### INDEX OF AUTHORS

Adron, J. W Armstrong, D. G. Asatoor, A. M.	:	. 447 347, 357 . 417	Dawson, I. M. P. Duncan, W. R. H.	:	:	417 409	Mount, L. E Muto, S	:	:	307 327
Bayley, H. S.		295, 339	Fuller, M. F			373	Ørskov, E. R.			425
Beavon, J. R. G. Beever, D. E.		. 385 347, 357	Garton, G. A.			409	Pope, J. A Porter, J. W. G.	:		447 283
Blair, A Blair, J. A	:	. 447	Hovell, F. D. de B. Huan, P. H.			409 405	Prescott, J. H. D. Prosser, D. I.	:	347,	357 417
Boyne, A. W Budowski, P	:	. 373 . 457	Hung, Le Van	:	:	405	Rolls, B. A			283
Carlson, W. E. Chadha, A. K.		295, 339 . 417	Lamming, G. E. Lis, M. T.	:	:	391 443	Seeley, R. C Sklan, D	:		357 457
Coward, W. A. Coward, D. G.	:	433, 463	Mann, S. O.			425	Stanier, M. W.	٠		307
Cowey, C. B Crampton, R. F.		. 447	Matthews, D. M. Mayes, R. W.	:	:	443 425	Thompson, F.	٠		391
Da Silva, J. F. C.	Ċ	347, 357	Milne, M. D Miyahara, C	:	:	417 327	Westgarth, D. R. Whitehead, R. G.	:	433,	283 463

### FORTHCOMING PAPERS

The next issue of the British Journal of Nutrition will appear in January 1973. It is hoped to publish in it the following papers:

### CLINICAL AND HUMAN NUTRITION

The vitamin B<sub>12</sub> content of meals and items of diet. By J. F. Adams, Fiona McEwan and Alison Wilson. The winged bean (*Psophocarpus palustris* Desv.) in the treatment of kwashiorkor. By K. ČERNÝ and HUTTON A. ADDY.

#### GENERAL NUTRITION

The effect of the chemical composition of maize plant lignin on the digestibility of maize stalk in the rumen of cattle. By NADIA F. CYMBALUK, A. J. GORDON and THE LATE T. S. NEUDOERFFER.

Rate of passage of digesta in sheep. 1. The effect of level of food intake on marker retention times along the small intestine and on apparent water absorption in the small and large intestines. By W. L. GROVUM and V. J. WILLIAMS.

Effect of an adequate-protein diet after a low-protein diet on protein catabolism in growing rats. By YOSHIMITSU HORIE and KIYOSHI ASHIDA.

Degradation of riboflavin by alimentary bacteria of the ruminant and man: production of 7,8-dimethyl-10-carboxymethylisoalloaxazine. By D. W. WEST and E. C. OWEN.

Metabolism of riboflavin: reduction of 7,8-dimethyl-10-formylmethylisoalloxazine by an enzyme in liver. By D. W. West and E. C. Owen.

Notes on a deamination method proposed for determining 'chemically available lysine' of proteins. By R. M. Allison, W. M. Laird and R. L. M. Synge.

The effects of diets containing raw soya-bean flour on the vitamin B<sub>12</sub>-status of rats. By D. L. WILLIAMS and G. H. Spray.

Relationships between copper, zinc and iron in the plasma, soft tissues and skeleton of the rat during Cu deficiency. By BEGOÑA ALFARO and F. W. HEATON.

Short-term effects of feeding rats with glucose syrup fractions and dextrose. By G. G. BIRCH, I. J. ETHE-RIDGE and L. F. GREEN.

Lesions produced by copper deficiency in neonate and older rats. By G. A. Hall and J. McC. Howell. Experimental protein-energy deficiency in rats. Ratio of serine+glycine to threonine as an index of deficiency. By Sohair I. Salem, S. M. Hegazi and S. R. Morcos.

The composition of chinchilla milk. By R. Volcani, Rivka Zisling, D. Sklan and Zifrira Nitzan.

The effect of a low-fat maternal diet on neonatal rats. By A. J. SINCLAIR and M. A. CRAWFORD.

Perinatal mortality, growth and survival to weaning in offspring of rats reared on diets moderately deficient in protein. By M. R. TURNER.

# The British Journal of Nutrition

# Volume 28 No. 3 November 1972

### **CONTENTS**

CLINICAL AND HUMAN NUTRITION	
The pH-dependent rearrangements of formyltetrahydrofolates and their nutritional implica- tions. By J. R. G. BEAVON and J. A. BLAIR	385-390
Quantitative changes in serum protein fractions during the development of kwashiorkor and in recovery. By W. A. Coward, R. G. Whitehead and Dorothy G. Coward	433-441
Changes in haemoglobin concentrations during the development of kwashiorkor. By W. A. COWARD and R. G. WHITEHEAD.	463-471
GENERAL NUTRITION	
The course of digestion of different food proteins in the rat. 3. The absorption of proteins given alone and with supplements of their limiting amino acids. By B. A. ROLLS, J. W. G. PORTER and D. R. WESTGARTH	283-293
Preparation and use of a glyceryl triether as an indicator of fat absorption. By W. E. CARLSON and H. S. BAYLEY	295-305
Growth rate, food intake and body composition before and after weaning in strains of mice selected for mature body-weight. By MARGARET W. STANIER and L. E. MOUNT	307-325
Eating behaviour of young rats: experiment on selective feeding on diet and sugar solution. By SHIZUKO MUTO and CHIHOKO MIYAHARA	327–337
Digestion of fat by young pigs: a study of the amounts of fatty acid in the digestive tract using a fat-soluble indicator of absorption. By W. E. CARLSON and H. S. BAYLEY	339–346
The effect in sheep of physical form and stage of growth on the sites of digestion of a dried grass, 1. Sites of digestion of organic matter, energy and carbohydrate. By D. E. Beever, J. F. Coelho da Silva, J. H. D. Prescott and D. G. Armstrong	347–356
The effect in sheep of physical form and stage of growth on the sites of digestion of a dried grass. 2. Sites of nitrogen digestion. By J. F. Coelho da Silva, R. C. Seeley, D. E. Beever, J. H. D. Prescott and D. G. Armstrong.	357-371
The effects of environmental temperature on the growth and metabolism of pigs given different amounts of food. 2. Energy metabolism. By M. F. Fuller and A. W. Boyne	373-384
The flow of digesta, dry matter and starch to the duodenum in sheep given rations containing straw of varying particle size. By F. Thompson and G. E. Lamming	391–403
Use of the double Thiry-Vella loop in the study of the effects of pantothenic acid on intestinal absorption of glucose. By Phan Hoang Huan and Le van Hung	405–408
Influence of dietary volatile fatty acids on the fatty-acid composition of lamb triglycerides, with special reference to the effect of propionate on the presence of branched-chain components. By G. A. GARTON, F. D. DEB. HOVELL and W. R. H. DUNCAN	<b>409</b> –416
The effect of pyridoxine deficiency on intestinal absorption of amino acids and peptides in the rat. By A. M. Asatoor, Amrit K. Chadha, I. M. P. Dawson, M. D. Milne and D. I. Prosser	417 422
Prosser	417–423 425–432
Effects of dietary restriction and protein deprivation on intestinal absorption of protein digestion products in the rat. By Maria T. Lis, D. M. Matthews and R. F. Crampton	443-446
Studies on the nutrition of marine flatfish. The protein requirement of plaice ( <i>Pleuronectes platessa</i> ). By C. B. COWEY, J. A. POPE, J. W. ADRON and A. BLAIR	447-456
Formation of linoleic acid in the rat colon. By D. SKLAN and P. BUDOWSKI	457-462
A CONTROL OF THE CONT	407-402

For Index of Authors see inside back cover

## **CAMBRIDGE UNIVERSITY PRESS**

Bentley House, 200 Euston Road, London NW1 2DB American Branch: 32 East 57th Street, New York, N.Y.10022

Single parts £4.00 net in U.K. (\$12.00 in U.S.A.)

Subscription price £18.00 net in U.K. (\$55.00 in U.S.A.)

Printed in Great Britain at the University Printing House, Cambridge