

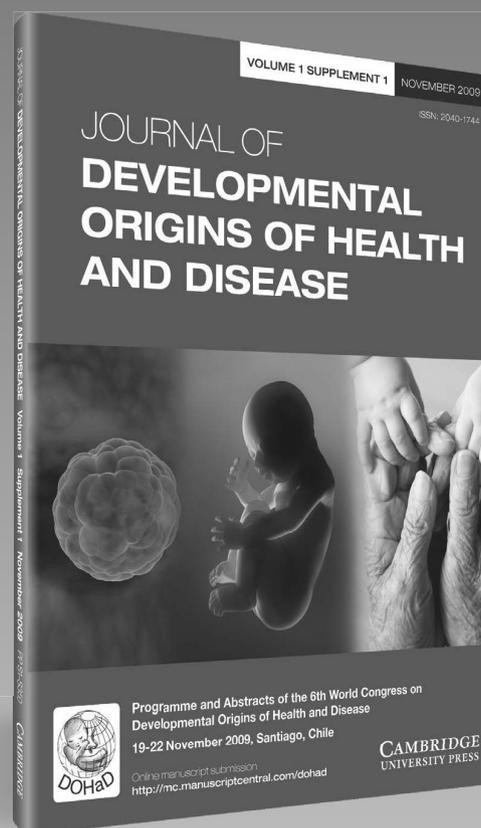
Discover the benefits of *JDOHaD* on Cambridge Journals Online (CJO)

- Register for content alerts and receive notification when new articles are published online journals.cambridge.org/doh-alerts
- Save searches
- Search across Cambridge Books Online (CBO) and Cambridge Journals Online (CJO) simultaneously using our new faceted search functionality
- Register for updates on new developments and sample content from your 'favourite journals'
- Easily download citations to reference management software
- Access CJO on your mobile: CJOm is optimised for smart phones and other small mobile devices

Members of DOHaD receive free access to the Journal.

If you have any problems setting up your online access please contact:

journals_societies@cambridge.org



Submit your research to JDOHaD

The Journal covers all aspects of research in developmental origins of health and disease (DOHaD) – from basic molecular research to health and disease outcomes, translation into policy and wider social and ethical issues.

- Global Editorial Board
- Dissemination of your research to over 5,000 libraries worldwide, including access through aid donation schemes
- Efficient online manuscript submission and tracking at ScholarOne™ Manuscripts
- *FirstView* publication of articles online ahead of issue and print allocation
- Generous copyright policies, compliant with all the major funding bodies
- State-of-the-art online hosting
- Forward reference linking
- Permanent record through DOI/CrossRef
- No submission or page charges
- Authors receive a free pdf of the final article

mc.manuscriptcentral.com/dohad



journals.cambridge.org/doh



CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS

JNS

JOURNAL OF NUTRITIONAL SCIENCE

Editor-in-Chief

G C Burdge, *University of Southampton, UK*



 **Cambridge
Open**

Journal of Nutritional Science encompasses the full spectrum of nutritional science including public health nutrition, epidemiology, dietary surveys, nutritional requirements, metabolic studies, body composition, energetics, appetite, obesity, ageing, endocrinology, immunology, neuroscience, microbiology, genetics and molecular and cell biology. The Nutrition Society fully engages with the Open Access model of publishing.

journals.cambridge.org/jns

Submit your article online
jnutsci.msubmit.net

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

 **THE
NUTRITION
SOCIETY**
Advancing Nutritional Science

 **CAMBRIDGE
UNIVERSITY PRESS**

NRR

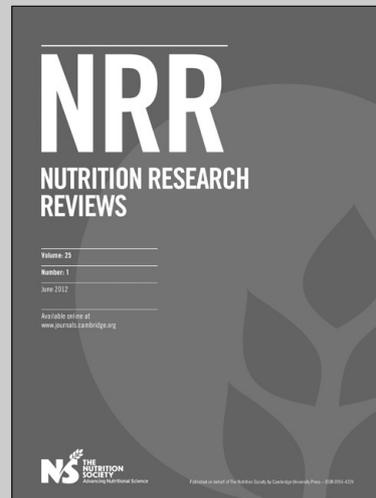
NUTRITION RESEARCH REVIEWS

Editor-in-ChiefJayne V. Woodside, *Queen's University, Belfast, 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
5.5**

Ranked **4/76**
Nutrition and Dietics

2012 Journal Citation Reports®
Thomson Reuters

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 115, 2016 ISSN: 0007-1145

**Publishing, Production, Marketing, and
Subscription Sales Office:**

Cambridge University Press,
Journals Fulfillment Department,
UPH, Shaftesbury Road,
Cambridge CB2 8BS, 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 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 2016 comprise Volume 115, the twelve issues starting July 2016 comprise Volume 116.

Annual subscription rates:

Volumes 115/116 (24 issues):
Internet/print package £1654/\$3225/€2649
Internet only: £1149/\$2241/€1836

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>.

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™, Global Health, BIOSIS® Database, EMBASE/Excerpta Medica and Elsevier BIOBASE/Current Awareness in Biological Sciences, CINAHL, and Chemical Abstracts Service.

Molecular Nutrition

Effects of dietary supplementation with epidermal growth factor-expressing *Saccharomyces cerevisiae* on duodenal development in weaned piglets
S. Wang, C. Guo, L. Zhou, Z. Zhong, W. Zhu, Y. Huang, Z. Zhang, T. G. M. F. Gorgels & T. T. J. M. Berendschot 1509-1520

Metabolism and Metabolic Studies

Medium-chain TAG improve energy metabolism and mitochondrial biogenesis in the liver of intra-uterine growth-retarded and normal-birth-weight weanling piglets
H. Zhang, Y. Li, X. Hou, L. Zhang & T. Wang 1521-1530

Nutritional Immunology

Effects of oxidised dietary fish oil and high-dose vitamin E supplementation on growth performance, feed utilisation and antioxidant defence enzyme activities of juvenile large yellow croaker (*Larimichthys crocea*)
J. Wang, H. Xu, R. Zuo, K. Mai, W. Xu & Q. Ai 1531-1538

Cocoa and cocoa fibre differentially modulate IgA and IgM production at mucosal sites
M. Massot-Cladera, A. Franch, F. J. Pérez-Cano & M. Castell 1539-1546

Human and Clinical Nutrition

Effects of sodium selenite on c-Jun N-terminal kinase signalling pathway induced by oxidative stress in human chondrocytes and c-Jun N-terminal kinase expression in patients with Kashin–Beck disease, an endemic osteoarthritis
X. Dai, Y. Li, R. Zhang, Y. Kou, X. Mo, J. Cao & Y. Xiong 1547-1555

Lean body mass change over 6 years is associated with dietary leucine intake in an older Danish population
C. K. McDonald, M. Z. Ankarfeldt, S. Capra, J. Bauer, K. Raymond & B. L. Heitmann 1556-1562

Dietary Surveys and Nutritional Epidemiology

Predominantly night-time feeding and maternal glycaemic levels during pregnancy
S. L. Loy, T. S. Cheng, M. T. Colega, Y. B. Cheung, K. M. Godfrey, P. D. Gluckman, K. Kwek, S. M. Saw, Y.-S. Chong, N. Padmapriya, F. Müller-Riemenschneider, N. Lek, F. Yap, M. F.-F. Chong & J. K. Y. Chan on behalf of the Growing Up in Singapore Towards Healthy Outcomes (GUSTO) study group 1563-1570

Substitutions of red meat, poultry and fish and risk of myocardial infarction
A. M. L. Würtz, M. D. Hansen, A. Tjønneland, E. B. Rimm, E. B. Schmidt, K. Overvad & M. U. Jakobsen 1571-1578

Associations between fruit, vegetable and legume intakes and prostate cancer risk: results from the prospective Supplémentation en Vitamines et Minéraux Antioxydants (SU.VI.MAX) cohort
A. Diallo, M. Deschasaux, P. Galan, S. Hercberg, L. Zelek, P. Latino-Martel & M. Touvier 1579-1585

Examining associations between dietary patterns and metabolic CVD risk factors: a novel use of structural equation modelling
M. A. Castro, V. T. Baltar, D. M. Marchioni & R. M. Fisberg 1586-1597

Description, measurement and evaluation of tertiary-education food environments
R. Roy, L. Hebden, B. Kelly, T. D. Gois, E. M. Ferrone, M. Samrout, S. Vermont & M. Allman-Farinelli 1598-1606

Urine phyto-oestrogen metabolites are not significantly associated with risk of type 2 diabetes: the Singapore Chinese health study
M. Talaie, B. L. Lee, C. N. Ong, R. M. van Dam, J. M. Yuan, W. P. Koh & A. Pan 1607-1615

The timing of the evening meal: how is this associated with weight status in UK children?
J. D. Coulthard & G. K. Pot 1616-1622

Iodine status and thyroid function among Spanish schoolchildren aged 6–7 years: the Tirokid study
L. Vila, S. Donnay, J. Arena, J. J. Arrizabalaga, J. Pineda, E. Garcia-Fuentes, C. Garcia-Rey, J. L. Marín, M. Serra-Prat, I. Velasco, A. López-Guzmán, L. M. Luengo, A. Villar, Z. Muñoz, O. Bandrés, E. Guerrero, J. A. Muñoz, G. Moll, F. Vich, E. Menéndez, M. Riestra, Y. Torres, P. Beato-Vibora, M. Aguirre, P. Santiago, J. Aranda & C. Gutiérrez-Repiso 1623-1631

A high-fat, high-glycaemic index, low-fibre dietary pattern is prospectively associated with type 2 diabetes in a British birth cohort
S. Pastorino, M. Richards, M. Pierce & G. L. Ambrosini 1632-1642

Vitamin D and colorectal cancer: molecular, epidemiological and clinical evidence
R. Dou, K. Ng, E. L. Giovannucci, J. E. Manson, Z. R. Qian & S. Oginio 1643-1660

Daily chocolate consumption is inversely associated with insulin resistance and liver enzymes in the Observation of Cardiovascular Risk Factors in Luxembourg study
A. Alkerwi, N. Sauvageot, G. E. Crichton, M. F. Elias & S. Stranges 1661-1668

Selenium status and risk of prostate cancer in a Danish population
M. Outzen, A. Tjønneland, E. H. Larsen, S. Friis, S. B. Larsen, J. Christensen, K. Overvad & A. Olsen 1669-1677

Innovative Techniques

Agreement between an online dietary assessment tool (myfood24) and an interviewer-administered 24-h dietary recall in British adolescents aged 11–18 years
S. A. Albar, N. A. Alwan, C. E. L. Evans, D. C. Greenwood & J. E. Cade 1678-1686

Behaviour, Appetite and Obesity

Effect of chronic undernutrition on body mass and mechanical bone quality under normoxic and altitude hypoxic conditions
C. Lezon, C. Bozzini, A. A. Romero, P. Pinto, G. Champin, R. M. Alippi, P. Boyer & C. E. Bozzini 1687-1695

Corrigendum

A randomised trial of a medium-chain TAG diet as treatment for dogs with idiopathic epilepsy – CORRIGENDUM
T. H. Law, E. S. S. Davies, Y. Pan, B. Zanghi, E. Want & H. A. Volk 1696-1696

Inositol for prevention of neural tube defects: a pilot randomised controlled trial – CORRIGENDUM
N. D. E. Greene, K.-Y. Leung, V. Gay, K. Burren, K. Mills, L. S. Chitty & A. J. Copp 1697-1697

Cambridge Journals Online For further information about this journal please go to the journal website at: journals.cambridge.org/bjn