

**The Proceedings of the Nutrition Society**, published by 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 meetings also include sessions at which papers are communicated by members and others on original work. 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 (excluding VAT) to the *Proceedings* is £117.00 net (US \$229.00 in USA, Canada and Mexico). Single issues are £41.00 (US \$79.00 in the USA, Canada and Mexico) each; postage extra.

**Copying.** This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. 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 0007-1145/94 \$5.00 + .00. Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions.

*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.

#### INDEX OF AUTHORS

|                     |               |                       |               |                      |               |
|---------------------|---------------|-----------------------|---------------|----------------------|---------------|
| Aleman, M.          | 199           | Fernández-López, J-A. | 199           | Pettersson, D.       | 277           |
| Allan, G. F.        | 181           |                       |               | Pine, A. P.          | 181           |
| Aranda, P.          | 315           | Greenburgh, A.        | 289           | Planells, E.         | 315           |
| Bach Knudsen, K. E. | 299           | Jessop, N. S.         | 181           | Rafecas, I.          | 199           |
| Backwell, F. R. C.  | 211           | Johansen, H. N.       | 299           | Razdan, A.           | 277           |
| Batterham, E. S.    | 221, 243, 257 |                       |               | Remesar, X.          | 199           |
| Bequette, B. J.     | 211           | Lerma, A.             | 315           | Smith, M. J.         | 325           |
| Beever, D. E.       | 211           | Llopis, J.            | 315           | Stickland, N. C.     | 173           |
| Brown, N. J.        | 289           | Lobley, G. E.         | 211           | Sutton, J. D.        | 211           |
|                     |               |                       |               | Southgate, D. A. T.  | 171           |
| Calder, A. G.       | 211           | MacRae, J. C.         | 211           |                      |               |
|                     |               | McCabe, R. D.         | 325           | Tomlin, J.           | 289           |
| Dhanoa, M. S.       | 211           | Metcalf, J. A.        | 211           |                      |               |
| Dwyer, C.           | 173           |                       |               | van Barneveld, R. J. | 221, 243, 257 |
| Dwyer, T. M.        | 325           | Norton, B. W.         | 221, 243, 257 | Walker, A.           | 211           |
|                     |               |                       |               | Wray-Cahen, D.       | 211           |
| Esteve, M.          | 199           | Oldham, J. D.         | 181           |                      |               |

CONTENTS

**Editorial**

Competition or ... . *D. A. T. Southgate* 171-172

**Effects of maternal diet on the development of fetal muscle**

Supplementation of a restricted maternal diet with protein or carbohydrate alone prevents a reduction in fetal muscle fibre number in the guinea-pig. *Catherine Dwyer & Neil C. Stickland* 173-180

**Effects of dietary restrictions during gestation and lactation**

Maternal protein reserves and their influence on lactational performance in rats. 2. Effects of dietary protein restriction during gestation and lactation on tissue protein metabolism and Na<sup>+</sup>,K<sup>+</sup>-ATPase (EC 3.6.1.3) activity. *A. P. Pine, N. S. Jessop, G. F. Allan & J. D. Oldham* 181-197

**Estimation of the protein content of the carcass**

Whole-rat protein content estimation: applicability of the N×6.25 factor. *Immaculada Rafecas, Montserrat Esteve, José-Antonio Fernández-López, Xavier Remesar & Marià Alemany* 199-209

**Kinetics of amino acid metabolism during lactation**

Kinetics of blood free and milk casein-amino acid labelling in the dairy goat at two stages of lactation. *B. J. Bequette, F. R. C. Backwell, M. S. Dhanoa, A. Walker, A. G. Calder, D. Wray-Cahen, J. A. Metcalf, J. D. Sutton, D. E. Beever, G. E. Lobley & J. C. MacRae* 211-220

**Ileal digestion of heat-treated amino acids**

The effect of heat on amino acids for growing pigs. 1. A comparison of ileal and faecal digestibilities of amino acids in raw and heat-treated field peas (*Pisum sativum* cultivar Dundale). *R. J. van Barneveld, the late E. S. Batterham & B. W. Norton* 221-241

The effect of heat on amino acids for growing pigs. 2. Utilization of ileal-digestible lysine from heat-treated field peas (*Pisum sativum* cultivar Dundale). *R. J. van Barneveld, the late E. S. Batterham & B. W. Norton* 243-256

The effect of heat on amino acids for growing pigs. 3. The availability of lysine from heat-treated field peas (*Pisum sativum* cultivar Dundale). *R. J. van Barneveld, the late E. S. Batterham & B. W. Norton* 257-275

**Effects of dietary chitin and chitosan**

Effect of chitin and chitosan on nutrient digestibility and plasma lipid concentrations in broiler chickens. *A. Razdan & D. Pettersson* 277-288

*continued on page facing inside back cover*

*For Index of Authors see inside back cover*

CAMBRIDGE  
UNIVERSITY PRESS



0007-1145(199408)72:2;1-L