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

## **British Journal of Nutrition**

Volume 122, 2019 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 Fullfillment Department 1 Liberty Plaza Floor 20 New York, NY 10006 USA

Publisher: Cambridge University Press

#### 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 2019 comprise Volume 121, the twelve issues starting July 2019 comprise Volume 122.

#### Annual subscription rates:

Volumes 121/122 (24 issues): Internet/print package £1550/\$3021 Internet only: £1077/\$2100 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, 1 Liberty Plaza, Floor 20, New York, NY 10006, USA.

**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.

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

#### **BRITISH JOURNAL OF NUTRITION, VOLUME 122 - Number 9**

Metabolism and Metabolic Studies	
Dietary addition of zinc-methionine influenced eggshell quality by	
affecting calcium deposition in eggshell formation of laying hens	
Lanlan Li, Liping Miao, Mingkun Zhu, Liansong Wang and Xiaoting Zou	961
Nutritional Endocrinology	
Nutrient intake is a predictor of lung function in obese asthmatic	
adolescents undergoing interdisciplinary therapy	
Lydiane C. Rodrigues, João F. Mota, Flávia C. Corgosinho,	
Deborah C. L. Masquio, Ana R. Dâmaso, Sérgio Tufik, Marco T. de Mello,	
Nádia C. Cheik and Patrícia L. da Silva Agostinho	974
Microbiology	
The association between gut microbiota composition and BMI in	
Chinese male college students, as analysed by next-generation	
sequencing	
Yanrong Lv, Xiangxiang Qin, Huaijie Jia, Sirui Chen, Weiwei Sun and	
Xiaoxia Wang	986
Human and Clinical Nutrition	
Dietary fibre and mortality risk in patients on peritoneal dialysis	
Xiao Xu, Ziqian Li, Yuan Chen, Xihui Liu and Jie Dong	996
Protein supplementation combined with low-intensity resistance	
training in geriatric medical patients during and after hospitalisation:	
a randomised, double-blind, multicentre trial	
Josephine Gade, Anne Marie Beck, Hanne E. Andersen, Britt Christensen,	
Finn Rønholt, Tobias W. Klausen, Anders Vinther and Arne Astrup	1006
Review-Systematic with Meta-Analysis	
The effect of L-arginine supplementation on lipid profile: a	
systematic review and meta-analysis of randomised controlled trials	
Amir Hadi, Arman Arab, Sajjad Moradi, Ana Pantovic, Cain C. T. Clark and	
Ehsan Ghaedi	1021

Dietary Surveys and Nutritional Epidemiology	
Changes in breast milk lutein concentrations and their associations with dietary lutein intake: a 12-week prospective analytical study Yaqin Zhang, Jiao Yang, Ninghua Huang, Linyan Xiao, Hong Lin, Jiayou Luo, Zhaofeng Zhang and Zhiyong Zou	1033
Association between dietary fibre intake and asthma (symptoms and control): results from the French national e-cohort NutriNet-Santé Roland M. Andrianasolo, Serge Hercberg, Emmanuelle Kesse-Guyot, Nathalie Druesne-Pecollo, Mathilde Touvier, Pilar Galan and Raphaëlle Varraso	1040
Street food in Dushanbe, Tajikistan: availability and nutritional value Gabriela Albuquerque, Inês Morais, Marcello Gelormini, Susana Casal, Albertino Damasceno, Olívia Pinho, Pedro Moreira, Jo Jewell, João Breda, Nuno Lunet and Patrícia Padrão	1010
Behaviour, Appetite and Obesity	
Proteomics study of the effect of high-fat diet on rat liver Jian Sang, Hengxian Qu, Ruixia Gu, Dawei Chen, Xia Chen, Boxing Yin, Yingping Huang, Wenbo Xi, Chunlei Wang and Yujun Huang	1062
Effectiveness of school-home intervention for adolescent obesity prevention: parallel school randomised study Michele R. Sgambato, Diana B. Cunha, Bárbara S. N. Souza,	
Viviana T. Henriques, Renata R. M. Rodrigues, Ana L. V. Rêgo, Rosangela A. Pereira, Edna M. Yokoo and Rosely Sichieri	1073

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





MIX Paper from responsible sources FSC<sup>®</sup> C007785

