

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

British Journal of Nutrition
Volume 127, 2022 ISSN: 0007-1145

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

Cambridge University Press
Journals Fulfillment Department
University Printing House, Shaftesbury Road
Cambridge CB2 8BS, UK

For Customers in North America:

Cambridge University Press
Journals Fulfillment 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 2021 comprise Volume 125, the twelve issues starting July 2021 comprise Volume 126.

Annual subscription rates:

Volumes 127/128 (24 issues):
Internet/print package £1724/\$3363
Internet only: £1164/\$2271

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.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 Great Britain 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.

Metabolism and Metabolic Studies

- Adipokines: inflammation and the pleiotropic role of white adipose tissue
Paul Trayhurn 161
- Resveratrol inclusion alleviated high-dietary-carbohydrate-induced glycogen deposition and immune response of largemouth bass, *Micropterus salmoides*
Yijun Liu, Ning Liu, An Wang, Naisong Chen and Songlin Li 165
- Decreased nutrient digestibility due to viscosity is independent of the amount of dietary fibre fed to growing pigs
Yuan-Tai Hung, Jinlong Zhu, Gerald C. Shurson, Pedro E. Urriola and Milena Saqui-Salces 177
- The effect of supplemental bioactive fatty acids on growth performance and immune function of milk-fed Holstein dairy calves during heat stress
B. Mohtashami, H. Khalilvandi-Behroozyar, R. Pirmohammadi, M. Dehghan-Banadaky, M. Kazemi-Bonchenari, E. Dirandeh and M. H. Ghaffari 188
- Metabolic and nutritional responses of Nile tilapia juveniles to dietary methionine sources
Rita Teodósio, Sofia Engrola, Miguel Cabano, Rita Colen, Karthik Masagounder and Cláudia Aragão 202

Nutritional Immunology

- Zinc deficiency as a possible risk factor for increased susceptibility and severe progression of Corona Virus Disease 19
Inga Wessels, Benjamin Rolles, Alan J. Slusarenko and Lothar Rink 214

Human and Clinical Nutrition

- The effects of surgery on plasma/serum vitamin C concentrations: a systematic review and meta-analysis
N. Travica, K. Ried, I. Hudson, A. Scholey, A. Pipingas and A. Sali 233
- Spirulina supplementation during gradual weight loss in competitive wrestlers
Reza Bagheri, Raof Negaresh, Mohamad S. Motevalli, Alexei Wong, Damoon Ashtary-Larky, Mehdi Kargarfard and Amir Rashidlamir 248
- Adiponectin and 8-epi-PGF_{2α} as intermediate influencing factors in weight reduction after legume consumption: a 12-week randomised controlled trial
Youngmin Han, A Ram Kim, Jong Ho Lee and Minjoo Kim 257

Dietary Surveys and Nutritional Epidemiology

- Prevalence of low protein intake in 80+-year-old community-dwelling adults and association with dietary patterns and modifiable risk factors: a cross-sectional study
Sussi F. Buhl, Anne M. Beck, Britt Christensen, Gry Kock, Eleanor Boyle and Paolo Caserotti 266
- Changes in food intake from 1999 to 2012 among Mexican children and women
Alan Reyes-Garcia, Dalia Stern, Juan Rivera-Dommarco and Carolina Batis 278
- Tipping the scale: the role of a national nutritional supplementation programme for pregnant mothers in reducing low birth weight and neonatal mortality in India
Rajesh Kumar Rai, Sandhya S. Kumar, Devraj J. Parasannanavar, Shweta Khandelwal and Hemalatha Rajkumar 289

Behaviour, Appetite and Obesity

- Systematic review of the effects of pandemic confinements on body weight and their determinants
Moien AB Khan, Preetha Menon, Romona Govender, Amal MB Abu Samra, Kholoud K Allaham, Javaid Nauman, Linda Östlundh, Halla Mustafa, Jane E.M. Smith and Juma M AIKaabi 298

Corrigendum

- Total water intake and its contributors in infants and young children – CORRIGENDUM
Jean-Pierre Chouraqui, Simon N. Thornton, Louise Seconda and Stavros A. Kavouras 318
- The relationship between Dietary Inflammatory Index and disease severity and inflammatory status: a case-control study of COVID-19 patients – CORRIGENDUM
Jalal Moludi, Shaimaa A. Qaisar, Mohammad Alizadeh, Hamed Jafari Vayghan, Mohammad Naemi, Akram Rahimi and Reihaneh Mousavi 320

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