

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 0007-1145/90 \$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 £81 in UK, £85 elsewhere net (US \$180.00 in USA and Canada). Single issues are £29.00 (US \$69.00 in the USA and Canada) each; postage extra.

INDEX OF AUTHORS

Bates, C. J.	553	Harding, R. L.	431	Noguchi, T.	515, 521
Bauchart, D.	563	Hay, S. M.	535	Oxley, A.	639
Beever, D. E.	489	Hill, M. J.	639	Pell, J. M.	431
Bibby, D. C.	653	Holdsworth, E. S.	623	Quelch, D. B.	503
Borrelli, R.	411	Horowitz, M.	447	Rodgers, W.	631
Brenes, A.	419	Hudson, A.	503	Rubio, L. A.	419
Brown, J. C.	467	Innes, G. M.	535	Salter, D. N.	503
Busby, R.	481	Judd, P. A.	597	Shearer, M. J.	639
Buttery, P. J.	489	Kajikawa, M.	521	Shearman, D.	447
Castaño, M.	419	Kaske, M.	457	Simmonds, A. D.	431
Chatterton, B.	447	Kato, H.	515, 521	Smith, S.	631
Davies, I. R.	467	Kelly, F. J.	631	Southon, S.	467, 579
Dawson, J. M.	489	Kumarasunderam, R.	547	Takahashi, S.	521
Delday, M. I.	535	Legay-Carmier, F.	563	Takahashi, S.-I.	521
Doreau, M.	563	Livesey, G.	467	Umezawa, T.	521
Eagles, J.	597	McCarthy, P. T.	639	Vanderveen, J. E.	587
Elcock, C.	431	Maddox, A.	447	Vernon-Roberts, J.	447
Elliott, R. J.	503	Malhotra, A.	613	Wallis, M.	431
Engelhardt, W. v.	457	Maltin, C. A.	535	Warwick, P. M.	481
Fairweather-Tait, S. J.	597, 613	Mason, P. M.	597	Wharton, P. A.	613
Faulks, R. M.	467	Mathers, J. C.	639	Whittaker, P.	587
Fernandez, F.	639	Mendis, S.	547	Williams, P. E. V.	535
Funabiki, R.	515	Minski, M. J.	597	Wishart, J.	447
Gaillard, B.	563	Miura, Y.	515, 521	Wright, A. J. A.	579
Gee, H.	613	Montgomery, A. I.	503		
Gill, M.	489	Morrell, D. J.	431		
Grimble, R. F.	653	Naito, H.	515, 521		
Hall, M. A.	631	Nam, T. J.	515, 521		
Handel, J.	631	Neville, E.	623		

CONTENTS

Editorial

Gurr M. I. 407-410

Food Intake, Nutritional Epidemiology

Collection of food intake data: a reappraisal of criteria for judging the methods.
Borrelli Renato 411-417

Growth, Body Composition

The utilization of raw and autoclaved faba beans (*Vicia faba* L., var. minor) and faba bean fractions in diets for growing broiler chickens. *Rubio Luis A., Brenes Agustin & Castañer María* 419-430

Growth, body composition, hormonal and metabolic status in lambs treated long-term with growth hormone. *Pell J. M., Elcock C., Harding R. L., Morrell D. J., Simmonds A. D. & Wallis M.* 431-445

Gastrointestinal Motility and Function

Effect of dexfenfluramine on gastric emptying of a mixed solid-liquid meal in obese subjects. *Horowitz Michael, Maddox Anne, Wishart Judith, Vernon-Roberts Jane, Chatterton Barry & Shearman David* 447-455

The effect of size and density on mean retention time of particles in the gastrointestinal tract of sheep. *Kaske M. & Engelhardt W. v.* 457-465

Energy Metabolism

Energy balance and energy values of α -amylase (EC 3.2.1.1)-resistant maize and pea (*Pisum sativum*) starches in the rat. *Livesey G., Davies I. R., Brown J. C., Faulks R. M. & Southon S.* 467-480

Influence of mild cold on 24 h energy expenditure in 'normally' clothed adults. *Warwick P. M. & Busby R.* 481-488

Protein Nutrition and Metabolism

The effect of fishmeal on the digestion of grass silage by growing cattle. *Beever D. E., Gill M., Dawson J. M. & Buttery P. J.* 489-502

Lysine requirements and whole-body protein turnover in growing pigs. *Salter D. N., Montgomery A. I., Hudson Anna, Quelch D. B. & Elliott Rosemary J.* 503-513

Correlation between the urinary excretion of acid-soluble peptides, fractional synthesis rate of whole body proteins, and plasma immunoreactive insulin-like growth factor-1/somatomedin C concentration in the rat. *Nam Taek Jeong, Noguchi Tadashi, Funabiki Ryuhei, Kato Hisanori, Miura Yutaka & Naito Hiroshi* 515-520

Effect of dietary proteins on the plasma immunoreactive insulin-like growth factor-1/somatomedin C concentration in the rat. *Takahashi Sachiko, Kajikawa Mikio, Umezawa Tsutomu, Takahashi Shin-Ichiro, Kato Hisanori, Miura Yutaka, Nam Taek Jeong, Noguchi Tadashi & Naito Hiroshi* 521-534

Effects of bovine pituitary growth hormone alone or in combination with the β -agonist clenbuterol on muscle growth and composition in veal calves. *Maltin C. A., Delday M. I., Hay S. M., Innes G. M. & Williams P. E. V.* 535-545

continued on page facing inside back cover

For Index of Authors see inside back cover

CAMBRIDGE UNIVERSITY PRESS

The Pitt Building, Trumpington Street, Cambridge CB2 1RP
40 West 20th Street, New York, NY 10011, USA
10 Stamford Road, Oakleigh, Melbourne 3166, Australia

Printed in Great Britain by the University Press, Cambridge