

Copying. This journal is registered with the Copyright Clearance Center, 27 Congress Street, Salem, Mass. 01970. Organizations in the USA who are also registered with C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of the US copyright law) subject to payment to C.C.C. of the per-copy fee of \$5.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0007-1145/89 \$5.00 + .00.

ISI Tear Sheet Service, 3501 Market Street, Philadelphia, Pennsylvania 19104, USA, is authorized to supply single copies of separate articles for private use only.

For all other use, permission should be sought from Cambridge or the American Branch of Cambridge University Press.

The Proceedings of the Nutrition Society, published by the Cambridge University Press, in part record meetings of the Symposium type, at which experts in a particular field are invited by Council to make contributions on specific parts of it and at which general discussion follows these invited contributions. The contributions will be published *in extenso*; such summaries of the ensuing discussions as circumstances warrant may also be published. The Society also holds scientific meetings at which papers are communicated by members and others on original work carried out by them. It is proposed at present to publish summaries of the papers read at each meeting, each communication being recorded in the Society's *Proceedings* by means of an abstract not exceeding in length 400 words or the equivalent space in print. The *Proceedings* are published three times a year.

The subscription to the *Proceedings* is £75.00 net (US \$165.00 in USA and Canada). Single issues are £27.00 (US \$63.00 in the USA and Canada) each; postage extra.

DIRECTIONS TO CONTRIBUTORS—CHANGE IN REFERENCE STYLE

In 1989 references will appear with **full paper titles**. When submitting papers please ensure that the reference list conforms to the new style (for example, see Directions to Contributors).

The British Journal of Nutrition

Volume 61 No. 1 January 1989

CONTENTS

SUBJECT MATTER IN BRIEF	1-2
EDITORIAL. GURR M. I.	3-6
DIETARY SURVEYS: MINERALS	
VAN DOKKUM W., DE VOS R. H., MUYS TH. & WESSTRA J. A. Minerals and trace elements in total diets in The Netherlands	7-15
NUTRIENT SUBSTITUTES	
GRENBY T. H. & PHILLIPS A. Dental and metabolic effects of lactitol in the diet of laboratory rats	17-24
BODY COMPOSITION: LACTATION	
WONG WILLIAM W., BUTTE NANCY F., SMITH E. O'BRIAN, GARZA CUTBERTO & KLEIN PETER D. Body composition of lactating women determined by anthropometry and deuterium dilution	25-33
MINERAL METABOLISM	
BALNAVE D., YOSELEWITZ I. & DIXON R. J. Physiological changes associated with the production of defective egg-shells by hens receiving sodium chloride in the drinking water	35-43
CHRISP J. S., SYKES A. R. & GRACE N. D. Kinetic aspects of calcium metabolism in lactating sheep offered herbage with different Ca concentrations and the effect of protein supplementation	45-58
CHRISP J. S., SYKES A. R. & GRACE N. D. Faecal endogenous loss of calcium in young sheep	59-65
DIETARY POLYSACCHARIDES: METABOLIC EFFECTS	
MÅYMLÖF KJELL, NUNES CARLOS SIMOES & ASKBRANT STEFAN. Effects of guar gum on plasma urea, insulin and glucose in the growing pig	67-73
LAPLACE J. P., DARCY-VRILLON BEATRICE, PÉREZ J. M., HENRY Y., GIGER SYLVIE & SAUVANT D. Associative effects between two fibre sources on ileal and overall digestibilities of amino acids, energy and cell-wall components in growing pigs	75-87
LIPIDS IN BODY TISSUES	
STAMMERS J. P., HULL D., ABRAHAM R. & MCFADYEN I. R. High arachidonic acid levels in the cord blood of infants of mothers on vegetarian diets	89-97
WATKINS BRUCE A. Influences of biotin deficiency and dietary <i>trans</i> -fatty acids on tissue lipids in chickens	99-111
RUMEN NITROGEN METABOLISM	
ROOKE, J. A. & ARMSTRONG D. G. The importance of the form of nitrogen on microbial protein synthesis in the rumen of cattle receiving grass silage and continuous intrarumen infusions of sucrose	113-121
CORRIGENDUM	

© The Nutrition Society 1989

For Index of Authors see inside back cover

CAMBRIDGE UNIVERSITY PRESS

The Pitt Building, Trumpington Street, Cambridge CB2 1RP

32 East 57th Street, New York, NY 10022, USA

10 Stamford Road, Oakleigh, Melbourne 3166, Australia

Printed in Great Britain by the University Press, Cambridge