
PNS

PROCEEDINGS OF THE NUTRITION SOCIETY

Volume: 78

Number: 4

November 2019

Available online at
cambridge.org/core

Symposia featured in this issue:

Multi-stakeholder nutrition actions in Africa: Translating evidence into policies,
and programmes for impact
Clinical and public health considerations in the management of energy balance

Proceedings of the Nutrition Society

Volume 78, 2019 ISSN: 0029-6651

Aims and Scope

Proceedings of the Nutrition Society publishes papers and abstracts presented by members and invited speakers at the scientific meetings of The Nutrition Society.

Coverage includes

- Cellular and molecular nutrition (including immunology)
- Nutritional genomics
- Nutrition and the food chain
- Clinical nutrition and metabolism
- Obesity and body composition
- Infant nutrition
- Diet selection and control of intake
- Nutrition and behaviour
- Reproduction, growth and development
- Public health nutrition
- Nutrition policy
- Sports and exercise nutrition
- Animal nutrition and metabolism
- Molecular aspects of nutrition
- Functional foods
- Macronutrient metabolism
- Micronutrients and antioxidants
- Companion animal nutrition
- Epidemiology

The *Proceedings of the Nutrition Society* is published four times a year by Cambridge University Press on behalf of the Nutrition Society. Symposium papers are published in February, May, August and November and are available as hard copy or electronically; Original Communications from individual meetings are published electronically only and comprise an OCE issue.

The journal is available on the Internet at: cambridge.org/pns

Editor in Chief

J E Drew, *Rowett Institute of Nutrition and Health, University of Aberdeen, UK*

Editorial Board

C Atkinson, *University of Bristol, UK*
S Caton, *University of Sheffield, UK*
A Cross, *Imperial College London, UK*
F Lithander, *University of Bristol, UK*
A Nugent, *Queens University Belfast, Northern Ireland*
L Owen, *University of Salford, UK*
V Ranawana, *University of Aberdeen, UK*
M Siervo, *University of Nottingham, UK*
O Witard, *University of Stirling, UK*

Science Committee

J Brameld <i>Council Member - Animal</i>	B Griffin <i>Council Member - Academia</i>	K Younger <i>FENS 2019 Representative</i>
F Thies <i>Chair/Scientific Officer</i>	J E Drew <i>Proceedings Editor</i>	J Woodside <i>Publications Officer</i>
A Gallagher <i>FENS 2019 Scientific Programme Committee Chair</i>	C J Seal <i>Treasurer</i>	
L Brennan <i>Irish Section Secretary</i>	S Athanasiadou <i>Scottish Section Secretary</i>	
R Elliott <i>Cellular and Molecular Nutrition Theme</i>	A Welch <i>Public Health Nutrition Theme</i>	W Hall <i>Whole Body Metabolism Theme</i>

The Nutrition Society has as its objectives the advancement of the scientific study of nutrition and its application to the maintenance of human and animal health.

Honorary Officers of the Society

P C Calder <i>President</i>	S Lanham-New <i>Secretary</i>	C J Seal <i>Treasurer</i>
B Corfe <i>Programme Officer</i>	D Sewell <i>Membership Officer</i>	J Woodside <i>Publications Officer</i>
F Thies <i>Scientific Officer</i>		
P Hunking <i>Training and Education</i>	C Ruxton <i>Strategic Communications</i>	B Ellahi <i>International Affairs</i>

Application for membership is open to any person who has a genuine interest in the science of human or animal nutrition and its application to human or animal health. Reduced subscriptions are available to full-time student members and those within 2 years of graduation, retired members, the unwaged and members who reside in low income countries (as defined by the World Bank).

The Nutrition Society Home Page is at <http://www.nutritionandsociety.org>

© Nutrition Society 2019



Contents

Proceedings of the
Nutrition
Society

Conference on ‘Multi-stakeholder nutrition actions in Africa: Translating evidence into policies, and programmes for impact’

Reducing waste in nutritional epidemiology: review and perspectives <i>D. Hawwash, C. Yang & C. Lachat</i>	475–483
FAO/WHO GIFT (Global Individual Food consumption data Tool): a global repository for harmonised individual quantitative food consumption studies <i>C. Leclercq, P. Allemand, A. Balcerzak, F. Branca, R. F. Sousa, A. Lartey, M. Lipp, V. P. Quadros & P. Verger</i>	484–495
Importance and use of reliable food composition data generation by nutrition/dietetic professionals towards solving Africa’s nutrition problem: constraints and the role of FAO/INFOODS/AFROFOODS and other stakeholders in future initiatives <i>H. Ene-Obong, H. C. Schönfeldt, E. Campaore, A. Kimani, R. Mwaisaka, A. Vincent, J. El Ati, P. Kouebou, K. Presser, P. Finglas & U. R. Charrondiere</i>	496–505
Challenges and opportunities to tackle the rising prevalence of diet-related non-communicable diseases in Africa <i>V. O. Owino</i>	506–512
Urban food environments in Africa: implications for policy and research <i>M. Holdsworth & E. Landais</i>	513–525
n-3 Fatty acids and risk for fatal coronary disease <i>W. S. Harris & F. B. Zotor</i>	526–531
Fatty acids: a role for Africa? <i>J. Delarue</i>	532–539
Maximising benefits and minimising adverse effects of micronutrient interventions in low- and middle-income countries <i>K. Baye</i>	540–546
Sugar-sweetened beverage consumption in the early years and implications for type-2 diabetes: a sub-Saharan Africa context <i>K. Audain, L. Levy & B. Ellahi</i>	547–553
Is iodine deficiency still a problem in sub-Saharan Africa?: a review <i>S. Saha, B. A. Z. Abu, Y. Jamshidi-Naeini, U. Mukherjee, M. Miller, L.-L. Peng & W. Oldewage-Theron</i>	554–566
Advocacy for scaling up biofortified crops for improved micronutrient status in Africa: approaches, achievements, challenges and lessons <i>R. Omari, F. Zotor, J. Tagwireyi & L. Lokosang</i>	567–575

Conference on ‘Getting energy balance right’

Symposium 6: Clinical and public health considerations in the management of energy balance

Developing evidence-based behavioural strategies to overcome physiological resistance to weight loss in the general population <i>R. J. Stubbs, C. Duarte, R. O’Driscoll, J. Turicchi & J. Michalowska</i>	576–589
Addressing malnutrition in low- and middle-income countries with double-duty actions – ERRATUM <i>R. Pradeilles, K. Baye & M. Holdsworth</i>	590

Retraction

Do anthocyanins in purple tomatoes reduce the risk of cardiovascular disease? – Retraction <i>S. Achterfeldt, M. Traka, C. Martin, D. Vauzour & P. A. Kroon</i>	591
--	-----



Four-weeks intervention with jaboticaba peel lowers MDA levels after post-prandial challenge in healthy adults – Retraction

Á.G. Batista, Y.C. Zanzer, M.R. Maróstica Júnior & E.M. Östman

592



Proceedings of the
Nutrition
Society

Editor in Chief
Dr J. Drew
pns.edoffice@cambridge.org
<http://www.nutritionssociety.org>

<http://www.journals.cambridge.org/pns>

Forthcoming topics to be featured in *Proceedings of the Nutrition Society* for 2020 (vol. 79):

- Optimal diet and lifestyle strategies for the management of cardio-metabolic risk
(Above proceedings were presented at the NS meeting at the Royal Society of Medicine, London, 4-5 December 2018)
- Inter-individual differences in the nutrition response: from research to recommendations
(Above proceedings were presented at the NS meeting at Abertay University, 1-2 April 2019)
- Malnutrition in an Obese World: European Perspectives
(Above proceedings were presented at the 13th European Nutrition Conference in Dublin, Ireland, 15-18 October 2019)

Original Communications

- Malnutrition in an Obese World: European Perspectives
(Above proceedings were presented at the 13th European Nutrition Conference in Dublin, Ireland, 15-18 October 2019)
- Diet and Digestive Disease
(Above proceedings to be presented at the NS meeting at the Royal Society of Medicine, London, 2-4 December 2019)
- Nutrition health and ageing – translating science to practice
(Above proceedings to be presented at the NS meeting at the University of Limerick, Ireland, 17-19 June 2020)
- New insights in protein nutrition science
(Above proceedings to be presented at the NS meeting at TECA, Aberdeen, 13-16 July 2020)

For further details, see our website: <http://www.nutritionssociety.org/events>



Proceedings of the Nutrition Society

Volume 78, 2019 ISSN: 0029-6651

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
1 Liberty Plaza, Floor 20
New York, NY 10006
USA

Special sales:

This journal accepts advertisements and inserts. We also provide bulk reprints of suitable papers to meet teaching or promotional requirements. Please contact ad_sales@cambridge.org for further details.

Subscription information:

Proceedings of the Nutrition Society is an international journal published by Cambridge University Press on behalf of The Nutrition Society as four issues per year. Symposium papers are published in February, May, August and November; Original Communications are published online (only).

Annual subscription rates:

Volume 78, 2019 (4 issues):
Internet/print package: £778/\$1518 Americas only
Internet only: £554/\$1078 Americas only

Japanese Agent: Maruzen Company Ltd, PO Box 5050, Tokyo International, 100-31, Japan.

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.

Despatch: deliveries outside the UK are by ASP Print-flow Airsaver unless other arrangements are made. Customers requiring airmail delivery should indicate

clearly their requirements and add an additional 10% to the relevant subscription price.

US POSTMASTERS: please send address corrections to *Proceedings of the Nutrition Society*, Cambridge University Press at the New York address.

Directions to Contributors are available from the Society at the address below or can be found on the Society's website at <http://www.nutrition-society.org> (concise Directions to Contributors can be found inside the back cover).

Offprints: The authors (or main author) of an accepted paper will receive a free PDF file of their paper. Paper offprints are available for a fee and should be ordered at proof stage. No page charges are levied by this journal.

Copyright: As of July 2000 the copyright of all articles submitted to the *Proceedings of the Nutrition Society* is 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, 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.

Typeset by Techset Composition India (P) Ltd., Chennai, India.

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. Printed by Bell & Bain, Glasgow, UK.

Proceedings of the Nutrition Society 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.