Molecular Nutrition
Fish oil combined with SCFA synergistically prevent tissue accumulation of NEFA during weight loss in obese mice.
M. H. Pedersen, L. Lauritzen & L. I. Hellgren
1449–1456

Diet × genotype interactions in hepatic cholesterol and lipoprotein metabolism in Atlantic salmon (Salmo salar) in response to replacement of dietary fish oil with vegetable oil.
1457–1469

Metabolism and Metabolic Studies
A high-amylopectin diet caused hepatic steatosis associated with more lipogenic enzymes and increased serum insulin concentration.
J. He, D. Chen, K. Zhang & B. Yu
1470–1475

Effects of Nors- and Wakame-enriched meats with or without supplementary cholesterol on atherogenesis, lipoproteinemia and lipoproteinemia in growing Wistar rats.
1476–1486

A dairy product fermented by lactobacilli cancels the adverse effects of hypochlorhydria induced by a proton pump inhibitor on bone metabolism in growing rats.
S. Takasugi, K. Ashida, S. Maruyama, Y. Komaba, T. Kaneko & T. Yamaji
1487–1494

Mango modulates body fat and plasma glucose and lipids in mice fed a high-fat diet.
1495–1505

A high dietary concentration of insulin is necessary to reduce the incidence of swine dysentery in pigs experimentally challenged with Brachyspira hyodysenteriae.
1506–1513

Nutritional Immunology
Long-term dietary antioxidant cocktail supplementation effectively reduces renal inflammation in diabetic mice.
N.-E. Park, S.-H. Park & Y. Lim
1514–1521

Therapeutic effect of antioxidants factor-rich egg yolk on the late phases of 2,4,6-trinitrobenzenesulphonic acid colitis in mice.
J. Málte, V. Lőrincz, E. Pintérfia, I. Gyöngyösi, E. Doménech, M. A. Gassull & E. Cabré
1522–1528

Human and Clinical Nutrition
Serum 25-hydroxyvitamin D concentrations are associated with erythrocyte levels of n-3 PUFA but not risk of CVD.
Y. Park & M. Kim
1529–1534

Mild dehydration impairs cognitive performance and mood of men.
1535–1543

Antioxidant enzymes induced by repeated intake of excess energy in the form of high-fat, high-carbohydrate meals are not sufficient to block oxidative stress in healthy lean individuals.
S. Lim, H. Won, Y. Kim, M. Jung, K. R. Jyothi, Y. Kim, P. Dandona, J. He & S. S. Kim
1544–1551

Glycaemic index and glycaemic load of breakfast predict cognitive function and mood in school children: a randomised controlled trial.
R. Micha, P. J. Rogers & M. Nelson
1552–1561

Dietary Surveys and Nutritional Epidemiology
Colours of fruit and vegetables and 10-year incidence of CHD.
L. M. O. Griep, W. M. M. Verschuren, D. Kromhout, M. C. Ocké & J. M. Geleijnse
1562–1569

Fish consumption in relation to other foods in the diet.
1570–1580

(Contents continued facing inside back cover)
British Journal of Nutrition

An International Journal of Nutritional Science

Volume 106, 2011 ISSN: 0007-1145

Aims and Scope

The British Journal of Nutrition is an international, peer-reviewed journal publishing original papers, review articles, short communications and technical notes on human and clinical nutrition, animal nutrition and basic science as applied to nutrition. Correspondence is encouraged in a Nutrition Discussion Forum. The Journal recognizes the multidisciplinary nature of nutritional science and encourages the submission of material from all of the specialties involved in research and clinical practice. The Journal also provides supplements on topics of particular interest.

The British Journal of Nutrition is published twice monthly by Cambridge University Press on behalf of The Nutrition Society.

The Nutrition Society is available online to subscribers at journals.cambridge.org/bjn. Tables of contents and abstracts are available free at the same website.

Editor-in-Chief
P C Calder, School of Medicine, University of Southampton, Southampton, UK

Deputy Editors
F Bellisle, INRA, University of Paris, Biophagy, France
D R Jacobs Jr, School of Public Health, University of Minnesota, Minneapolis, MN, USA
R J Wallace, Gut Health Programme, Rowett Institute of Nutrition and Health, University of Aberdeen, Aberdeen, UK
S J Whiting, College of Pharmacy and Nutrition, University of Saskatchewan, Saskatoon, Sask., Canada

Reviews Editors
D J Millward, Faculty of Health and Medical Sciences, University of Surrey, UK
P Aggett, School of Medicine and Health, Lancaster University, Lancaster, UK

Systematic Reviews Editor
M Maksides, Women's and Children's Health Research Institute and University of Adelaide, Adelaide, Australia

Supplements Editor
I Woodside, Nutrition and Metabolism Group, Centre for Public Health, Queen's University, Belfast, UK

Editorial Board
J H B Bieling, Chapel Hill, NC, USA
Y Ba, Novartis, Taiwan
J H Beattie, Aberdeen, UK
G Belling, Sterling, USA
M B Bendich, Bendich Germany
S Briët, Zandvoort, Netherlands
C G Budgen, Southamtown, UK
A E Buyken, Dortmund, Germany
J Buyse, Laren, Belgium
K D Cashman, Cork, Ireland
S R Chapkin, College Station, TX, USA
M S Chiu, Daegu, Korea
A Collins, Odlo, Norway
S Dertinger, Munich, Germany
U Eckelmann, Cambridge, UK
Q Eirola, Eskilstuna, Sweden
A Fielden, Oxford, UK
J L Frikin, Columbus, OH, USA
J K Fried, Winnipeg, MB, Canada
M Fukushima, Octoboko City, Japan
P Grandi, Bari, Italy
A Grill, Brussels, Belgium
J C Hallford, Liverpool, UK
W Hendriks, Wageningen, The Netherlands

Publications Staff
C Goodstein (Publications Manager), C Jackson (Deputy Publications Manager), L Weeks, H Zadarev and C T Hughes (Publications Officers) and S Hui and D Owen (Publications Assistants)

The Nutrition Society has as its objective the advancement of the study of nutrition and its applications to the maintenance of human and animal health.

Application of membership is invited from anyone whose work has contributed to the scientific knowledge of nutrition, whether such work has been done in the laboratory, in the field or the clinic, and whether experimental, clinical, agricultural or statistical in nature. There is also a student membership scheme with reduced subscriptions.

Particulars of The Nutrition Society and application forms for membership are available from The Nutrition Society, 10 Cambridge Court, 210 Shepherds Bush Road, London W6 7NJ, UK. Tel: +44 (0)20 7602 0228, Fax: +44 (0)20 7602 1756, Email: office@nutsoc.org.uk

Directions to Contributors - Concise Version

(Revised August 2007)

The British Journal of Nutrition is an international peer-reviewed journal that publishes original papers, review articles, technical notes and short communications in English in all branches of nutritional science. Prospective authors should note that they (or their institutions) now retain the copyright of their material published in the British Journal of Nutrition. Authors are asked to follow the guidelines set out below. For detailed information on the presentation of the technical content of your paper please see the full version of the Directions to Contributors, which can be downloaded from the Nutrition Society website (http://www.nutrition society.org). Prospective authors may also contact the Publications Office directly on +44 2076056555 (telephone), +44 2076061756 (fax) or edoffice@nutsoc.org.uk (email).

Papers should be accompanied by a statement to the effect that the conditions laid down in the full Directions to Contributors are accepted. The statement should affirm that the submission represents original work that has not been published previously and which is not currently being considered by another journal. It should also confirm that each author has seen and approved the contents of the submitted paper. At the time of acceptance the authors should provide a completed copy of the "Licence to Publish" (in lieu of copyright transfer). The Licence to Publish is available on the Nutrition Society website (http://www.nutrition society.org). All relevant financial interests should be declared.

Text. Papers should be submitted with 1.5 line spacing and margins of at least 2 cm on each side. Text should be printed without underlining, bold or italics except for scientific names. Standard abbreviations (e.g. Fig. and Figs.) and SI units should be used. Typescrrips can be submitted as Word, WordPerfect, EPS, Text, Postscript or RTF files. A Word processing format is required for production purposes once papers have been accepted. When substantial revisions are required to type-settings, authors are given the opportunity to do this once only, the need for any further changes should at most reflect any minor issues.

Title Page. The first page should include a concise, informative title together with the full names and addresses of the authors. Each contact name for correspondence should be given and telephone, fax and e-mail addresses provided. Authors should supply four or five key words or phrases (each containing up to three words).

Abstract. A short title of up to 45 characters is required as a running head. Each paper should commence with an abstract that sets out the scientific significance of the work. Prospective authors are advised to write the abstract, which will be complete in itself and intelligible without reference to the text or figures, and should not exceed 250 words.

Tables. Tables should be reduced to the simplest form, and should not duplicate information in the text or figures. They should be typed on separate pages, one page for each Table, at the end of the article and carry headings describing their content.

Illustrations. The original illustrations should accompany the submitted typescript. Text figures, line drawings, computer-generated figures and graphs should be of sufficient quality and size to allow for reduction by half or two-thirds. Halftone photographs are acceptable where they clearly contribute to the text. All figures should be numbered and legends should be provided.

Note that authors will be charged 360 GBP for the publication of colour figures. Authors from countries entitled to free journal access through HINARI will be exempt from these charges.

References. References should be listed alphabetically according to the last name of the author. Each reference should be numbered consecutively in the order in which they first appear in the text using superscript Arabic numerals in parentheses, e.g. (Vancouver) system. The citation should conform to the following styles:

C Goodstein (http://www.nutrition society.org) and S Hui and D Owen (http://bjn.msubmit.net/).


Citations should be numbered consecutively in the order in which they first appear in the text using superscript Arabic numerals in parentheses, e.g. the “c” in this approach has recently been replaced by “n”. If more than one citation is cited more than once the same number should be used each time.

References. Authors are asked to submit the names of up to four reviewers who would be well-qualified to review the paper; however, no more than one such reviewer will be used. The e-mail addresses and institutions of the named reviewers should be given.

Proofs. PDF page proofs will be emailed to authors for checking, and should be returned within 3 days by fax or Express mail to the Publications Manager, Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, UK; fax +44 1223 325802, email bjnproduction@cambridge.org

Typescripts. The British Journal of Nutrition operates an online typesetting and review system (eJournalPress). Authors should submit to the following address: http://bjn.msubmit.net/. If any difficulties are encountered please contact the Publications Office (details above) immediately.

Professor Phil Calder
Editor-in-Chief
British Journal of Nutrition
The Nutrition Society
10 Cambridge Court
210 Shepherds Bush Road
London W6 7NJ
UK
Tel: +44 (0)20 7605 6555
Fax: +44 20 7602 1756
Email: edoffice@nutsoc.org.uk

Contents

Molecular Nutrition
Fish oil combined with SCFA synergistically prevent tissue accumulation of NEFA during weight loss in obese mice.
M. H. Pedersen, L. Lauritzen & L. I. Hellgren 1449–1456

Diet × genotype interactions in hepatic cholesterol and lipoprotein metabolism in Atlantic salmon (Salmo salar) in response to replacement of dietary fish oil with vegetable oil.

Metabolism and Metabolic Studies
A high-amylopectin diet caused hepatic steatosis associated with more lipogenic enzymes and increased serum insulin concentration.
J. He, D. Chen, K. Zhang & B. Yu 1470–1475

Effects of Nori- and Wakame-enriched meats with or without supplementary cholesterol on arylesterase activity, lipaemia and lipoproteinaemia in growing Wistar rats.

A dairy product fermented by lacticobacilli cancels the adverse effects of hypochlorhydria induced by a proton pump inhibitor on bone metabolism in growing rats.
S. Takasugi, K. Ashida, S. Maruyama, Y. Komaba, T. Kaneko & T. Yamaji 1487–1494

Mango modulates body fat and plasma glucose and lipids in mice fed a high-fat diet.

A high dietary concentration of inulin is necessary to reduce the incidence of swine dysentery in pigs experimentally challenged with Brachyspira hydysenteriae.

Nutritional Immunology
Long-term dietary antioxidant cocktail supplementation effectively reduces renal inflammation in diabetic mice.
N.-Y. Park, S.-K. Park & Y. Lim 1514–1521

Therapeutic effect of antisecretory factor-rich egg yolk on the late phases of 2,4,6-trinitrobenzenesulphonic acid colitis in mice.
J. Martí, V. Lloréns, E. Pedrosa, I. Ojanguren, E. Domènech, M. A. Gassull & E. Cabrera 1522–1528

Human and Clinical Nutrition
Serum 25-hydroxyvitamin D concentrations are associated with erythrocyte levels of n-3 PUFA but not risk of CVD.
Y. Park & M. Kim 1529–1534

Mild dehydration impairs cognitive performance and mood of men.

Antioxidant enzymes induced by repeated intake of excess energy in the form of high-fat, high-carbohydrate meals are not sufficient to block oxidative stress in healthy lean individuals.
S. Lim, H. Won, Y. Kim, M. Jang, K. R. Jyothi, Y. Kim, P. Dandona, J. Ha & S. S. Kim 1544–1551

Glycaemic index and glycaemic load of breakfast predict cognitive function and mood in school children: a randomised controlled trial.
R. Micha, P. J. Rogers & M. Nelson 1552–1561

Dietary Surveys and Nutritional Epidemiology
Colours of fruit and vegetables and 10-year incidence of CHD.

Fish consumption in relation to other foods in the diet.
Adherence to the Mediterranean diet reduces mortality in the Spanish cohort of the European Prospective Investigation into Cancer and Nutrition (EPIC-Spain).

The role of infant feeding practices in the explanation for ethnic differences in infant growth: the Amsterdam Born Children and their Development study.
M. L. A. de Hoog, M. van Eijsden, K. Stronks, R. J. B. J. Gemke & T. G. M. Vrijkotte 1592–1601

Behaviour, Appetite and Obesity

Length and site of the small intestine exposed to fat influences hunger and food intake.