

## Index of Authors

- ARNAL M. *see* ATTAIX D., AUROUSSEAU E., MANGHEBATI A. & ARNAL M. Contribution of liver, skin and skeletal muscle to whole-body protein synthesis in the young lamb. 77
- ATINMO T., MBOFUNG C.M.F., EGUN G. & OSOTIMEHIN B. Nitrogen balance study in young Nigerian adult males using four levels of protein intake. 451
- ATINMO T., EGUN G. & MBOFUNG C.M.F. Long-term evaluation of the adequacy of habitual diets to provide protein needs of adult Nigerian men. 459
- ATTAIX D., AUROUSSEAU E., MANGHEBATI A. & ARNAL M. Contribution of liver, skin and skeletal muscle to whole-body protein synthesis in the young lamb. 77
- AUROUSSEAU Bernard Effects of substitution of tricaproin for tallow and of protein concentration in milk substitutes on nitrogen and energy balance in the preruminant lamb. 525
- AUROUSSEAU E. *see* ATTAIX D., AUROUSSEAU E., MANGHEBATI A. & ARNAL M. Contribution of liver, skin and skeletal muscle to whole-body protein synthesis in the young lamb. 77
- BARDSLEY R.G. *see* HIGGINS Janet A., LASSLETT Yvonne V., BARDSLEY R.G. & BUTTERY P.J. The relation between dietary restriction or clenbuterol (a selective  $\beta_2$  agonist) treatment on muscle growth and calpain proteinase (*EC* 3.4.22.17) and calpastatin activities in lambs. 645
- BARTRAM C.G. *see* MARSDEN M., BRUCE C.I., BARTRAM C.G. & BUTTERY P.J. Initial studies on leucine metabolism in the rumen of sheep. 161
- BATES C.J., COWEN T.D. & TSUCHIYA Harumi Growth, ascorbic acid and iron contents of tissues of young guinea-pigs whose dams received high or low levels of dietary ascorbic acid or Fe during pregnancy and suckling. 487
- BEARNE C.A. *see* MALLETT A.K., BEARNE C.A., YOUNG P.J., ROWLAND I.R. & BERRY C. Influence of starches of low digestibility on the rat caecal microflora. 597
- BECK Bernard *see* DOLLET Jean-Marc, BECK Bernard & MAX Jean-Pierre Effect of the duration of malnutrition and of nutritional rehabilitation on blood glucose homeostasis and pancreatic hormones in rats. 69
- BEEVER D.E. *see* ULYATT M.J., THOMSON D.J., BEEVER D.E., EVANS R.T. & HAINES M.J. The digestion of perennial ryegrass (*Lolium perenne* cv. Melle) and white clover (*Trifolium repens* cv. Blanca) by grazing cattle. 137
- BEEVER D.E. *see* THOMAS C., GIBBS B.G., BEEVER D.E. & THURNHAM B.R. The effect of date of cut and barley substitution on gain and on the efficiency of utilization of grass silage by growing cattle. 1. Gains in live weight and its components. 297
- BEEVER D.E., CAMMELL S.B., THOMAS C., SPOONER M.C., HAINES M.J. & GALE D.L. The effect of date of cut and barley substitution on gain and on the efficiency of utilization of grass silage by growing cattle. 2. Nutrient supply and energy partition. 307
- BEEVER D.E. *see* DAWSON J.M., BRUCE C.I., BUTTERY P.J., GILL M. & BEEVER D.E. Protein metabolism in the rumen of silage-fed steers: effect of fishmeal supplementation. 339
- BELL A.W. *see* DUNSHEA F.R., BELL A.W. & TRIGG T.E. Relations between plasma non-esterified fatty acid metabolism and body tissue mobilization during chronic undernutrition in goats. 633
- BELLEVILLE J. *see* NARCE M., POISSON J.-P., BELLEVILLE J. & CHANUSSOT B. Time-course effects of protein malnutrition on hepatic fatty acids  $\Delta 6$  and  $\Delta 5$  desaturation in the growing rat. 389
- BELLEVILLE Jacques *see* PROST Josiane, BELLEVILLE Jacques & VALANTIN-ROLLET Carole Effects of age, and protein malnutrition followed by a balanced diet on the non-parallel change in digestive enzymes in the pancreas and their secretion in the rat. 619
- BERG T. *see* BLOMHOFF R., BERG T. & NORUM K.R. Distribution of retinol in rat liver cells: effect of age, sex and nutritional status. 233
- BERRY C. *see* MALLETT A.K., BEARNE C.A., YOUNG P.J., ROWLAND I.R. & BERRY C. Influence of starches of low digestibility on the rat caecal microflora. 597
- BLOMHOFF R., BERG T. & NORUM K.R. Distribution of retinol in rat liver cells: effect of age, sex and nutritional status. 233

- BOLTON-SMITH Caroline *see* GIBNEY M.J. & BOLTON-SMITH Caroline The effect of a dietary supplement of *n*-3 polyunsaturated fat on platelet lipid composition, platelet function and platelet plasma membrane fluidity in healthy volunteers. 5
- BONHOMME-FLORENTIN A. Degradation of hemicellulose and pectin by horse caecum contents. 185
- BRICHARD S.M. *see* OKITOLONDA W., BRICHARD S.M., POTTIER A.M. & HENQUIN J.C. Influence of low- and high-protein diets on glucose homeostasis in the rat. 509
- BROOKES I.M. *see* WILSON G.F., MACKENZIE D.D.S., BROOKES I.M. & LYON G.L. Importance of body tissues as sources of nutrients for milk synthesis in the cow, using <sup>13</sup>C as a marker. 605
- BRUCE C.I. *see* MARSDEN M., BRUCE C.I., BARTRAM C.G. & BUTTERY P.J. Initial studies on leucine metabolism in the rumen of sheep. 161
- BRUCE C.I. *see* DAWSON J.M., BRUCE C.I., BUTTERY P.J., GILL M. & BEEVER D.E. Protein metabolism in the rumen of silage-fed steers: effect of fishmeal supplementation. 339
- BRYANT M.J. *see* SYMONDS M.E., BRYANT M.J., SHEPHERD D.A.L. & LOMAX M.A. Glucose metabolism in shorn and unshorn pregnant sheep. 249
- BRYDON W.G. *see* WALTER D.J., EASTWOOD M.A., BRYDON W.G. & ELTON R.A. Fermentation of wheat bran and gum arabic in rats fed on an elemental diet. 225
- BUSS David H. *see* LEWIS Janet & BUSS David H. Trace nutrients. 5. Minerals and vitamins in the British household food supply. 413
- BUTTERY P.J. *see* MARSDEN M., BRUCE C.I., BARTRAM C.G. & BUTTERY P.J. Initial studies on leucine metabolism in the rumen of sheep. 161
- BUTTERY P.J. *see* DAWSON J.M., BRUCE C.I., BUTTERY P.J., GILL M. & BEEVER D.E. Protein metabolism in the rumen of silage-fed steers: effect of fishmeal supplementation. 339
- BUTTERY P.J. *see* HIGGINS Janet A., LASSLETT Yvonne V., BARDSLEY R.G. & BUTTERY P.J. The relation between dietary restriction or clenbuterol (a selective  $\beta_2$  agonist) treatment on muscle growth and calpain proteinase (*EC* 3.4.22.17) and calpastatin activities in lambs. 645
- CAMMELL S.B. *see* BEEVER D.E., CAMMELL S.B., THOMAS C., SPOONER M.C., HAINES M.J. & GALE D.L. The effect of date of cut and barley substitution on gain and on the efficiency of utilization of grass silage by growing cattle. 2. Nutrient supply and energy partition. 307
- CHANUSSOT B. *see* NARCE M., POISSON J.-P., BELLEVILLE J. & CHANUSSOT B. Time-course effects of protein malnutrition on hepatic fatty acids  $\Delta 6$  and  $\Delta 5$  desaturation in the growing rat. 389
- COCKBURN J.E. *see* MCALLAN A.B., COCKBURN J.E., WILLIAMS A.P. & SMITH R.H. The degradation of different protein supplements in the rumen of steers and the effects of these supplements on carbohydrate digestion. 669
- CONNOLLY Aedeon *see* GIBNEY M.J. & CONNOLLY Aedeon Uptake of exogenous and endogenous eicosapentaenoic acid by cultured human mononuclear cells. 13
- COOMBE J.B. *see* SPENCER D., HIGGINS T.J.V., FREER M., DOVE H. & COOMBE J.B. Monitoring the fate of dietary proteins in rumen fluid using gel electrophoresis. 241
- COPPEN D.E. & DAVIES N.T. Studies on the roles of apotransferrin and caeruloplasmin (*EC* 1.16.3.1) on iron absorption in copper-deficient rats using an isolated vascularly- and lumenally-perfused intestinal preparation. 361
- COWEN T.D. *see* BATES C.J., COWEN T.D. & TSUCHIYA Harumi Growth, ascorbic acid and iron contents of tissues of young guinea-pigs whose dams received high or low levels of dietary ascorbic acid or Fe during pregnancy and suckling. 487
- DAVIES N.T. *see* COPPEN D.E. & DAVIES N.T. Studies on the roles of apotransferrin and caeruloplasmin (*EC* 1.16.3.1) on iron absorption in copper-deficient rats using an isolated vascularly- and lumenally-perfused intestinal preparation. 361
- DAWRA R.K. *see* MAKKAR H.P.S., SINGH B. & DAWRA R.K. Effect of tannin-rich leaves of oak (*Quercus incana*) on various microbial enzyme activities of the bovine rumen. 287
- DAWSON J.M., BRUCE C.I., BUTTERY P.J., GILL M. & BEEVER D.E. Protein metabolism in the rumen of silage-fed steers: effect of fishmeal supplementation. 339
- DOLLET Jean-Marc, BECK Bernard & MAX Jean-Pierre Effect of the duration of malnutrition and of nutritional rehabilitation on blood glucose homeostasis and pancreatic hormones in rats. 69
- DONNAN S.P.B. *see* WOO Jean, HO S.C., DONNAN S.P.B. & SWAMINATHAN R. Nutritional status of healthy, active, Chinese elderly. 21
- DOVE H. *see* SPENCER D., HIGGINS T.J.V., FREER M., DOVE H. & COOMBE J.B. Monitoring the fate of dietary proteins in rumen fluid using gel electrophoresis. 241

## Index of Authors

691

- DOVE H. Estimation of the intake of milk by lambs, from the turnover of deuterium- or tritium-labelled water. 375
- DOVE H., MILNE J.A., SIBBALD A.M., LAMB C.S. & MCCORMACK H.A. Circadian variation in abomasal digesta flow in grazing ewes during lactation. 653
- DRIVER Christopher J.I. The effect of meal composition on the degree of satiation following a test meal and possible mechanisms involved. 441
- DUNSHEA F.R., BELL A.W. & TRIGG T.E. Relations between plasma non-esterified fatty acid metabolism and body tissue mobilization during chronic undernutrition in goats. 633
- EASTWOOD M.A. *see* WALTER D.J., EASTWOOD M.A., BRYDON W.G. & ELTON R.A. Fermentation of wheat bran and gum arabic in rats fed on an elemental diet. 225
- EDMUNDSON S.A. *see* EDMUNDSON W.C. & EDMUNDSON S.A. Food intake and work allocation of male and female farmers in an impoverished Indian village. 433
- EDMUNDSON W.C. & EDMUNDSON S.A. Food intake and work allocation of male and female farmers in an impoverished Indian village. 433
- EDWARDS R.H.T. *see* JACKSON M.J., ROBERTS J. & EDWARDS R.H.T. Effects of dietary-fish-oil feeding on muscle growth and damage in the rat. 217
- EGUN G. *see* ATINMO T., MBOFUNG C.M.F., EGUN G. & OSOTIMEHIN B. Nitrogen balance study in young Nigerian adult males using four levels of protein intake. 451
- EGUN G. *see* ATINMO T., EGUN G. & MBOFUNG C.M.F. Long-term evaluation of the adequacy of habitual diets to provide protein needs of adult Nigerian men. 459
- ELLIS W.C. *see* POND K.R., ELLIS W.C., MATIS J.H., FERREIRO H.M. & SUTTON J.D. Compartment models for estimating attributes of digesta flow in cattle. 571
- ELTON R.A. *see* WALTER D.J., EASTWOOD M.A., BRYDON W.G. & ELTON R.A. Fermentation of wheat bran and gum arabic in rats fed on an elemental diet. 225
- EVANS R.T. *see* ULYATT M.J., THOMSON D.J., BEEVER D.E., EVANS R.T. & HAINES M.J. The digestion of perennial ryegrass (*Lolium perenne* cv. Melle) and white clover (*Trifolium repens* cv. Blanca) by grazing cattle. 137
- FAIRWEATHER-TAIT Susan J., SOUTHON Susan & PIPER Zoe The effect of alcoholic beverages on iron and zinc metabolism in the rat. 209
- FAIRWEATHER-TAIT Susan J. *see* SOUTHON Susan, KECHRID Z., WRIGHT A.J.A. & FAIRWEATHER-TAIT Susan J. Effect of reduced dietary zinc intake on carbohydrate and Zn metabolism in the genetically diabetic mouse (C57BL/KsJ *db + /db +*). 499
- FERREIRO H.M. *see* POND K.R., ELLIS W.C., MATIS J.H., FERREIRO H.M. & SUTTON J.D. Compartment models for estimating attributes of digesta flow in cattle. 571
- FLETCHER J.M. & MCKENZIE N. The effects of dietary fat content on the growth and body composition of lean and genetically obese Zucker rats adrenalectomized before weaning. 563
- FREER M. *see* SPENCER D., HIGGINS T.J.V., FREER M., DOVE H. & COOMBE J.B. Monitoring the fate of dietary proteins in rumen fluid using gel electrophoresis. 241
- FRENCH A.P. *see* MORGAN L.M., TREDGER J.A.T., HAMPTON S.M., FRENCH A.P., PEAKE J.C.F. & MARKS V. The effect of dietary modification and hyperglycaemia on gastric emptying and gastric inhibitory polypeptide (GIP) secretion. 29
- GALE D.L. *see* BEEVER D.E., CAMMELL S.B., THOMAS C., SPOONER M.C., HAINES M.J. & GALE D.L. The effect of date of cut and barley substitution on gain and on the efficiency of utilization of grass silage by growing cattle. 2. Nutrient supply and energy partition. 307
- GEE J.M. *see* WYATT G.M., HORN N., GEE J.M. & JOHNSON I.T. Intestinal microflora and gastrointestinal adaptation in the rat in response to non-digestible dietary polysaccharides. 197
- GETTYS Tom W., MILLS Susan & HENRICKS Donald M. An evaluation of the relation between food consumption rate and equilibrium body-weight in male rats. 151
- GIBBS B.G. *see* THOMAS C., GIBBS B.G., BEEVER D.E. & THURNHAM B.R. The effect of date of cut and barley substitution on gain and on the efficiency of utilization of grass silage by growing cattle. 1. Gains in live weight and its components. 297
- GIBNEY M.J. & BOLTON-SMITH Caroline The effect of a dietary supplement of *n*-3 polyunsaturated fat on platelet lipid composition, platelet function and platelet plasma membrane fluidity in healthy volunteers. 5
- GIBNEY M.J. & CONNOLLY Aedeen Uptake of exogenous and endogenous eicosapentaenoic acid by cultured human mononuclear cells. 13

- GILL M. *see* DAWSON J.M., BRUCE C.I., BUTTERY P.J., GILL M. & BEEVER D.E. Protein metabolism in the rumen of silage-fed steers: effect of fishmeal supplementation. 339
- HAINES M.J. *see* ULYATT M.J., THOMSON D.J., BEEVER D.E., EVANS R.T. & HAINES M.J. The digestion of perennial ryegrass (*Lolium perenne* cv. Melle) and white clover (*Trifolium repens* cv. Blanca) by grazing cattle. 137
- HAINES M.J. *see* BEEVER D.E., CAMMELL S.B., THOMAS C., SPOONER M.C., HAINES M.J. & GALE D.L. The effect of date of cut and barley substitution on gain and on the efficiency of utilization of grass silage by growing cattle. 2. Nutrient supply and energy partition. 307
- HAMPTON S.M. *see* MORGAN L.M., TREDGER J.A.T., HAMPTON S.M., FRENCH A.P., PEAKE J.C.F. & MARKS V. The effect of dietary modification and hyperglycaemia on gastric emptying and gastric inhibitory polypeptide (GIP) secretion. 29
- HART I.C. *see* SUTTON J.D., HART I.C., MORANT S.V., SCHULLER E. & SIMMONDS A.D. Feeding frequency for lactating cows: diurnal patterns of hormones and metabolites in peripheral blood in relation to milk-fat concentration. 265
- HENQUIN J.C. *see* OKITOLONDA W., BRICHARD S.M., POTTIER A.M. & HENQUIN J.C. Influence of low- and high-protein diets on glucose homeostasis in the rat. 509
- HENRICKS Donald M. *see* GETTYS Tom W., MILLS Susan & HENRICKS Donald M. An evaluation of the relation between food consumption rate and equilibrium body-weight in male rats. 151
- HIGGINS Janet A., LASSLETT Yvonne V., BARDSLEY R.G. & BUTTERY P.J. The relation between dietary restriction or clenbuterol (a selective  $\beta_2$  agonist) treatment on muscle growth and calpain proteinase (EC 3.4.22.17) and calpastatin activities in lambs. 645
- HIGGINS T.J.V. *see* SPENCER D., HIGGINS T.J.V., FREER M., DOVE H. & COOMBE J.B. Monitoring the fate of dietary proteins in rumen fluid using gel electrophoresis. 241
- HO S.C. *see* WOO Jean, HO S.C., DONNAN S.P.B. & SWAMINATHAN R. Nutritional status of healthy, active, Chinese elderly. 21
- HOCKADAY T.D.R. *see* NG L.L. & HOCKADAY T.D.R. The effect of Intralipid® infusion on the human leucocyte sodium-pump in vivo. 49
- HORIGOME T., KUMAR R. & OKAMOTO K. Effects of condensed tannins prepared from leaves of fodder plants on digestive enzymes in vitro and in the intestine of rats. 275
- HORN N. *see* WYATT G.M., HORN N., GEE J.M. & JOHNSON I.T. Intestinal microflora and gastrointestinal adaptation in the rat in response to non-digestible dietary polysaccharides. 197
- HUANG Chia *see* LIN Yaw-Huei, HUANG Tzou-Chi & HUANG Chia Quality improvement of sweet-potato (*Ipomoea batatas* L. Lam.) roots as feed by ensilage. 173
- HUANG Tzou-Chi *see* LIN Yaw-Huei, HUANG Tzou-Chi & HUANG Chia Quality improvement of sweet-potato (*Ipomoea batatas* L. Lam.) roots as feed by ensilage. 173
- HUNTINGTON Gerald B. *see* REYNOLDS Christopher K. & HUNTINGTON Gerald B. Partition of portal-drained visceral net flux in beef steers. 1. Blood flow and net flux of oxygen, glucose and nitrogenous compounds across stomach and post-stomach tissues. 539
- HUNTINGTON Gerald B. *see* REYNOLDS Christopher K. & HUNTINGTON Gerald B. Partition of portal-drained visceral net flux in beef steers. 2. Net flux of volatile fatty acids, D- $\beta$ -hydroxybutyrate and L-lactate across stomach and post-stomach tissues. 553
- JACKSON M.J., ROBERTS J. & EDWARDS R.H.T. Effects of dietary-fish-oil feeding on muscle growth and damage in the rat. 217
- JOHNSON I.T. *see* WYATT G.M., HORN N., GEE J.M. & JOHNSON I.T. Intestinal microflora and gastrointestinal adaptation in the rat in response to non-digestible dietary polysaccharides. 197
- JUNG J. *see* RÉRAT A., JUNG J. & KANDÉ J. Absorption kinetics of dietary hydrolysis products in conscious pigs given diets with different amounts of fish protein. 2. Individual amino acids. 105
- KANDÉ J. *see* RÉRAT A., JUNG J. & KANDÉ J. Absorption kinetics of dietary hydrolysis products in conscious pigs given diets with different amounts of fish protein. 2. Individual amino acids. 105
- KATO H. *see* NOGUCHI T., NAM T. J., KATO H. & NAITO H. Further studies on the nutritional factors affecting the urinary excretion of acid-soluble peptides in rats. 321
- KATOH K., SATO F., YAMAZAKI A., SASAKI Y. & TSUDA T. Passage of indigestible particles of various specific gravities in sheep and goats. 683
- KECHRID Z. *see* SOUTHON Susan, KECHRID Z., WRIGHT A.J.A. & FAIRWEATHER-TAIT Susan J. Effect of reduced dietary zinc intake on carbohydrate and Zn metabolism in the genetically diabetic mouse (C57BL/KsJ *db+ /db+*). 499
- KUMAR R. *see* HORIGOME T., KUMAR R. & OKAMOTO K. Effects of condensed tannins prepared from leaves of fodder plants on digestive enzymes in vitro and in the intestine of rats. 275

## Index of Authors

693

- LAMB C.S. *see* DOVE H., MILNE J.A., SIBBALD A.M., LAMB C.S. & MCCORMACK H.A. Circadian variation in abomasal digesta flow in grazing ewes during lactation. 653
- LASSLETT Yvonne V. *see* HIGGINS Janet A., LASSLETT Yvonne V., BARDSLEY R.G. & BUTTERY P.J. The relation between dietary restriction or clenbuterol (a selective  $\beta_2$  agonist) treatment on muscle growth and calpain proteinase (*EC* 3.4.22.17) and calpastatin activities in lambs. 645
- LEWIS Janet & BUSS David H. Trace nutrients. 5. Minerals and vitamins in the British household food supply. 413
- LIN Yaw-Huei, HUANG Tzou-Chi & HUANG Chia Quality improvement of sweet-potato (*Ipomoea batatas* L. Lam.) roots as feed by ensilage. 173
- LOMAX M.A. *see* SYMONDS M.E., BRYANT M.J., SHEPHERD D.A.L. & LOMAX M.A. Glucose metabolism in shorn and unshorn pregnant sheep. 249
- LYON G.L. *see* WILSON G.F., MACKENZIE D.D.S., BROOKES I.M. & LYON G.L. Importance of body tissues as sources of nutrients for milk synthesis in the cow, using  $^{13}\text{C}$  as a marker. 605
- MCALLAN A.B., COCKBURN J.E., WILLIAMS A.P. & SMITH R.H. The degradation of different protein supplements in the rumen of steers and the effects of these supplements on carbohydrate digestion. 669
- MCCORMACK H.A. *see* DOVE H., MILNE J.A., SIBBALD A.M., LAMB C.S. & MCCORMACK H.A. Circadian variation in abomasal digesta flow in grazing ewes during lactation. 653
- MCDONALD I.A. *see* MANSELL P.I. & MCDONALD I.A. The effect of underfeeding on the physiological response to food ingestion in normal weight women. 39
- MACKENZIE D.D.S. *see* WILSON G.F., MACKENZIE D.D.S., BROOKES I.M. & LYON G.L. Importance of body tissues as sources of nutrients for milk synthesis in the cow, using  $^{13}\text{C}$  as a marker. 605
- MCKENZIE N. *see* FLETCHER J.M. & MCKENZIE N. The effects of dietary fat content on the growth and body composition of lean and genetically obese Zucker rats adrenalectomized before weaning. 563
- MAKKAR H.P.S., SINGH B. & DAWRA R.K. Effect of tannin-rich leaves of oak (*Quercus incana*) on various microbial enzyme activities of the bovine rumen. 287
- MALLET A.K., BEARNE C.A., YOUNG P.J., ROWLAND I.R. & BERRY C. Influence of starches of low digestibility on the rat caecal microflora. 597
- MANGHEBATI A. *see* ATTAIX D., AUROUSSEAU E., MANGHEBATI A. & ARNAL M. Contribution of liver, skin and skeletal muscle to whole-body protein synthesis in the young lamb. 77
- MANSELL P.I. & MCDONALD I.A. The effect of underfeeding on the physiological response to food ingestion in normal weight women. 39
- MARKS V. *see* MORGAN L.M., TREDGER J.A.T., HAMPTON S.M., FRENCH A.P., PEAKE J.C.F. & MARKS V. The effect of dietary modification and hyperglycaemia on gastric emptying and gastric inhibitory polypeptide (GIP) secretion. 29
- MARSDEN M., BRUCE C.I., BARTRAM C.G. & BUTTERY P.J. Initial studies on leucine metabolism in the rumen of sheep. 161
- MATIS J.H. *see* POND K.R., ELLIS W.C., MATIS J.H., FERREIRO H.M. & SUTTON J.D. Compartment models for estimating attributes of digesta flow in cattle. 571
- MAX Jean-Pierre *see* DOLLET Jean-Marc, BECK Bernard & MAX Jean-Pierre Effect of the duration of malnutrition and of nutritional rehabilitation on blood glucose homeostasis and pancreatic hormones in rats. 69
- MBOFUNG C.M.F. *see* ATINMO T., MBOFUNG C.M.F., EGUN G. & OSOTIMEHIN B. Nitrogen balance study in young Nigerian adult males using four levels of protein intake. 451
- MBOFUNG C.M.F. *see* ATINMO T., EGUN G. & MBOFUNG C.M.F. Long-term evaluation of the adequacy of habitual diets to provide protein needs of adult Nigerian men. 459
- MILLS Susan *see* GETTYS Tom W., MILLS Susan & HENRICKS Donald M. An evaluation of the relation between food consumption rate and equilibrium body-weight in male rats. 151
- MILNE J.A. *see* DOVE H., MILNE J.A., SIBBALD A.M., LAMB C.S. & MCCORMACK H.A. Circadian variation in abomasal digesta flow in grazing ewes during lactation. 653
- MORANT S.V. *see* SUTTON J.D., HART I.C., MORANT S.V., SCHULLER E. & SIMMONDS A.D. Feeding frequency for lactating cows: diurnal patterns of hormones and metabolites in peripheral blood in relation to milk-fat concentration. 265
- MORGAN L.M., TREDGER J.A.T., HAMPTON S.M., FRENCH A.P., PEAKE J.C.F. & MARKS V. The effect of dietary modification and hyperglycaemia on gastric emptying and gastric inhibitory polypeptide (GIP) secretion. 29
- NAITO H. *see* NOGUCHI T., NAM T. J., KATO H. & NAITO H. Further studies on the nutritional factors affecting the urinary excretion of acid-soluble peptides in rats. 321

- NAM T. J. *see* NOGUCHI T., NAM T. J., KATO H. & NAITO H. Further studies on the nutritional factors affecting the urinary excretion of acid-soluble peptides in rats. 321
- NARCE M., POISSON J.-P., BELLEVILLE J. & CHANUSSOT B. Time-course effects of protein malnutrition on hepatic fatty acids  $\Delta 6$  and  $\Delta 5$  desaturation in the growing rat. 389
- NG L.L. & HOCKADAY T.D.R. The effect of Intralipid® infusion on the human leucocyte sodium-pump in vivo. 49
- NG T.B. *see* SAHA N., NG T.B., TAN P.Y. & WEE K.P. Vitamin A reserve of liver in health and coronary heart disease among ethnic groups in Singapore. 407
- NIR I. *see* PINCHASOV Y., NIR I. & NITSAN Zafira The synthesis in vivo of proteins in various tissues in chickens adapted to intermittent feeding. 517
- NITSAN Zafira *see* PINCHASOV Y., NIR I. & NITSAN Zafira The synthesis in vivo of proteins in various tissues in chickens adapted to intermittent feeding. 517
- NOGUCHI T., NAM T. J., KATO H. & NAITO H. Further studies on the nutritional factors affecting the urinary excretion of acid-soluble peptides in rats. 321
- NORUM K.R. *see* BLOMHOFF R., BERG T. & NORUM K.R. Distribution of retinol in rat liver cells: effect of age, sex and nutritional status. 233
- NUNES C. *see* RÉRAT A., NUNES C., SIMOES Mendy F. & ROGER L. Amino acid absorption and production of pancreatic hormones in non-anaesthetized pigs after duodenal infusions of a milk enzymic hydrolysate or of free amino acids. 121
- O'CONNOR Deborah L., PICCIANO Mary Frances & SHERMAN Adria R. Impact of maternal iron deficiency on quality and quantity of milk ingested by neonatal rats. 477
- OKAMOTO K. *see* HORIGOME T., KUMAR R. & OKAMOTO K. Effects of condensed tannins prepared from leaves of fodder plants on digestive enzymes in vitro and in the intestine of rats. 275
- OKITOLONDA W., BRICHARD S.M., POTTIER A.M. & HENQUIN J.C. Influence of low- and high-protein diets on glucose homeostasis in the rat. 509
- OSOTIMEHIN B. *see* ATINMO T., MBOFUNG C.M.F., EGUN G. & OSOTIMEHIN B. Nitrogen balance study in young Nigerian adult males using four levels of protein intake. 451
- PEAKE J.C.F. *see* MORGAN L.M., TREDGER J.A.T., HAMPTON S.M., FRENCH A.P., PEAKE J.C.F. & MARKS V. The effect of dietary modification and hyperglycaemia on gastric emptying and gastric inhibitory polypeptide (GIP) secretion. 29
- PICCIANO Mary Frances *see* O'CONNOR Deborah L., PICCIANO Mary Frances & SHERMAN Adria R. Impact of maternal iron deficiency on quality and quantity of milk ingested by neonatal rats. 477
- PINCHASOV Y., NIR I. & NITSAN Zafira The synthesis in vivo of proteins in various tissues in chickens adapted to intermittent feeding. 517
- PIPER Zoe *see* FAIRWEATHER-TAIT Susan J., SOUTHON Susan & PIPER Zoe The effect of alcoholic beverages on iron and zinc metabolism in the rat. 209
- POISSON J.-P. *see* NARCE M., POISSON J.-P., BELLEVILLE J. & CHANUSSOT B. Time-course effects of protein malnutrition on hepatic fatty acids  $\Delta 6$  and  $\Delta 5$  desaturation in the growing rat. 389
- POND K.R., ELLIS W.C., MATIS J.H., FERREIRO H.M. & SUTTON J.D. Compartment models for estimating attributes of digesta flow in cattle. 571
- POTTIER A.M. *see* OKITOLONDA W., BRICHARD S.M., POTTIER A.M. & HENQUIN J.C. Influence of low- and high-protein diets on glucose homeostasis in the rat. 509
- PROST Josiane, BELLEVILLE Jacques & VALANTIN-ROLLET Carole Effects of age, and protein malnutrition followed by a balanced diet on the non-parallel change in digestive enzymes in the pancreas and their secretion in the rat. 619
- READ N.W. *see* TOMLIN J. & READ N.W. The relation between bacterial degradation of viscous polysaccharides and stool output in human beings. 467
- RÉRAT A., VAISSADE P. & VAUGELADE P. Absorption kinetics of dietary hydrolysis products in conscious pigs given diets with different amounts of fish protein. 1. Amino-nitrogen and glucose. 91
- RÉRAT A., JUNG J. & KANDÉ J. Absorption kinetics of dietary hydrolysis products in conscious pigs given diets with different amounts of fish protein. 2. Individual amino acids. 105
- RÉRAT A., NUNES C., SIMOES Mendy F. & ROGER L. Amino acid absorption and production of pancreatic hormones in non-anaesthetized pigs after duodenal infusions of a milk enzymic hydrolysate or of free amino acids. 121
- REYNOLDS Christopher K. & HUNTINGTON Gerald B. Partition of portal-drained visceral net flux in beef steers. 1. Blood flow and net flux of oxygen, glucose and nitrogenous compounds across stomach and post-stomach tissues. 539



## Index of Authors

695

- REYNOLDS Christopher K. & HUNTINGTON Gerald B. Partition of portal-drained visceral net flux in beef steers. 2. Net flux of volatile fatty acids, D- $\beta$ -hydroxybutyrate and L-lactate across stomach and post-stomach tissues. 553
- ROBERTS J. *see* JACKSON M.J., ROBERTS J. & EDWARDS R.H.T. Effects of dietary-fish-oil feeding on muscle growth and damage in the rat. 217
- ROGER L. *see* RÉRAT A., NUNES C., SIMOES Mendy F. & ROGER L. Amino acid absorption and production of pancreatic hormones in non-anaesthetized pigs after duodenal infusions of a milk enzymic hydrolysate or of free amino acids. 121
- ROTHWELL Nancy J. & STOCK M.J. Increased body-weight gain and body protein in castrated and adrenalectomized rats treated with clenbuterol. 355
- ROWLAND I.R. *see* MALLETT A.K., BEARNE C.A., YOUNG P.J., ROWLAND I.R. & BERRY C. Influence of starches of low digestibility on the rat caecal microflora. 597
- SAHA N., NG T.B., TAN P.Y. & WEE K.P. Vitamin A reserve of liver in health and coronary heart disease among ethnic groups in Singapore. 407
- SAINZ R.D. & WOLFF J.E. Effects of the  $\beta$ -agonist, cimaterol, on growth, body composition and energy expenditure in rats. 85
- SASAKI Y. *see* KATOH K., SATO F., YAMAZAKI A., SASAKI Y. & TSUDA T. Passage of indigestible particles of various specific gravities in sheep and goats. 683
- SATO F. *see* KATOH K., SATO F., YAMAZAKI A., SASAKI Y. & TSUDA T. Passage of indigestible particles of various specific gravities in sheep and goats. 683
- SCHULLER E. *see* SUTTON J.D., HART I.C., MORANT S.V., SCHULLER E. & SIMMONDS A.D. Feeding frequency for lactating cows: diurnal patterns of hormones and metabolites in peripheral blood in relation to milk-fat concentration. 265
- SEQUEIRA Jennifer *see* SOARES M.J., SEQUEIRA Jennifer & SHETTY P.S. The effect of the preceding day's protein intake on basal metabolic rates in young adults. 425
- SHEPHERD D.A.L. *see* SYMONDS M.E., BRYANT M.J., SHEPHERD D.A.L. & LOMAX M.A. Glucose metabolism in shorn and unshorn pregnant sheep. 249
- SHERMAN Adria R. *see* O'CONNOR Deborah L., PICCIANO Mary Frances & SHERMAN Adria R. Impact of maternal iron deficiency on quality and quantity of milk ingested by neonatal rats. 477
- SHETTY P.S. *see* SOARES M.J., SEQUEIRA Jennifer & SHETTY P.S. The effect of the preceding day's protein intake on basal metabolic rates in young adults. 425
- SIBBALD A.M. *see* DOVE H., MILNE J.A., SIBBALD A.M., LAMB C.S. & McCORMACK H.A. Circadian variation in abomasal digesta flow in grazing ewes during lactation. 653
- SIMMONDS A.D. *see* SUTTON J.D., HART I.C., MORANT S.V., SCHULLER E. & SIMMONDS A.D. Feeding frequency for lactating cows: diurnal patterns of hormones and metabolites in peripheral blood in relation to milk-fat concentration. 265
- SIMOES Mendy F. *see* RÉRAT A., NUNES C., SIMOES Mendy F. & ROGER L. Amino acid absorption and production of pancreatic hormones in non-anaesthetized pigs after duodenal infusions of a milk enzymic hydrolysate or of free amino acids. 121
- SINGH B. *see* MAKKAR H.P.S., SINGH B. & DAWRA R.K. Effect of tannin-rich leaves of oak (*Quercus incana*) on various microbial enzyme activities of the bovine rumen. 287
- SMITH R.H. *see* McALLAN A.B., COCKBURN J.E., WILLIAMS A.P. & SMITH R.H. The degradation of different protein supplements in the rumen of steers and the effects of these supplements on carbohydrate digestion. 669
- SOARES M.J., SEQUEIRA Jennifer & SHETTY P.S. The effect of the preceding day's protein intake on basal metabolic rates in young adults. 425
- SOUTHON Susan *see* FAIRWEATHER-TAIT Susan J., SOUTHON Susan & PIPER Zoe The effect of alcoholic beverages on iron and zinc metabolism in the rat. 209
- SOUTHON Susan, KECHRID Z., WRIGHT A.J.A. & FAIRWEATHER-TAIT Susan J. Effect of reduced dietary zinc intake on carbohydrate and Zn metabolism in the genetically diabetic mouse (C57BL/KsJ *db + / db +*). 499
- SPENCER D., HIGGINS T.J.V., FREER M., DOVE H. & COOMBE J.B. Monitoring the fate of dietary proteins in rumen fluid using gel electrophoresis. 241
- SPOONER M.C. *see* BEEVER D.E., CAMMELL S.B., THOMAS C., SPOONER M.C., HAINES M.J. & GALE D.L. The effect of date of cut and barley substitution on gain and on the efficiency of utilization of grass silage by growing cattle. 2. Nutrient supply and energy partition. 307

- STOCK M.J. *see* ROTHWELL Nancy J. & STOCK M.J. Increased body-weight gain and body protein in castrated and adrenalectomized rats treated with clenbuterol. 355
- SUNDE Roger A. *see* WASCHULEWSKI Ingo H. & SUNDE Roger A. Effect of dietary methionine on tissue selenium and glutathione peroxidase (EC 1.11.1.9) activity in rats given selenomethionine. 57
- SUTTON J.D., HART I.C., MORANT S.V., SCHULLER E. & SIMMONDS A.D. Feeding frequency for lactating cows: diurnal patterns of hormones and metabolites in peripheral blood in relation to milk-fat concentration. 265
- SUTTON J.D. *see* POND K.R., ELLIS W.C., MATIS J.H., FERREIRO H.M. & SUTTON J.D. Compartment models for estimating attributes of digesta flow in cattle. 571
- SWAMINATHAN R. *see* WOO Jean, HO S.C., DONNAN S.P.B. & SWAMINATHAN R. Nutritional status of healthy, active, Chinese elderly. 21
- SYMONDS M.E., BRYANT M.J., SHEPHERD D.A.L. & LOMAX M.A. Glucose metabolism in shorn and unshorn pregnant sheep. 249
- TAN P.Y. *see* SAHA N., NG T.B., TAN P.Y. & WEE K.P. Vitamin A reserve of liver in health and coronary heart disease among ethnic groups in Singapore. 407
- THOMAS C., GIBBS B.G., BEEVER D.E. & THURNHAM B.R. The effect of date of cut and barley substitution on gain and on the efficiency of utilization of grass silage by growing cattle. 1. Gains in live weight and its components. 297
- THOMAS C. *see* BEEVER D.E., CAMMELL S.B., THOMAS C., SPOONER M.C., HAINES M.J. & GALE D.L. The effect of date of cut and barley substitution on gain and on the efficiency of utilization of grass silage by growing cattle. 2. Nutrient supply and energy partition. 307
- THOMSON D.J. *see* ULYATT M.J., THOMSON D.J., BEEVER D.E., EVANS R.T. & HAINES M.J. The digestion of perennial ryegrass (*Lolium perenne* cv. Melle) and white clover (*Trifolium repens* cv. Blanca) by grazing cattle. 137
- THURNHAM B.R. *see* THOMAS C., GIBBS B.G., BEEVER D.E. & THURNHAM B.R. The effect of date of cut and barley substitution on gain and on the efficiency of utilization of grass silage by growing cattle. 1. Gains in live weight and its components. 297
- TOMLIN J. & READ N.W. The relation between bacterial degradation of viscous polysaccharides and stool output in human beings. 467
- TREDGER J.A.T. *see* MORGAN L.M., TREDGER J.A.T., HAMPTON S.M., FRENCH A.P., PEAKE J.C.F. & MARKS V. The effect of dietary modification and hyperglycaemia on gastric emptying and gastric inhibitory polypeptide (GIP) secretion. 29
- TRIGG T.E. *see* DUNSHEA F.R., BELL A.W. & TRIGG T.E. Relations between plasma non-esterified fatty acid metabolism and body tissue mobilization during chronic undernutrition in goats. 633
- TSUCHIYA Harumi *see* BATES C.J., COWEN T.D. & TSUCHIYA Harumi Growth, ascorbic acid and iron contents of tissues of young guinea-pigs whose dams received high or low levels of dietary ascorbic acid or Fe during pregnancy and suckling. 487
- TSUDA T. *see* KATO K., SATO F., YAMAZAKI A., SASAKI Y. & TSUDA T. Passage of indigestible particles of various specific gravities in sheep and goats. 683
- ULYATT M.J., THOMSON D.J., BEEVER D.E., EVANS R.T. & HAINES M.J. The digestion of perennial ryegrass (*Lolium perenne* cv. Melle) and white clover (*Trifolium repens* cv. Blanca) by grazing cattle. 137
- VAISSADE P. *see* RÉRAT A., VAISSADE P. & VAUGELADE P. Absorption kinetics of dietary hydrolysis products in conscious pigs given diets with different amounts of fish protein. 1. Amino-nitrogen and glucose. 91
- VALANTIN-ROLLET Carole *see* PROST Josiane, BELLEVILLE Jacques & VALANTIN-ROLLET Carole Effects of age, and protein malnutrition followed by a balanced diet on the non-parallel change in digestive enzymes in the pancreas and their secretion in the rat. 619
- VAUGELADE P. *see* RÉRAT A., VAISSADE P. & VAUGELADE P. Absorption kinetics of dietary hydrolysis products in conscious pigs given diets with different amounts of fish protein. 1. Amino-nitrogen and glucose. 91
- WALTER D.J., EASTWOOD M.A., BRYDON W.G. & ELTON R.A. Fermentation of wheat bran and gum arabic in rats fed on an elemental diet. 225
- WASCHULEWSKI Ingo H. & SUNDE Roger A. Effect of dietary methionine on tissue selenium and glutathione peroxidase (EC 1.11.1.9) activity in rats given selenomethionine. 57
- WEE K.P. *see* SAHA N., NG T.B., TAN P.Y. & WEE K.P. Vitamin A reserve of liver in health and coronary heart disease among ethnic groups in Singapore. 407



*Index of Authors*

697

- WILLIAMS A.P. *see* McALLAN A.B., COCKBURN J.E., WILLIAMS A.P. & SMITH R.H. The degradation of different protein supplements in the rumen of steers and the effects of these supplements on carbohydrate digestion. 669
- WILSON G.F., MACKENZIE D.D.S., BROOKES I.M. & LYON G.L. Importance of body tissues as sources of nutrients for milk synthesis in the cow, using <sup>13</sup>C as a marker. 605
- WOLFF J.E. *see* SAINZ R.D. & WOLFF J.E. Effects of the  $\beta$ -agonist, cimaterol, on growth, body composition and energy expenditure in rats. 85
- Woo Jean, Ho S.C., DONNAN S.P.B. & SWAMINATHAN R. Nutritional status of healthy, active, Chinese elderly. 21
- WRIGHT A.J.A. *see* SOUTHON Susan, KECHRID Z., WRIGHT A.J.A. & FAIRWEATHER-TAIT Susan J. Effect of reduced dietary zinc intake on carbohydrate and Zn metabolism in the genetically diabetic mouse (C57BL/KsJ *db + / db +*). 499
- WYATT G.M., HORN N., GEE J.M. & JOHNSON I.T. Intestinal microflora and gastrointestinal adaptation in the rat in response to non-digestible dietary polysaccharides. 197
- YAMAZAKI A. *see* KATOH K., SATO F., YAMAZAKI A., SASAKI Y. & TSUDA T. Passage of indigestible particles of various specific gravities in sheep and goats. 683
- YOUNG P.J. *see* MALLETT A.K., BEARNE C.A., YOUNG P.J., ROWLAND I.R. & BERRY C. Influence of starches of low digestibility on the rat caecal microflora. 597