviews

Published on behalf of The Nutrition Society

Editor-in-Chief

Graham C. Burdge, University of Southampton, UK

Nutrition Research Reviews offers a comprehensive overview of nutritional science today. By distilling the latest research and linking it to established practice, the journal consistently delivers the widest range of in-depth articles in the field of nutritional science and has done so for the past twenty-one years. It presents up-to-date, concise and critical reviews of key topics in nutrition science, advancing new concepts and hypotheses that encourage the exchange of fundamental ideas on nutritional well-being in both humans and animals.

Submit your article online **nrr.msubmit.net**

Register for free content alerts journals.cambridge.org/nrr-alerts



Impact Factor 4.842

Ranked **4/72**Nutrition and Dietics

2011 Journal Citation Reports®

To subscribe contact Customer Services

Cambridge:

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

New York:

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



CAMBRIDGE

JOURNALS

Public Health Nutrition

Published on behalf of The Nutrition Society

Editor-in-Chief

Agneta Yngve, Akershus University College, Norway

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

journals.cambridge.org/phn

Submit your article online **phn.msubmit.net**

Register for free content alerts journals.cambridge.org/phn-alerts



Impact Factor 2.169

Ranked **52/157**Public,
Environmental and
Occupational Health

Ranked **34/72**Nutrition and Dietics

2011 Journal Citation Reports® Thomson Reuter

To subscribe contact Customer Services

Cambridge:

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

New York:

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



CAMBRIDGE

JOURNALS

Proceedings of the Nutrition Society

Published on behalf of The Nutrition Society

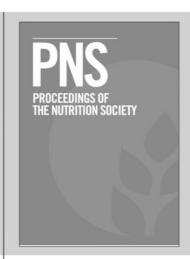
Editor-in-Chief

K.R. Westerterp, Maastricht University, The Netherlands

Proceedings of the Nutrition Society publishes papers and abstracts presented by members and invited speakers at the scientific meetings of The Nutrition Society. The journal provides an invaluable record of the scientific research currently being undertaken, contributing to 'the scientific study of nutrition and its application to the maintenance of human and animal health.'

journals.cambridge.org/pns

Register for free content alerts journals.cambridge.org/pns-alerts



Impact Factor 2.77

Ranked **23/72**Nutrition and Dietics

2011 Journal Citation Reports®

To subscribe contact Customer Services

Cambridge:

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

New York:

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



Directions to Contributors can be found at journals.cambridge.org/bjn

British Journal of Nutrition

Volume 109, 2013 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 Fullfillment 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 Sarah Maddox at the Cambridge address for further details. E-mail: special_sales@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 2013 comprise Volume 109, the twelve issues starting July 2013 comprise Volume 110.

Annual subscription rates:

Volumes 109/110 (24 issues):

Internet/print package £1302/\$2538/€2085

Internet only: £956/\$1864/€1527

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.nutritionsociety.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 of their article. 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 Medica and Elsevier BIOBASE/Current Awareness in Biological Sciences, CINAHL, and Chemical Abstracts Service.

RRITISH INJIRNAL OF NUTRITION VOLUME 109 - Number

Molecular Nutrition		Human and Clinical Nutrition	
Mutation in porcine Zip4-like zinc transporter is associated with pancreatic zinc concentration and apparent zinc absorption. F. Siebert, G. Lühken, J. Pallauf & G. Erhardt	969–976	Long-term vitamin $\mathrm{D_3}$ supplementation is more effective than vitamin $\mathrm{D_2}$ in maintaining serum 25-hydroxyvitamin D status over the winter months.	
Supplementation of xanthophylls increased antioxidant capacity and decreased lipid peroxidation in hens and chicks. YY. Gao, QM. Xie, JY. Ma, XB. Zhang, JM. Zhu, DM. Shu, BL. Sun, L. Jin & YZ. Bi	977–983	V. F. Logan, A. R. Gray, M. C. Peddie, M. J. Harper & L. A. Houghton Vitamin C supplementation in relation to inflammation in individuals with atrophic gastritis: a randomised controlled trial in Japan. E. Ma, S. Sasazuki, S. Sasaki, Y. Tsubono, S. Okubo & S. Tsugane	1082–1088 1089–1095
A candidate gene study of one-carbon metabolism pathway genes and colorectal cancer risk. M. Martinelli, L. Scapoli, G. Mattei, G. Ugolini, I. Montroni, D. Zattoni, G. Rosati & R. Solmi	984–989	Beneficial effect of a weight-stable, low-fat/low-saturated fat/ low-glycaemic index diet to reduce liver fat in older subjects. K. M. Utzschneider, J. L. Bayer-Carter, M. D. Arbuckle, J. M. Tidwell, T. L. Richards & S. Craft	1096–1104
n-3 Fatty acids inhibit transcription of human IL-13: implications for development of T helper type 2 immune responses. E. MacLean, N. Madsen, H. Vliagoftis, C. Field & L. Cameron	990–1000	Effect of sex and gestational age on neonatal body composition. L. Simon, P. Borrego, D. Darmaun, A. Legrand, JC. Rozé & A. Chauty-Frondas	1105–1108
Casein glycomacropeptide in the diet may reduce <i>Escherichia coli</i> attachment to the intestinal mucosa and increase the intestinal lactobacilli of early weaned piglets after an enterotoxigenic	330—1000	Mandatory fortification of bread with iodised salt modestly improves iodine status in schoolchildren. S. A. Skeaff & E. Lonsdale-Cooper	1109–1113
E. coli K88 challenge. R. G. Hermes, F. Molist, J. F. Pérez, A. G. de Segura, M. Ywazaki,		Dietary Surveys and Nutritional Epidemiology	
R. Davin, M. Nofrarías, T. K. Korhonen, R. Virkola & S. M. Martín-Orúe	1001–1012	Type of milk feeding in infancy and health behaviours in adult life: findings from the Hertfordshire Cohort Study.	
Metabolism and Metabolic Studies		S. Robinson, G. Ntani, S. Simmonds, H. Syddall, E. Dennison, A. A. Sayer,	
Investigating the appropriate mode of expressing lysine requirement of fish through non-linear mixed model analysis and multilevel analysis. <i>K. Hua</i> Highly viscous guar gum shifts dietary amino acids from metabolic use to fermentation substrate in domestic cats.	1013–1021	D. Barker, C. Cooper & the Hertfordshire Cohort Study Group Long-term tracking of plasma phospholipid fatty acid concentrations and their correlation with the dietary intake of marine foods in newly diagnosed diabetic patients: results from a follow-up of the HUNT Study, Norway. M. Lindberg, K. Midthjell & K. S. Bjerve	1114-1122 1123-1134
K. Rochus, G. P. J. Janssens, H. Van de Velde, A. Verbrugghe, B. Wuyts, L. Vanhaecke & M. Hesta	1022–1030	The association between dairy product consumption and cognitive function in the National Health and Nutrition Examination Survey.	1120 1104
Nutritional Endocrinology		K. M. Park & V. L. Fulgoni III	1135–1142
Dietary arginine and linear growth: the Copenhagen School Child Intervention Study. A. J. A. H. van Vught, P. C. Dagnelie, I. C. W. Arts, K. Froberg, L. B. Andersen, B. El-Naaman, A. Bugge, B. M. Nielsen & B. L. Heitman	1031–1039	High intakes of protein and processed meat associate with increased incidence of type 2 diabetes. U. Ericson, E. Sonestedt, B. Gullberg, S. Hellstrand, G. Hindy, E. Wirfält & M. Orho-Melander	1143–1153
The dietary flavonoids naringenin and quercetin acutely impair glucose metabolism in rodents possibly via inhibition of hypothalamic insulin		Behaviour, Appetite and Obesity	
signalling. C. E. Koch, G. K. Ganjam, J. Steger, K. Legler, S. Stöhr, D. Schumacher, N. Hoggard, G. Heldmaier & A. Tups	1040–1051	Breast-feeding duration: influence on taste acceptance over the first year of life. C. Schwartz, C. Chabanet, C. Laval, S. Issanchou & S. Nicklaus	1154–1161
Nutritional Immunology			
Effect of dietary supplementation with white button mushrooms on host resistance to influenza infection and immune function in mice. Y. Xu, L. Na, Z. Ren, J. Xu, C. Sun, D. Smith, S. N. Meydani & D. Wu	1052–1061	Cambridge Journals Online For further information about this journal	
Prevention of soya-induced enteritis in Atlantic salmon (<i>Salmo salar</i>) by bacteria grown on natural gas is dose dependent and related to		please go to the journal website at: journals.cambridge.org/bjn	



epithelial MHC II reactivity and ${\rm CD8}\alpha^{\scriptscriptstyle +}$ intraepithelial lymphocytes. O. H. Romarheim, D. L. Hetland, A. Skrede, M. Øverland, L. T. Mydland

Toxic effects of dietary hydrolysed lipids: an in vivo study on fish larvae. Ø. Sæle, A. Nordgreen, P. A. Olsvik, J. I. Hjelle, T. Harboe & K. Hamre

& T. Landsverk

Nutritional Toxicology



1062-1070

1071-1081

