

## Index of Authors

- ABE, M. and IRIKI, T. Effects of diet on protozoa population and volatile fatty acid composition in permeable continuous cultures of rumen contents 255
- ABE, M., SHIBUI, H., IRIKI, T., KONDOH, K. and KAWAI, T. Effects of liquid feeding of concentrate from a pail on growth and on digestibility of the diet in young calves 469
- ÅKESSON, B. *see* FEHLING, C. 501
- APTE, S. V. *see* NARASINGA RAO, B. S. 663
- ARMSTRONG, D. G. *see* BEN-GHEDALIA, D. 37
- AXELSSON, J. *see* FEHLING, C. 501
- BAKER, S. J. *see* PEREIRA, S. M. 493
- BANNISTER, D. W. *see* WHITEHEAD, C. C. 547
- BAPURAO, S. *see* KRISHNASWAMY, K. 61
- BASSETT, J. M. *see* THOMPSON, G. E. 219
- BATTERHAM, E. S. and O'NEILL, G. H. The effect of frequency of feeding on the response by growing pigs to supplements of free lysine 265
- BEGUM, A. *see* PEREIRA, S. M. 493
- BELL, A. W. *see* THOMPSON, G. E. 219
- BEN-GHEDALIA, D., MCMENIMAN, N. P. and ARMSTRONG, D. G. The effect of partially replacing urea nitrogen with protein N on N capture in the rumen of sheep given a purified diet 37
- BIENFET, V. *see* LOMBA, F. 425
- BINES, J. A. and DAVEY, A. W. F. Metabolic changes associated with intake by cows of complete diets containing straw and concentrates in different proportions 567
- BIRKINSHAW, C. *see* HILL, G. L. 403
- BITMAN, J., WEYANT, J. R., WOOD, D. L. and WRENN, T. R. Necessity of vitamin B<sub>12</sub> for growth of rats fed on an odd- or even-carbon number fat 615
- BLAXTER, K. L. The effect of simulated altitude on the heat increment of feed in sheep 659
- BOTHWELL, T. H. *see* DERMAN, D. P. 383
- BRADLEY, J. A. *see* HILL, G. L. 403
- BRAITHWAITE, G. D. The effect of dietary calcium intake of ewes in pregnancy on their Ca and phosphorus metabolism in lactation 213
- BREMNER, I. and YOUNG, B. W. Effects of dietary molybdenum and sulphur on the distribution of copper in plasma and kidneys of sheep 325
- BRINK, P. A. *see* DERMAN, D. P. 383
- BRUN, A. *see* FEHLING, C. 501
- BRYANT, A. M. *see* MURRAY, R. M. 337
- BUBAR, R. H. *see* SYMONDS, H. W. 347
- BUDOWSKI, P. *see* SHAPIRA, N. 151, 289
- BUNTON, N. G. *see* THORN, J. 391
- BURTON, C. E. *see* THOMSON, C. D. 579
- BUSS, D. H. *see* THORN, J. 391
- BUTTERY, P. J. *see* LING, J. R. 165
- CARE, A. D. *see* FOX, J. 431
- CARE, A. D. *see* SOMMERVILLE, B. A. 411
- CASEY, C. E. and ROBINSON, M. F. Copper, manganese, zinc, nickel, cadmium and lead in human foetal tissues 639
- CHARLTON, R. W. *see* DERMAN, D. P. 383
- CHAUVAUX, G. *see* LOMBA, F. 425
- CHESTERS, J. K. and WILL, M. The assessment of zinc status of an animal from the uptake of <sup>65</sup>Zn by the cells of whole blood in vitro 297
- CHESTERS, J. K. and WILL, M. Effect of age, weight and adequacy of zinc intake on the balance between alkaline ribonuclease and ribonuclease inhibitor in various tissues of the rat 375
- COATES, M. E. *see* OKUMURA, J. 99
- COATES, M. E. *see* ROLLS, B. A. 91
- COLE, D. J. A. *see* SOHAIL, M. A. 463
- COLE, T. J. *see* DAUNCEY, M. J. 557
- COLLINS, J. F. *see* HILL, G. L. 403
- CRACKEL, W. *see* SYMONDS, H. W. 347
- DAUNCEY, M. J., MURGATROYD, P. R. and COLE, T. J. A human calorimeter for the direct and indirect measurement of 24 h energy expenditure 557
- DAVEY, A. W. F. *see* BINES, J. A. 567
- DAVIES, N. T. and FLETT, A. A. The similarity between alkaline phosphatase and phytase activities in rat intestine and their importance in phytate-induced zinc deficiency 307
- DAWSON, R. and MILNE, G. The effects of dietary nitrogen level on the collagen of rat skin 181
- DERMAN, D. P., LYNCH, S. R., BOTHWELL, T. H., CHARLTON, R. W., TORRANCE, J. D., BRINK, B. A., MARGO, G. M. and METZ, J. Serum ferritin as an index of iron nutrition in rural and urban South African children 383
- DJOLETO-NATTEY, E. *see* LEPPINGTON, I. M. 407
- DROR, Y. *see* NIR, I. 27
- FEARS, R. The hypercholesterolaemic effect of caffeine in rats fed on diets with and without supplementary cholesterol 363
- FEHLING, C., JÄGERSTAD, M., ÅKESSON, B., AXELSSON, J. and BRUN, A. Effects of vitamin B<sub>12</sub> deficiency on lipid metabolism of the rat liver and nervous system 501
- FLETT, A. A. *see* DAVIES, N. T. 307
- FOX, J., CARE, A. D. and SWAMINATHAN, R. The use of a Thiry-Vella loop of jejunum to study the intestinal absorption of calcium and inorganic phosphate in the conscious pig 431
- FRANKEL, T. L. and RIVERS, J. P. W. The nutritional and metabolic impact of  $\gamma$ -linolenic acid on cats deprived of animal lipid 227
- FRIEND, G. M. *see* ROBINSON, M. F. 589
- GURR, M. I. *see* KIRTLAND, J. 19
- HANSEN-SMITH, F. M. *see* SPENCE, C. A. 647

- HARRIS, P. M. and WIDDOWSON, E. M. Deposition of fat in the body of the rat during rehabilitation after early undernutrition 201
- HASTIE, S. W. *see* WHITTEMORE, C. T. 193
- HAZELL, T., LEDWARD, D. A. and NEALE, R. J. Iron availability from meat 631
- HEWITT, D. *see* OKUMURA, J. 99
- HILL, G. L., BRADLEY, J. A., COLLINS, J. F., MCCARTHY, I., OXBYP, C. B. and BIRKINSHAW, C. Fat-free body mass from skinfold thickness: a close relationship with total body nitrogen 403
- HOCKADAY, J. M. *see* HOCKADAY, T. D. R. 357
- HOCKADAY, T. D. R., HOCKADAY, J. M., MANN, J. I. and TURNER, R. C. Prospective comparison of modified-fat-high-carbohydrate with standard low-carbohydrate dietary advice in the treatment of diabetes: one year follow-up study 357
- IRIKI, T. *see* ABE, M. 256, 469
- JABLONSKI, E. *see* RAFALSKI, H. 13
- JACKSON, A. A. *see* PATRICK, J. 417
- JÄGERSTAD, M. *see* FEHLING, C. 501
- KARLSSON, N. *see* TOTTMAR, O. 317
- KATHOKE, S. *see* NARASINGA RAO, B. S. 663
- KAWAI, T. *see* ABE, M. 469
- KENNEDY, P. M. and MILLIGAN, L. P. Quantitative aspects of the transformations of sulphur in sheep 65
- KENNEDY, P. M. and MILLIGAN, L. P. Effects of cold exposure on digestion, microbial synthesis and nitrogen transformations in sheep 105
- KIRTLAND, J. and GURR, M. I. The effect of different dietary fats on fat cell size, number and chemical composition in rat epididymal fat pad 19
- KONDOH, K. *see* ABE, M. 469
- KRISHNASWAMY, K. and BAPURAO, S. Effect of leucine at different levels of pyridoxine on hepatic quinolinate phosphoribosyl transferase and leucine aminotransferase in rats 61
- LAWES, L. *see* PAYNE, E. 441
- LEDWARD, D. A. *see* HAZELL, T. 631
- LENG, R. A. *see* MURRAY, R. M. 337
- LENGELE, L. *see* LOMBA, F. 425
- LEPPINGTON, I. M., DJOLETO-NATTEY, E. and WHEELER, E. F. The energy content of rat carcasses prepared for analysis by different methods 407
- LEWIS, D. *see* SOHAIL, M. A. 463
- LING, J. R. and BUTTERY, P. J. The simultaneous use of ribonucleic acid, <sup>35</sup>S, 2,6-diaminopimelic acid and 2-aminoethylphosphonic acid as markers of microbial nitrogen entering the duodenum of sheep 165
- LOMBA, F., CHAUVAUX, G., TELLER, E., LENGELE, L. and BIENFET, V. Calcium digestibility in cows as influenced by the excess of alkaline ions over stable acid ions in their diets 425
- LOW, A. G., PARTRIDGE, I. G. and SAMBROOK, I. E. Studies on digestion and absorption in the intestines of growing pigs. 2. Measurements of the flow of dry matter, ash and water 515
- LYNCH, S. R. *see* DERMAN, D. P. 383
- MCCARTHY, I. *see* HILL, G. L. 403...
- MC MENIMAN, N. P. *see* BEN-GHEDALIA, D. 37
- MANN, J. I. *see* HOCKADAY, T. D. R. 357
- MARCHNER, H. *see* TOTTMAR, O. 317
- MARGO, G. M. *see* DERMAN, D. P. 383
- METZ, J. *see* DERMAN, D. P. 383
- MICHAELIS, O. E. IV, NACE, C. S. and SZEPESI, B. Effect of refeeding raw and cooked starches on hepatic enzyme activities of rats 85
- MILLIGAN, L. P. *see* KENNEDY, P. M. 65, 105
- MILNE, G. *see* DAWSON, R. 181
- MILTENBERGER, R. and OLTERSDORF, U. The B-vitamin group and the activity of hepatic microsomal mixed-function oxidases of the growing Wistar rat 127
- MINSON, D. J. *see* REES, M. C. 5
- MORANT, S. V., RIDLEY, J. L. and SUTTON, J. D. A model for the estimation of volatile fatty acid production in the rumen in non-steady-state conditions 451
- MURGATROYD, P. R. *see* DAUNCEY, M. J. 557
- MURRAY, A. B. *see* MURRAY, M. J. 159, 627
- MURRAY, M. B. *see* MURRAY, M. J. 159, 627
- MURRAY, M. J., MURRAY, A. B., MURRAY, N. J. and MURRAY, M. B. Serum cholesterol, triglycerides and heart disease of nomadic and sedentary tribesmen consuming isoenergetic diets of high and low fat content 159
- MURRAY, M. J., MURRAY, A. B., MURRAY, N. J. and MURRAY, M. B. The effect of iron status of Nigerian mothers on that of their infants at birth and 6 months, and on the concentration of Fe in breast milk 627
- MURRAY, N. J. *see* MURRAY, M. J. 159, 627
- MURRAY, R. M., BRYANT, A. M. and LENG, R. A. Methane production in the rumen and lower gut of sheep fed lucerne chaff: effect of level of intake 337
- NACE, C. S. *see* MICHAELIS, O. E. IV 85
- NARASINGA RAO, B. S., KATHOKE, S. and APTE, S. V. Mono ferrous acid citrate as an iron fortificant 663
- NEALE, R. J. *see* HAZELL, T. 631
- NICOL, B. M. and PHILLIPS, P. G. The utilization of proteins and amino acids in diets based on cassava, rice or sorghum by young Nigerian men of low income 271
- NIR, I., DROR, Y., NITSAN, Z. and SHAPIRA, N. Overfeeding influence on growth, obesity and intestinal tract in young chicks of light and heavy breeds 27
- NIR, I. *see also* SHAPIRA, N. 151, 289
- NITSAN, Z. *see* NIR, I. 27
- OKUMURA, J., HEWITT, D. and COATES, M. E. Nitrogen excretion in germ-free and conventional chickens: effects of an alkali load 99
- OLTERSDORF, U. *see* MILTENBERGER, R. 127
- O'NEILL, G. H. *see* BATTERHAM, E. S. 265
- OXBYP, C. B. *see* HILL, G. L. 403
- PARTRIDGE, I. G. Studies on digestion and absorption in the intestines of growing pigs. 3. Net movements of mineral nutrients in the digestive tract 527

- PARTRIDGE, I. G. Studies on digestion and absorption in the intestines of growing pigs. 4. Effects of dietary cellulose and sodium levels on mineral absorption 539
- PARTRIDGE, I. G. *see* LOW, A. G. 515
- PATRICK, J., REEDS, P. J., JACKSON, A. A., SEAKINS, A. and PICOU, D. I. M. Total body water in malnutrition: the possible role of energy intake 417
- PAYNE, E. Fatty acid composition of tissue phospholipids of the foetal calf and neonatal lamb, piglet and deer calf as compared with the cow, sheep, deer and pig 45
- PAYNE, E. The polyunsaturated fatty acid status of foetal and neonatal ruminants 53
- PAYNE, E. and LAWS, L. Tissue enzyme levels as indices of protein status in sheep 441
- PEREIRA, S. M., BEGUM, A. and BAKER, S. J. Studies in iron supplementation of preschool children 493
- PHILLIPS, P. G. *see* NICOL, B. M. 271
- PICOU, D. I. M. *see* PATRICK, J. 417
- PINGLE, U. and RAMASASTRI, B. V. Absorption of calcium from a leafy vegetable rich in oxalates 119
- RADCLIFFE, J. D. and WEBSTER, A. J. F. Sex, body composition and regulation of food intake during growth in the Zucker rat 483
- RAFALSKI, H., JABLONSKI, E. and SWITONIAK, T. Protein utilization in rats receiving a low-protein diet with various limiting amino acids 13
- RAMASASTRI, B. V. *see* PINGLE, U. 119
- REA, H. M. *see* ROBINSON, M. F. 589
- REEDS, P. J. *see* PATRICK, J. 417
- REES, M. C. and MINSON, D. J. Fertilizer sulphur as a factor affecting voluntary intake, digestibility and retention time of pangola grass (*Digitaria decumbens*) by sheep 5
- RIDLEY, J. L. *see* MORANT, S. V. 451
- RIVERS, J. P. W. *see* FRANKEL, T. L. 227
- ROBERTSON, J. *see* THORN, J. 391
- ROBINSON, M. F., REA, H. M., FRIEND, G. M., STEWART, R. D. H., SNOW, P. C. and THOMSON, C. D. On supplementing the selenium intake of New Zealanders. 2. Prolonged metabolic experiments with daily supplements of selenomethionine, selenite and fish 589
- ROBINSON, M. F. *see* CASEY, C. E. 639
- ROBINSON, M. F. *see* THOMSON, C. D. 579
- ROLLS, B. A., TURVEY, A. and COATES, M. E. The influence of gut microflora and of dietary fibre on epithelial cell migration in the chick intestine 91
- SAMBROOK, I. E. *see* LOW, A. G. 515
- SCHORAH, C. J., ZEMROCH, P. M., SHEPPARD, S. and SMITHELLS, R. M. Leucocyte ascorbic acid and pregnancy 139
- SCHULZ, A. R. Simulation of energy metabolism in the simple-stomached animal 235
- SEAKINS, A. *see* PATRICK, J. 417
- SHAPIRA, N., NIR, I. and BUDOWSKI, P. Response of lipogenic enzymes to intensity and duration of overfeeding in the adult Japanese quail (*Coturnix coturnix japonica*) 289
- SHAPIRA, N., NIR, I. and BUDOWSKI, P. Response of lipogenic enzymes to overfeeding in liver and adipose tissue of light and heavy breeds of chicks 151
- SHAPIRA, N. *see also* NIR, I. 27
- SHEPPARD, S. *see* SCHORAH, C. J. 139
- SHIBUI, H. *see* ABE, M. 469
- SMITHELLS, R. M. *see* SCHORAH, C. J. 139
- SNOW, P. C. *see* ROBINSON, M. F. 589
- SOHAIL, M. A., COLE, D. J. A. and LEWIS, D. Amino acid requirements of the breeding sow: the dietary lysine requirement during pregnancy 463
- SOMMERVILLE, B. A., SWAMINATHAN, R. and CARE, A. D. A comparison of the effects of dietary calcium and phosphorus deficiency on the in vitro and in vivo metabolism of 25-hydroxycholecalciferol 411
- SPENCE, C. A. and HANSEN-SMITH, F. M. Comparison of the chemical and biochemical composition of thirteen muscles of the rat after dietary protein restriction 647
- SPREADBURY, D. A study of the protein and amino acid requirements of the growing New Zealand White rabbit with emphasis on lysine and the sulphur-containing amino acids 601
- STEWART, R. D. H. *see* ROBINSON, M. F. 589
- SUTTON, J. D. *see* MORANT, S. V. 451
- SWAMINATHAN, R. *see* FOX, J. 431
- SWAMINATHAN, R. *see* SOMMERVILLE, B. A. 411
- SWITONIAK, T. *see* RAFALSKI, H. 13
- SYMONDS, H. W., BUBAR, R. H., CRACKEL, W. C. and TWARDOCK, A. R. The effect of litter size upon placental blood flow and placental calcium transfer in the multifoetate guinea-pig 347
- SZEPESI, B. *see* MICHAELIS, O. E. IV 85
- TELLER, E. *see* LOMBA, F. 425
- THOMPSON, G. E., BASSETT, J. M. and BELL, A. W. The effects of feeding and acute cold exposure on the visceral release of volatile fatty acids, estimated hepatic uptake of propionate and release of glucose, and plasma insulin concentration in sheep 219
- THOMSON, C. D., BURTON, C. E. and ROBINSON, M. F. On supplementing the selenium intake of New Zealanders. 1. Short experiments with large doses of selenite or selenomethionine 579
- THOMSON, C. D. *see* ROBINSON, M. F. 589
- THORN, J., ROBERTSON, J., BUSS, D. H. and BUNTON, N. G. Trace nutrients. Selenium in British food 391
- THURLBY, P. L. and TRAYHURN, P. The development of obesity in preweaning obob mice 397
- TORRANCE, J. D. *see* DERMAN, D. P. 383
- TOTTMAR, O., MARCHNER, H. and KARLSSON, N. The presence of an aldehyde dehydrogenase inhibitor in animal diets and its effects on the experimental results in alcohol studies 317
- TRAYHURN, P. *see* THURLBY, P. L. 397
- TULLIS, J. B. *see* WHITTEMORE, C. T. 193
- TURNER, R. C. *see* HOCKADAY, T. D. R. 357
- TURVEY, A. *see* ROLLS, B. A. 91
- TWARDOCK, A. R. *see* SYMONDS, H. W. 347
- WEBSTER, A. J. F. *see* RADCLIFFE, J. D. 483

- WEYANT, J. R. *see* BITMAN, J. 615  
WHEELER, E. F. *see* LEPPINGTON, I. M. 407  
WHITEHEAD, C. C. and BANNISTER, D. W. Blood pyruvate carboxylase (*EC* 6.4.1.1) activity as a criterion of biotin status in chickens and turkeys 547  
WHITTEMORE, C. T., TULLIS, J. B. and HASTIE, S. W. Efficiency of use of nitrogen from dried microbial cells after a period of N deprivation in growing pigs 193  
WIDDOWSON, E. M. *see* HARRIS, P. M. 201  
WILL, M. *see* CHESTERS, J. K. 297, 375  
WOOD, D. L. *see* BITMAN, J. 615  
WRENN, T. R. *see* BITMAN, J. 615  
YOUNG, B. W. *see* BREMNER, I. 325  
ZEMROCH, P. M. *see* SCHORAH, C. J. 139