Index of Subjects

- Abomasum, fundic pouch secretion, effect of food intake, sheep 375
- Absorption, glucose, glycine and glycylglycine, effect of malnutrition, Zambian African adult 503
- Absorption, milk, lactose and casein, short-term response, plasma, normal child 605
- Absorption rate, glycylglycine, effect of systemic infection, small intestine, man 163
- Adipose tissue, adipocyte size and numbers, effect of weight loss and regrowth, sheep 522
- Adipose tissue, functional capacity, obesity and hyperlipidaemia, man 273
- Amino acid(s) see also Glycine, Glycylglycine, Lysine
- Amino acid(s), branched-chain, oxidation, relation to catabolic enzyme activity, growing rat 615
- Amino acid(s), essential metabolism after intragastric or intravenous infusion, rat 11
- Amino acid(s), evaluation of assay methods 647
- Amino acid(s), free, muscle, effect of food intake level, rat 127
- Amino acid(s), plasma concentration, relationship to amino acid requirements, ruminant calf 421
- Amino acid composition, African locust-bean seed (Parkia filicoidea Welw.) 31
- Amino acid composition, excreta, germ-free and conventional chick 625
- Amino acid oxidation rate, ¹⁴C-labelled, estimation of amino acid requirements, critical evaluation, rat 257
- Amino acid requirements, estimation, ruminant calf 421
- Amino acid requirements, technique evaluation, rat 257
- Aminotransferase activity, liver, rate of adaptation to protein intake, rat 353
- Ammonia, rumen concentration, effect on microbial protein production, in vitro 199
- AMP deaminase activity, analytical technique, muscle, rat 541
- AMP deaminase activity, muscle, effect of dietary protein, rat 539
- Ampicillin, effect on vitamin B₁₂ deficiency, baboon 219
- Anaemia, megaloblastic, folate deficiency, baboon 579
- Anaemia, megaloblastic, vitamin B₁₂ absorption, man 491
- Anthropometric measurements, long-term changes Glasgow schoolchildren 169
- Antibiotics see also Ampicillin
- Baboon 219, 579
- Bacteria, rumen, nucleic acid utilization by sheep 529

- Behaviour, social interaction, effect of early undernutrition, rat 413
- Blood composition, effect of force-feeding, chick 229
- Blood plasma, lysozyme activity, malnourished child 313
- Body composition, effects of force-feeding, chick 229
- Body composition, effects of weight loss and regrowth, sheep 515
- Body composition, fat, estimation from total body density and skinfold thickness, man 77
- Body composition, preruminant lamb, young pig 113
- Body density, estimation of body fat, man 77
- Calcium-binding protein, effect of protein malnutrition, rat 569
- Calf see also Cattle
- Calf 37, 283, 293, 421
- Carbohydrate, dietary deficiency, effect on growth and metabolism, fatty acid-based diet, rat 209
- Casein, dietary, short-term response, plasma, normal child 605
- Cattle see also Calf
- Chick see also Quail
- Chick 229, 241, 625
- Child see also Man
- Child 169, 313, 389, 605
- Chloroform, effect on rumen fermentation, sheep 155
- Cobalt, dietary, effect on subcutaneous fat hardness, lamb 59
- Cobalt, dietary, effect on triglyceride fatty acid composition, processed-barley diet, lamb 71
- Cold exposure, effect on volatile fatty acid metabolism, hind leg, calf 471
- Collagen metabolism, folic acid deficiency, rat 457
- Copper, biological availability, measurement technique, sheep 395
- Copper, deficiency, distribution of copper, zinc and iron, liver, kidney, rat 435
- Copper, dietary, effect of sulphur, sheep 559
- Copper, subcellular distribution, liver and kidney, copper-deficient rat 435
- Copper-binding protein(s), liver, sheep, calf 283, 293
- Cyanocobalamin, dietary, effect on triglyceride fatty acid composition, processed-barley diet, lamb 71
- Cyanocobalamin, effect on megaloblastic anaemia, man 493
- Development, effect of growth retardation and rehabilitation, weanling rat 301

- Diet, barley, processed, effect on triglyceride fatty acid composition, lamb 71
- Diet, cereal, effect of processing, rumen metabolism, lamb 59
- Diet, long-term changes, Glasgow schoolchildren 169
- Diet, maize, dry and high-moisture, digestion, pig 639
- Diet, milk, cow's, food conversion efficiency and body composition, lamb, pig 113
- Diet, milk substitute, digestion and utilization, effect of quantity of pancreatic secretion, calf 37
- Diet, protein-free, effect on essential amino acid metabolism, rat 11
- Diet, Sri Lanka, vitamin B_{12} and folic acid deficiency, man 496
- Digesta, duodenal, estimation of dietary and microbial protein, sheep 99
- Digesta, duodenal flow, dry and high-moisture maize diets, pig 642
- Digestibility, dried red clover, perennial ryegrass hay diet, sheep 317
- Digestibility, effect of processing cereal diet, lamb 59
- Digestion, effect of quantity of pancreatic secretion, milk-substitute diet, calf 37
- Digestion, grass lipids and pigments, rumen, sheep 327
- Digestion, maize, dry and high-moisture diets, pig 639
- Digestion, protein, dietary and endogenous, effect of gut microflora, chick 625
- Digestion, protein, intestines, pig 479
- Digestion, site of, gelled maize starch, sheep 143
- Energy, body composition, effect of weight loss and regrowth, sheep 521
- Enzymes see also AMP deaminase, Aminotransferase, Glutamic dehydrogenase, Glutathione reductase, Hydro-lase, Lysozyme, Pyridoxaminephosphate oxidase, Transketolase, Urea cycle
- Enzyme activity, catabolic, relation to branchedchain amino acid oxidation, protein-free diet, growing rat 615
- Enyzme activity, liver, kidney, pancreas and digestive tract, effect of force-feeding, chick 241
- Equipment, continuous in vitro fermentation 349
- *Escherichia coli*, nucleic acid utilization by sheep 529
- Fat, body composition, effect of weight loss and regrowth, sheep 521
- Fat, body composition, estimation from total body density and skinfold thickness, man 77
- Fat, subcutaneous, effect of processing cereal diets, lamb 59
- Fatty acid(s), basal diet, effect of carbohydrate deficiency on growth and metabolism, rat 209
- Fatty acid(s), volatile, hind leg metabolism, effect of acute cold exposure and feeding, calf 47¹

- Fatty acid(s), volatile, preservatives, high-moisture maize, effect on digestion, pig 639
- Fatty acid(s), volatile, rumen, effect of ammonia concentration, in vitro 199
- Fatty acid(s), volatile, rumen, effect of processing cereal diet, lamb 59
- Fatty acid(s), volatile, rumen, rate of passage, sheep, in vitro 341
- Fatty acid composition, blood, effect of force-feeding, chick 229
- Fatty acid composition, triglyceride, effect of cobalt and cyanobalamin, processed-barley diet, lamb, 71
- Feeding, forced, effect on digestive enzyme activity, chick 241
- Feeding, forced, effect on growth, body and blood composition, chick 229
- Feeding, frequency, effect on estimation of microbial protein, duodenal digesta, sheep 108
- Fibre, dietary, effect on sterol metabolism, rat 447 Folate deficiency, baboon 579
- Folic acid, effect on megaloblastic anaemia, man 493
- Folic acid deficiency, effect on collagen metabolism, rat 457
- Food conversion efficiency, preruminant lamb, young pig 113
- Food intake, effect on fundic secretion, abomasal pouch, sheep 375
- Food intake, effect on volatile fatty acid metabolism, hind leg, calf 471
- Food intake level, effect on protein metabolism, skeletal muscle, rat 127
- Furosine, use in heat-damaged lysine estimation 599
- Glucose, absorption, effect of malnutrition, Zambian African adult 503
- Glutamic dehydrogenase activity, liver, rate of adaptation to protein intake, rat 353
- Glutathione reductase activity, riboflavin deficiency, man 249
- Glycine, absorption, effects of malnutrition, Zambian African adult 503
- Glycylglycine, absorption, effects of malnutrition, Zambian African adult 503
- Glycylglycine, absorption rate, small intestine, effect of systemic infections, man 163
- Growth, body composition, effect of weight loss and regrowth, sheep 515
- Growth, carbohydrate-deficient, fatty acid-based diet, rat 209
- Growth, effect of force-feeding, chick 229
- Growth, retardation and rehabilitation, effect on development, weanling rat 301
- Hexoseamine composition, excreta, germ-free and conventional chick 628
- Hormone(s) see also Insulin
- Hydrolase activity, lysosomes of liver, muscle and plasma, effect of malnutrition, rat 189
- Hyperlipidaemia, adipose tissue, functional capacity, man 273

- Infection, resistance, effect of lysozyme activity, malnourished child 313
- Infection, systemic, effect on glycylglycine absorption rat, small intestine, man 163
- Insulin, plasma concentration, effect of food intake level, rat 127
- Intestine(s), protein digestion, pig 479
- Intestine, small, absorption of glucose, glycine and glycylglycine, Zambian African adult 503
- Intestine, small, utilization of gelled maize starch, sheep 143
- Iron, subcellular distribution, liver and kidney, copper-deficient rat 435
- Kidney, copper, zinc and iron distribution, copper-deficient rat 435
- Kidney, enzyme activity, effect of force-feeding, chick 241
- Lactose, dietary, short-term response, plasma, normal child 605
- Lamb see also Sheep
- Lamb 59, 71, 113
- Leucocytes, lysozyme activity, malnourished child 313
- Linseed oil, effect on rumen fermentation, sheep 155
- Lipid(s), grass, digestion, rumen, sheep 327
- Lipid metabolism, obesity and hyperlipidaemia, man 273
- Liver, copper and zinc concentration, occurrence of metallothionein-like protein, sheep, calf 203
- Liver, copper- and zinc-binding proteins, sheep, calf 283, 293
- Liver, copper, zinc and iron distribution, copperdeficient rat 435
- Liver, enzyme activity, effect of force-feeding, chick 241
- Liver, enzyme activity, rate of adaptation to protein intake, rat 353
- Liver, essential amino acid metabolism, rat 20
- Liver, lysosomal hydrolase activity, effect of malnutrition, rat 189
- Liver, partial hepatectomy, effect on vitamin B_{12} deficiency, baboon 219
- Lysine, heat-damaged material, evaluation of assay methods 589
- Lysozyme activity, plasma and leucocytes, malnourished child 313
- Malnutrition, early-life, effect on social interaction, adult male rat 413
- Malnutrition, effect on absorption of glucose, glycine and glycylglycine, Zambian African adult 503
- Malnutrition, effect on development, weanling rat 301
- Malnutrition, effect on finger nail hardness, child 389
- Malnutrition, effect on lysosomal hydrolase activity, rat 189

- Malnutrition, lysozyme activity, plasma and leucocytes, child 313
- Malnutrition, protein, effect on calcium-binding protein and vitamin D metabolism, rat 569
- Man see also Child, Woman
- Man 77, 163, 249, 273, 407, 491, 503
- Metabolism, carbohydrate-deficient, fatty acidbased diet, rat 209
- Metallothionein-like protein, liver, relationship to copper and zinc concentration, sheep, calf 293
- Methanogenesis, effect of trichloroacetamide, chloroform and linseed oil, rumen, sheep 155
- Micro-organisms, gut, effect on digestion, dietary and endogenous protein, chick 625
- Micro-organisms, protein, estimation in duodenal digesta, sheep 99
- Micro-organisms, rumen, protein production, effect of ammonia concentration, in vitro 199
- Milk, cow's, food conversion efficiency and body composition, lamb, pig 113
- Milk, dietary, short-term response, plasma, normal child 605
- Milk-substitute diet, digestion and utilization, effect of quantity of pancreatic secretion, calf 37
- Mineral(s) see also Calcium, Cobalt, Copper, Iron, Selenite, Sulphur, Zinc
- Muscle, gastrocnemius, lysosomal hydrolase activity, effect of malnutrition, rat 189

Nail hardness, effect of malnutrition, child 389

- Nitrogen, dietary utilization, relationship to serum urea level, man 407
- Nucleic acid(s), *Escherichia coli* and rumen bacteria, utilization by sheep 529
- Nutritional status, Glasgow schoolchildren 169
- Nutritive value, African locust-bean seed (Parkia filicoidea Welw.) 27
- Nutritive value, dried red clover, perennial ryegrass hay diet, sheep 317
- Obesity, adipose tissue, functional capacity, man 273
- Pancreas, enzyme activity, effect of force-feeding, chick 241
- Pancreatic secretion, quantity, effect on digestion and utilization, milk-substitute diet, calf 37
- Parkia filicoidea Welw., African locust-bean seed, protein quality 27
- Phaseolus vulgaris L., raw navy bean, identification of phytohaemagglutinin, Japanese quail 181
- Phytohaemagglutinin, identification, raw navy beans (*Phaseolus vulgaris* L.), Japanese quail, 181
- Pig 1, 113, 479, 639
- Pigments, grass, digestion, rumen, sheep 327
- Processing, cereal diet, effect on rumen metabolism, lamb 59
- Propionate, dietary, effect on vitamin B_{12} deficiency, baboon 219

1974

- Protein, body composition, effect of weight loss and regrowth, sheep 521
- Protein, calcium-binding, metabolism, effect of protein malnutrition, rat 569
- Protein(s), copper- and zinc-binding, liver, sheep, calf 283, 293
- Protein, dietary, effect on muscle AMP deaminase activity, rat 539
- Protein, dietary and endogenous, digestion, effect of gut microflora, chick 625
- Protein, dietary deficiency, effect on retinol-binding protein, plasma, rat 549
- Protein, dietary intake, effect on rate of adaptation of hepatic enzyme activity, rat 353
- Protein, digestion, intestines, pig 479
- Protein, heat damage mechanism to lysine, evaluation of assay methods 589
- Protein, metabolism in skeletal muscle, effect of feeding and fasting, rat 127
- Protein, metallothionein-like, liver, relationship to copper and zinc concentration, sheep, calf 293
- Protein, microbial, estimation in duodenal digesta, sheep 99
- Protein, microbial production, rumen, effect of ammonia concentration, in vitro 199
- Protein, retinol-binding, plasma, effect of dietary level of protein and retinol, rat 549
- Protein quality, African locust-bean seed 27
- Protein quality, evaluation of amino acid assay methods 647
- Protozoa, rumen, rate of passage, sheep, in vitro 341
- Pyridoxal phosphate, tissue concentration, riboflavin deficiency, rat, man 249
- Pyridoxaminephosphate oxidase activity, riboflavin deficiency, rat, man 249

Quail see also Chick

Quail, Japanese 181

- Rat, 11, 27, 127, 189, 209, 249, 257, 301, 353, 413, 435, 447, 457, 539, 549, 569, 615
- Rate of passage, rumen, protozoa and volatile fatty acids, sheep, in vitro 341
- Red clover, nutritive value, perennial ryegrass hay diet, sheep 317
- Retinol, dietary deficiency, effect on retinol-binding protein, plasma, rat 541
- Riboflavin, deficiency, effect on pyridoxal phosphate and pyridoxaminephosphate oxidase, rat, man 249
- RNA, muscle, effect of food intake level, rat 127
- Rumen, digestion, grass lipids and pigments, sheep 327
- Rumen, fermentation, effect of processing cereal diets, lamb 59
- Rumen, fermentation end products, effect of trichloroacetamide, chloroform and linseed oil, sheep 155
- Rumen, microbial protein production, effect of ammonia concentration, in vitro 199

- Rumen, passage of protozoa and volatile fatty acids, sheep, in vitro 341
- Rumination time, effect of processing cereal diets, lamb 59
- Secretion, fundic abomasal pouch, effect of food intake, sheep 375
- Selenite, 75Se, metabolism, woman 47
- Sheep see also Lamb
- Sheep 99, 143, 155, 283, 293, 317, 327, 341, 375, 395, 515, 529, 559
- Skinfold thickness, estimation of body fat, man 77
- Starch, gelled maize, utilization, small intestine, sheep 143
- Sterol metabolism, effect of dietary fibre, rat 447
- Sugars see also Glucose, Lactose
- Sulphur, dietary, effect on dietary copper availability, sheep 559
- Sulphur-35 use in estimation of dietary and microbial protein, duodenal digesta, sheep 99
- Technique(s), analytical, amino acids, evaluation of biological assay methods 647
- Technique, analytical, AMP deaminase activity, muscle, rat 541
- Technique(s), analytical, evaluation, lysine in heat-damaged material 589
- Technique, biological availability of copper, sheep 395
- Technique, continuous in vitro fermentation 349
- Technique, estimation of amino acid requirement, critical evaluation, rat 257
- Technique, microbial protein estimation, use of ³⁵S, duodenal digesta, sheep 99
- Temperature, ambient, effect on thiamin requirement, pig I
- Thiamin, requirement, effect of ambient temperature, pig 1
- Toxicity, identification of phytohaemagglutinin, raw navy bean (*Phaseolus vulgaris* L.), Japanese quail 181
- Transketolase activity, erythrocyte, estimation of thiamin requirement, pig 1
- Trichloroacetamide, effect on rumen fermentation, sheep 155
- Triglyceride(s), fatty acid composition, effect of dietary cobalt and cyanobalamin, processedbarley diet, lamb 71
- Urea, plasma concentration, relationship to amino acid requirements, ruminant calf 421
- Urea, serum level, relationship to dietary nitrogen utilization, man 407
- Urea cycle enzyme activity, liver, rate of adaptation to protein intake, rat 353
- Vitamin(s) see also Cyanocobalamin, Folate, Folic acid, Pyridoxal phosphate, Retinol, Riboflavin, Thiamin
- Vitamin B_{12} , absorption, megaloblastic anaemia, man 491

667

https://doi.org/10.1079/BJN19740119 Published online by Cambridge University Press