## INDEX OF AUTHORS

Adron, J. W.	127	Kaladhar, M.	141	Satyanarayana, U.	39
		Knox, D.	127	Schelp, F. P.	31
Bremner, I.	87			Schreurs, W. H. P.	31
		Lobley, C. E.	1	Soliman, H. S.	153
Care, A. D.	47	Low, A. G.	145	Sommerville, B. A.	47
Corrigall, W.	153	Lunn, P. G.	115	Stewart, R. D. H.	19
Coward, W. A.	115			Supawan, V.	31
Cowey, C. B.	127	McAnulty, P. A.	73	Swaminathan, R.	47
•		MacRae, J. C.	65		
Davies, N. T.	153			Van Nevel, C. J.	101
Demeyer, D. I.	101	Migasena, P.	31		
				Whitehead, R. G.	115
Flett, A.	153	Narasinga Rao, B. S.	39, 141	Williams, J. P. G.	73
		Nicholas, G. A.	1	Williams, R. B.	87
George, S.	127	Nishizawa, N.	149	Wilson, S.	65
Guthrie, B. E.	55	Noguchi, T.	149	-	
				Young, B. W.	87
Harris, C. I.	1	Pirie, B.	1-4		
Hassam, A. G.	137	Pongpaew, P.		Zebrowska, T.	145
Hayeyama, S.	149				
		Richold, M.	19		
Jackson, N.	93	Robinson, M. F.	19, 55	L	

### FORTHCOMING PAPERS

The next issue of the British Journal of Nutrition will appear in September 1977. It is hoped to publish in it the following papers:

Papers of direct relevance to CLINICAL AND HUMAN NUTRITION

The effect of acute illness on leucocyte and plasma ascorbic acid levels. By W. J. MACLENNAN and JUDITH C. HAMILTON

The effect of in utero protein malnutrition and subsequent renutrition on rat saliva and some salivary enzymes. By R. R. WATSON

Hydroxyproline index as a tool for nutrition status surveys in malarial regions. By R. W. WENLOCK

The effect of dietary protein deprivation on protein synthesis in the isolated liver parenchymal cell. By A. G. Grant and R. Hoffenberg

Iron absorption from a cereal diet containing cane sugar fortified with ascorbic acid. By D. Derman, M. Sayers, S. R. Lynch, R. W. Charlton, T. H. Bothwell and Fatima Mayer

A comparison of the skinfold method with degree of 'overweight' and various weight-height relationships in the assessment of obesity. By J. Womersley and J. V. G. A. Durnin

Mechanisms of heat damage in proteins. 8. The role of sucrose in the susceptibility of protein foods to heat damage. By R. F. HURRELL and K. J. CARPENTER

### Papers on GENERAL NUTRITION

Effect of exercise during rehabilitation on swimming performance, metabolism and function of muscle in rats, By N. V. RAJU

The nutritive value of non-milk proteins for the pre-ruminant calf. The effect of replacement of milk protein by soya-bean flour or fish-protein concentrate. By J. H. B. Roy, I. J. F. Stobo, Susan M. Shotton, P. Ganderton and Catherine M. Gillies

Studies in rats on the nutritional value of hydrogen-peroxide treated fish protein and the utilization of oxidized sulphur-amino acids. By L. B. Stöberg and S. L. Bostrom

Digestibilities of nitrogen compounds in rumen bacteria and in other components of digesta in the small intestine of the young steer. By D. N. Salter and R. H. Smith

On the role of higher plant and microbial lipases in the ruminal hydrolysis of grass lipids. By R. M. C. DAWSON, N. HEMINGTON and G. P. HAZLEWOOD

An improved method for the microbiological assay of available amino acids in proteins using *Tetrahymena pyriformis*. By the late N. D. Shepherd, T. G. Taylor and D. C. Wilton

# The British Journal of Nutrition

# Volume 38 No. 1 July 1977

## CONTENTS

Papers of direct relevance to CLINICAL AND HUMAN NUTRITION	
Metabolic studies in rats of 75Se incorporated in vivo into fish muscle. By Margaret Richold, Marion F. Robinson and R. D. H. Stewart	19-29
Serum proteinase inhibitors and other serum proteins in protein-energy malnutrition. By F. P. SCHELP, P. MIGASENA, P. PONGPAEW, W. H. P. SCHREURS and V. SUPAWAN	31-38
Effect of dietary protein level on some key enzymes of the tryptophan-NAD pathway. By U. SATYANARAYANA and B. S. NARASINGA RAO	39-45
Daily intakes of manganese, copper, zinc and cadmium by New Zealand women. By BARBARA E. GUTHRIE and MARION F. ROBINSON	55-63
Reasons why hypoalbuminaemia may or may not appear in protein-energy malnutrition. By W. A. COWARD, R. G. WHITEHEAD and P. G. LUNN	115–126
Papers on GENERAL NUTRITION	
Use of the constant infusion technique for measuring rates of protein synthesis in the New Zealand White rabbit. By G. A. NICHOLAS, G. E. LOBLEY and C. I. HARRIS	1-17
The effect of dietary calcium on the activity of 25-hydroxycholecalciferol-1-hydroxylase and Ca absorption in vitamin D-replete chicks. By R. SWAMINATHAN, BARBARA A. SOMMERVILLE and A. D. CARE	47-54
The effect of various forms of gastro-intestinal cannulation on digestive measurements in sheep.  By J. C. MacRae and S. Wilson	65-71
Polyamine synthesis in various tissues of the young rat during undernutrition. By P. A. MCANULTY and J. P. G. WILLIAMS	73-86
Distribution of copper and zinc in the liver of the developing sheep foetus. By I. Bremner, R. B. WILLIAMS and B. W. Young	87-92
The effect of dietary copper sulphate on laying performance, nutrient intake and tissue copper and iron levels of the mature, laying, domestic fowl. By N. Jackson	93-100
Determination of rumen microbial growth in vitro from <sup>32</sup> P-labelled phosphate incorporation. By C. J. VAN NEVEL and D. I. DEMEYER	101-114
The production of renal calcinosis by magnesium deficiency in rainbow trout, Salmo gairdneri. By C. B. Cowey, D. Knox, J. W. Adron, S. George and B. Pirie	127-135
SHORT PAPERS	
The influence of $\alpha$ -linolenic acid (18:3 $\omega$ 3) on the metabolism of $\gamma$ -linolenic acid (18:3 $\omega$ 6) in the rat. By A. G. HASSAM	137–140
Experimental protein and energy deficiencies effects on brain free amino acid composition in rats. By M. KALADHAR and B. S. NARASINGA RAO	141-144
Dry matter and nitrogen in the duodenum of growing pigs: a discrepancy explained. By A. G. Low and Teresa Zebrowska	145-147
Fractional flux rates of $N^{\tau}$ -methylhistidine in skin and gastrointestine: the contribution of these tissues to urinary excretion of $N^{\tau}$ -methylhistidine in the rat. By N. NISHIZAWA, T. NOGUCHI and S. HAYEYAMA	149-151
The susceptibility of suckling lambs to zinc toxicity. By N. T. Davies, H. S. Soliman, W. Corrigall and A. Flett	153-156

C The Nutrition Society 1977

For Index of Authors see inside back cover

### **CAMBRIDGE UNIVERSITY PRESS**

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