Vol. 24

Index of Subjects

Numerals show only the initial page of passages concerned with the subject

Abomasum, protein digestion, effect of ruminal bypass, various diets, sheep 803

Abomasum, riboflavine metabolism, sheep 57 Absorption, form of digested protein, man 241 Absorption, minerals, digestive tract, sheep 197 Absorption site, protein, digestive tract, man 227 Acetate metabolism, pig 705

Acetic acid, dietary salts, utilization for body gains, sheep 695

L-Alanine, dietary supplement, effect on biological value of milk protein, child 741

Alanine racemase activity, rumen bacterial cell walls, sheep 123

Alimentary tract and contents, weight, effect of acetate supplementation, sheep 703

Alimentary tract, presence of volatile fatty acids, kangaroo, guinea-pig 149

Alimentary tract, various sites, mineral concentration and solubility, dried grass diet, sheep 769 Amino acid(s) see also Alanine, Glutamic acid,

Amino acid(s) see also Alanine, Glutamic acid, Hydroxyproline, Isoleucine, Lysine, Methionine, Tryptophan.

Amino acid absorption, form of digested protein, man 241

Amino acid carbon, contribution to glucose synthesis, pregnant sheep 905

Amino acid composition, chemical changes due to heating, protein 315

Amino acid composition, edible protein prepared from wool 719

Amino acid composition, muscle, various species including man 400

Amino acid composition, protein extract, cassava leaves 764

Amino acid composition, staple foodstuffs, East
Africans 397

Amino acid concentrations, plasma, relation to egg formation, hen 1071

Amino acid(s), incorporation into liver protein, riboflavine-deficient rat 635

D-Amino acid oxidase, effect on urinary alanine, phenylketonuric child 578

Amino acid(s), rate of absorption, man 238

Amino acid composition, rumen bacteria, sheep 123 Amino acid(s), site of absorption, man 227

Amino acid(s), serum changes in malnourished pig 557

Aminopyrine demethylase activity, liver, effect of vitamin E, carbon tetrachloride toxicity, rat 373
Anaemia, nutritional, effect of iron and folic acid, pregnancy, Nigerian woman 689

Antibiotics, effect on vitamin B₁₂ deficiency, rat

Antioxidants, synthetic, effect on carbon tetrachloride toxicity, rat 357 Apparatus, regulation of food supply, rat 1049
Appetite, effect of early zinc deficiency, rat 1056
Appetite, effect of vitamin B₁₂ depletion, sheep 630
Aromatic acids, urinary excretion, effect of stage of
maturity of ryegrass diet, sheep 943

Artificial rearing, milk protein digestion, young pig 827

Ascorbic acid status, tropical environment, Europeans 801

Ascorbic acid, dietary, interrelationships with copper deficiency, rabbit 61

Ascorbic acid, effect on copper deficiency, chick 607

Bacillus subtilis, ¹⁴C-labelled, utilization by sheep

Bacteria see also Bacillus subtilis, Escherichia coli. Bacteria, alimentary tract, relation to riboflavine metabolites, ruminant 45

Bacteria and bacterial cell walls, chemical composition, rumen, sheep 119

Bacteria, rumen, effect of level of pelleted barley diet, cattle 167, 170, 172

Bacterial counting anomalies, effect of free starch grains, rumen, cattle 173

Bacterial sample preparation, use of ultrasonic probe 597

Balance trials, use of intermittent and continuous faecal markers, young woman 489

Behaviour, effect of proportions of straw and concentrates, complete diets, cow 1013

Behaviour, feeding procedure, relationship to oesophageal groove closure, sheep 789

Bile acid levels, serum, effect of dietary lignin, woman 1029

Biological value, milk protein, effect of addition of non-essential amino acids, child 741

Blood composition, effect of diet, Nigerian child 683

Blood composition, effect of frequency of sucrose intake, man 413

Blood serum, vitamin B₁₂ metabolism, sheep 623 Blood urea measurement, value for assessing protein quality, rat 983

Body fat percentage, effect on cardiac necrosis, rat 3 Body fat, quantitative determination, use of deuterium oxide space, pregnant ewe 815

Body-weight, relationship to food intake and energy expenditure, army recruit 1104

Bone, analysis by microradiography and microdensitometry 31

Bone and tooth growth, effect of calcium to phosphorus ratio and vitamin D, rat 934

Bone composition, effect of ascorbic acid, copperdeficient rabbit 65 Bone mineralization, effect of vitamin D, rat 29 Brain, uptake of copper, effect of age, rat 727 Breed differences, fasting metabolism, cattle 599 Brilliant blue, use as faecal marker, young woman

Buffering systems, rumen, effect of phosphate and carbonate-bicarbonate supplements,

Caecum, microflora and fermentation, effect of large intestine starch digestion, sheep 671

Caecum, riboflavine metabolism, goat 51

Calcium balance, use of various faecal markers, young woman 489

Calcium excretion, effect of lactation, grazing cow 85

Calcium metabolism, effect of level of dietary protein, calf 445

Calcium metabolism, effect of level of fat, milk substitute diets, calf 468

Calcium metabolism, pregnant ewe 661

Calcium:phosphorus ratio, vitamin D status, effect on bone mineralization, rat 29

Calcium: phosphorus, unit ratio, effect of dietary mineral content, vitamin D metabolism, rat 929 Calf 45, 441, 459

Calorie and protein deficient diet, body collagen and urinary hydroxyproline excretion, rat 97

Calorie conversion factors, experimental reassessment, human diets 517

Calorie deficiency, incidence in India 480

Capric acid, milk fat, relationship to stage of lactation, African elephant 115

Carbohydrate(s) see also Glucose, Mucopolysaccharides, Starch, Sucrose

Carbohydrate composition, rumen bacteria, sheep

Carbohydrate, content in isocaloric reducing diets, obese woman 39

Carbonate-bicarbonate, dietary, effect on rumen buffering systems, sheep 653

Carbon tetrachloride toxicity, effect of vitamin E and synthetic antioxidants, rat 357

Cardiac necrosis, effect of exercise and body fat percentage, rat 3

 β -Carotene, retinyl palmitate, relative biological potency, milk-fed lamb 23

Casein, formaldehyde-treated, value as supplement, sheep 1083

Cassava diet, cyanide metabolism, rat 797 Cattle see also Calf

Cattle 71, 85, 157, 179, 545, 599, 961, 1013

Cellulase activity, rumen, effect of dietary buffers, sheep 654

Cellulose digestion, rumen, effect of proportions of straw and concentrates, complete diets, cow 1013

Chick 213, 607, 893

Child 205, 573, 641, 683, 741

Cholestatic jaundice, pruritus, effect of dietary lignin, woman 1029

Cholesterol levels, serum, relationship to diet, young man, Antarctica 307

Chromic oxide, use as faecal marker, young woman 489

¹⁴C-labelled bacteria, abomasal and ruminal utilization, sheep 133

Cobalt, effect on vitamin B₁₂ production, sheep

Cobalt, efficiency of conversion into vitamin B₁₂, rumen, sheep 870

Cobalt, metabolic effects, vitamin B₁₂ deficiency, sheep 879

Cobalt requirement, sheep 615

Collagen, carcass, relationship to urinary hydroxyproline excretion, rat 97

Copper, concentration and solubility, various sites, alimentary tract, sheep 769

Copper deficiency, effects of ascorbic acid, chick

Copper deficiency, interrelationships with dietary ascorbic acid, rabbit 61

Copper, manganese, zinc complexes, ryegrass 279 Copper, uptake by brain and other tissues, rat

Creatinine excretion, various ryegrass diets, sheep 949

Creatinine, urinary excretion, calorie-deficient rat 101

Creatinine, urinary, relationship to malnutrition, infant 641

Cyanide metabolism, Cassava diet, rat 797

Cyanocobalamin, degradation in rumen, sheep 863 Cytochrome oxidase activity, effect of ascorbic acid, copper-deficient chick 607

Cytochrome oxidase activity, liver, effect of ascorbic acid, copper-deficient rabbit 64

Deuterium oxide space, determination of amount of body fat, pregnant ewe 815

Diarrhoea, effect of level of fat, milk substitute diets, calf 464

Diet, effect on blood platelet 5-hydroxytryptamine levels, East Africans 385

Diet, effect on haemoglobin and haematocrit values, Nigerian child 683

Diet(s), energy value, reassessment of calorie conversion factor, man 517

Diet(s), low-phenylalanine, relationship to hyperaminoaciduria 573

Diet, relationship to serum cholesterol levels, young man, Antarctica 307

Dietary patterns, India, effect on incidence of protein deficiency 477

Digesta, quantity in alimentary tract, effect of proportions of straw and concentrates, complete diets, cow 1013

Digestibility, dietary fats, and constituent fatty acids, milk-fed lamb 425

Digestibility, milk substitute diets, calf 465

Digestion and nitrogen metabolism, effect of water and protein intake, sheep, deer 843

Digestion, effect of proportions of straw and concentrates, complete diets, cow 1013

Digestion, site of, milk proteins, baby pig 510

IIII

DNA synthesis, effects of early zinc deficiency,

Drug-processing enzyme activity, liver, carbon tetrachloride toxicity, rat 373

Egg formation, relationship of plasma amino acid concentrations, hen 1071

Elephant 100

Endomyocardial fibrosis, relationship to diet and blood platelet 5-hydroxytryptamine levels, East Africans 385

Endomycardial fibrosis, relationship to plasma amino acids, East Africans 393

Energy expenditure and food intake, army recruit 1091

Energy expenditure, specific activities, Australian adolescent 348

Energy expenditure, urban Australian adolescent 337, 345

Energy intake, relationship to ruminal volatile fatty acid production, cattle 191

Energy metabolism, vitamin B₁₂ deficiency, sheep

Energy requirements, lactation, woman 565 Energy value, reassessment of calorie conversion factors, human diets 517

Environment, tropics, ascorbic acid status, Europeans 801

Enzyme(s) see also Alanine racemase, D-Amino acid oxidase, Aminopyrine demethylase, Cytochrome oxidase, Thiosulphate sulphur-transferase, Trypsin.

Enzyme activity, liver, effect of soya-bean flour and vitamin B₁₂, rat 736

Enzyme activity, pancreas and intestine, effect of trypsin inhibitors, chick 893

Enzyme activity, pancreas, soya-bean diets, germfree chick 216

Enzyme secretion, proteolytic, young pig 827 Equipment, regulation of food supply, rat 1049 Escherichia coli, 14C-labelled, utilization by sheep

Excretion, aromatic acids, effect of stage of maturity of ryegrass diet, sheep 943

Excretion, vitamin B₁₂, sheep 871

Exercise see physical activity

Fasting metabolism, breed differences, cattle

Fat see also Body fat, Lipid(s)

Fat and protein, effect of dietary levels, milk substitute diets, calf 441

Fat deposition, effect of levels of dietary fat and protein, calf 455

Fat deposition, effect of level of fat, milk substitute diets, calf 471

Fat(s), dietary, digestibility, milk-fed lamb 425 Fat(s), dietary, effect on body fat composition, milk-fed lamb 435

Fat, dietary, effect on milk fat composition, sow

Fat, effect of dietary level, milk substitute diets, calf 459

Fatty acid composition, milk fat, effect of intravenous triglyceride infusion, sow 275

Fatty acid composition, plasma lipids and milk fat, effect of dietary fat, sow 751

Fatty acid(s), dietary, effect on concentration of serum and liver lipids, rat 971

Fatty acid(s), dietary fat, digestibility, milk-fed lamb 425

Fatty acid(s), dietary fats, effect on body fat composition, milk-fed lamb 435

Fatty acid metabolism, pig 705

Fatty acid(s), volatile, dietary salts, utilization for body gains, sheep 695

Fatty acid(s), volatile, effect of dietary buffers, rumen, sheep 655

Fatty acid(s), volatile, incorporation of bacterial 14C, rumen, sheep 134

Fatty acid(s), volatile, metabolism, fermentative organs, kangaroo, guinea-pig 145

Fatty acid(s), volatile, rate of ruminal production, effect of feeding schedule, concentrate diet, cattle 179

Fatty acid(s), volatile, relationship to rumen protozoa populations, barley diets, cattle 165,

Fatty acid(s), volatile, rumen and caecum, dried grass or barley diets, sheep 674

Feeding, apparatus for regulating food supply, rat 1049

Feeding frequency, effect on milk protein digestion, baby pig 501

Feeding level, effect on milk protein digestion, baby pig 501

Feeding patterns, effect of zinc deficiency, rat 1061

Feeding procedure, effect on oesophageal groove closure, sheep 785

Fermentative organs, volatile fatty acid metabolism, ketogenesis, kangaroo, guinea-pig 145 Fibre, dietary, effect on pruritus of cholestatic jaundice, man 1029

Folic acid, prevention of nutritional anaemias, pregnancy, Nigerian woman 689

Food intake and activity, urban Australian adolescent 331

Food intake and energy expenditure, army recruit 1091

Food intake and energy expenditure, Australian adolescent 345

Food intake, effect of proportions of straw and concentrates, complete diets, cow 1013

Food intake, effect of zinc deficiency, rat 994,

Food preference, zinc deficiency, rat 1066

Formaldehyde-treated casein and methionine, value as supplement, sheep 1083

Fructose concentration, serum, effect of frequency of sucrose intake, man 418

Fructose metabolic pathways, relationship to plasma glycerides, man and woman 537

Gluconeogenesis, role of alanine and glycine, malnourished pig 563

1970

Glucose concentration, serum, effect of frequency of sucrose intake, man 418

Glucose metabolism, pig 705

Glucose requirements, estimate of contribution from rumen bacteria, sheep 126, 143

Glucose synthesis, contribution of amino acid carbon, pregnant sheep 905

L-Glutamic acid, supplement, effect on biological value of milk protein, child 741

Glutathione, reduced, blood and liver, effects of vitamin B₁₂ and methionine, soya-bean diets, rat 738

Glycerol, dietary, effect on serum glyceride level, man 537

Goat 45

Growth rate, effect of dietary supplements, protein-deficient New Guinea child 297

Growth rate, effect of zinc deficiency, rat 992 Growth retardation, relationship to duration of protein deficiency, New Guinea child 297 Guinea-pig 145

Haematocrit value, effect of diet, Nigerian child 683

Haematological values, effect of dietary fat and protein levels, calf 454

Haemoglobin values, effect of diet, Nigerian child, 683

Heat damage, chemical changes, protein 313 Hen see also Chick

Hen 1071

Hume, Eleanor Margaret, obituary notice 1 Hydroxethylflavine, natural occurrence, rabbit and ruminants 57

Hydroxyproline, urinary, relationship to malnutrition, infant 641

5-Hydroxytryptamine, blood platelets, relationship to endomyocardial fibrosis and diet, East Africans 385

Hyperaminoaciduria, effect of low-phenylalanine diets, phenylketonuria, man 573

Insulin, effect on glucose and palmitate metabolism, pig 707

Intestinal enzymes, effect of trypsin inhibitors, soya-bean diets, chick 893

Iodine prophylaxis, endemic goitre, survey of salt intake, Ceylon 811

Iron, liver content, effect of ascorbic acid, copper-

deficient chick 607 Iron, prevention of nutritional anaemias, preg-

nancy, Nigerian woman 689 Isoalloxazines, analytical technique, biological

materials 47 Isoleucine, racemization on heating protein 317 Isoprenaline, cardiotoxicity effects, rat 3

Kangaroo 145

Ketogenesis, fermentative organ tissues, kangaroo, guinea-pig 150

Ketones, serum and urine, effect of dietary carbohydrate proportions, obese woman 42 Kidney, retinol content, milk-fed lamb 19 Kwashiorkor and marasmus, lipid transport, infant 1005

Lactation, effect on calcium and potassium excretion, grazing cow 85

Lactation, effect on magnesium excretion and faecal dry matter, grazing cow 71

Lactation, energy requirements, woman 565

Lamb 11, 23, 425, 435

Lignin, dietary, effect on pruritus of cholestatic jaundice, man 1029

Lipid(s) see also Cholesterol, Glycerol, Milk fat, Triglycerides

Lipid concentration, serum, effect of frequency of sucrose intake, man 413

Lipid content, rumen bacteria, sheep 125

Lipid transport, kwashiorkor and marasmus, infant 1005

Liver, effect of vitamin E, carbon tetrachloride toxicity, rat 363

Liver lipid concentrations, effect of dietary fatty acid concentration, rat 971

Liver protein, amino acid incorporation, riboflavine-deficient rat 635

Liver, retinol reserves, milk-fed lamb 16, 25

Liver, vitamin B_{12} activity, effect of antibiotics, rat 409

Liver, vitamin B₁₂ storage and depletion, sheep 616

Lung lesions, incidence, breed difference, calf 464 Lysine binding, effect of heating, proteins 319 Lysine incorporation into protein, effect of early zinc deficiency, rat 1055

Magnesium balance, use of various faecal markers, young woman 489

Magnesium excretion, effect of lactation, grazing cow 71

Malnutrition, relationship to urinary creatinine and hydroxyproline, infant 641

Malnutrition, total body potassium during repletion, Jamaican infant 205

Man see also Child, Woman

Man 227, 241, 297, 307, 331, 345, 385, 393, 413, 477, 517, 537, 801, 811, 1005, 1033, 1091,

Manganese, concentration and solubility, various sites, alimentary tract, sheep 769

Manganese, zinc, copper complexes, ryegrass 279, Marasmus, relationship to urinary creatinine and hydroxyproline, infant 641

Markers, comparison, rumen digestion, sheep, steer 961

Markers, faecal, use of intermittent or continuous type, young woman 489

Methionine, dietary supplement, effect on biological value, cassava leaf protein 765

Methionine, formaldehyde-treated, value as supplement, sheep 1083

Methionine metabolism, effect of unheated soyabean flour, rat 735

Methylmalonic acid excretion, effect of antibiotics, vitamin B₁₂ deficiency, rat 407

https://doi.org/10.1079/BJN19700114 Published online by Cambridge University Press

Microdensitometry, analysis of bone 33 Microflora, caecum, effect of large intestine starch digestion, sheep 671

Micro-organisms, formation of nucleic acids from dietary nitrogen, ruminant 545

Micro-organisms, protein synthesis from ammonia, rumen, sheep 589

Microradiography, quantitative analysis of bone 31 Milk composition, African elephant 109

Milk fat composition, effect of dietary fat, sow 749 Milk fat composition, effect of intravenous triglycerides, sow 269

Milk fever, calcium metabolism, sheep 668

Milk proteins, cow's, digestion by baby pig 501 Milk proteins, effect of addition of non-essential amino acids on biological value, child 741

Milk proteins, time course of digestion, young pig 827

Milk substitute diets, effect of level of fat, calf

Milk substitute diets, effect of levels of fat and protein, calf 441

Minerals see also Calcium, Cobalt, Copper, Iodine, Iron, Magnesium, Manganese, Phosphorus, Potassium, Selenium, Sodium, Sulphur, Zinc Minerals, net movement in digestive tract, sheep

Mortality, effect of milk substitute diets, calf 463 Mucopolysaccharides, aorta, effect of ascorbic acid, copper-deficient chick 607

Muscular dystrophy, nutritional, metabolism of vitamin E, hay diet, sheep 917

Nematode parasitism, effect on rate of passage of digesta, sheep 291

Nitrogen and energy retention, vitamin B₁₂ deficiency, sheep 881

Nitrogen, dietary, conversion into microbial nitrogen, rumen, sheep 589

Nitrogen, faecal excretion, effect of intestinal starch digestion, sheep 671

Nitrogen metabolism and digestion, effect of water and protein intakes, sheep, deer 843

Nitrogen metabolism, effect of level of fat, milk substitute diets, calf 468

Nitrogen metabolism, effect of levels of dietary fat and protein, calf 449

Nitrogen retention, milk protein, effect of addition

of non-essential amino acids, child 741 Nitrogen, urinary, relationship to fasting metabolism, cattle 604

Novel foods, preparation of nutritious protein

from wool 717 Nucleic acid metabolism, ruminant 545

Nutrient intake, Nigerian village child 686 Nutritive value, cassava leaves 761

Nutritive value, edible protein prepared from wool, rat 720

Obesity, carbohydrate content in isocaloric reducing diets, woman 39

Oesophageal groove closure, effect of feeding procedure, sheep 785

Oestrogen, intramuscular injection, effect on plasma amino acid concentration, cock 1076 Oleate metabolism, pig 705

Palmitate metabolism, pig 705

Pancreas, effects of soya-bean diets, germ-free chick 218

Pancreas, proteolytic enzyme activity, young pig

Pancreatic enzymes, effect of trypsin inhibitors, soya-bean diets, chick 893

Parasitism, nematodes, effect on rate of passage of digesta, sheep 291

Peptide linkage, hydrolysis during heating, protein

pH, rumen, effect of dietary buffers, sheep

Phenylketonuria, hyperaminoaciduria associated with low-phenylalanine diets, man 573

Phosphate, dietary, effect on rumen buffering systems, sheep 653

Phosphorus and calcium, unit ratio, effect of dietary mineral content, vitamin D metabolism, rat 020

Phosphorus retention, calculated, effect of dietary fat and protein levels, calf 454

Physical activity and food intake, urban Australian adolescent 331

Physical activity, effect on cardiac necrosis, rat 3 Pig 269, 501, 557, 705, 749, 827, 983

Plasma amino acid concentrations, relation to egg formation, hen 1071

Plasma amino acids, relationship to endomyocardial fibrosis, East Africans 393

Plasma lipid composition, effect of dietary fat, sow

Plasma lipids, effect of intravenous triglyceride infusions, sow 272

Plasma lipids, kwashiorkor, infant 1007

Plasma thiocyanate, cassava diet, rat 798

Plasma, α-tocopherol levels, effect of steatorrhoea, man 1036

Plasma urea, effect of water and protein intake, sheep, deer 848

Potassium excretion, effect of lactation, grazing cow 85

Potassium, total body content, status during repletion, malnourished Jamaican infant 205

Pregnancy, calcium metabolism, sheep 661

Pregnancy, nutritional anaemias, effect of iron and folic acid, Nigerian woman 689

Protein see also Amino acid(s), Casein, Collagen, Milk protein

Protein absorption, form of digested protein, man

Protein and calorie deficient diets, body collagen and urinary hydroxyproline excretion, rat 97

Protein and fat, effect of dietary levels, milk substitute diets, calf 441

Protein and water intake, effect on digestion and nitrogen metabolism, sheep, deer 843

Protein concentration, serum, effect of frequency of sucrose intake, man 413

Protein deficiency, growth-rate response to supplements, New Guinea child 297

Protein deficiency, relationship to different diets, incidence in India 477

Protein, edible, preparation from wool 717

Protein, estimate of endogenous secretion, man 237 Protein, fractionation of digestion products, Sephadex-gel filtration 829

Protein, heat-damaged, nature of chemical changes

Protein intake, relationship to potassium retention during repletion, malnourished Jamaican infant

Protein, low dietary intake, effect on feeding patterns, zinc deficiency, rat 1064

Protein malnutrition, effect on serum amino acids, pig 557

Protein, microbial, synthesis from ammonia, rumen, sheep 589

Protein, protection from rumen degradation, method for testing effectiveness of treatment 1089

Protein quality assessments, value of blood urea measurement, rat 983

Protein quality, cassava leaves 761

Protein, site of absorption, man 227

Protein synthesis, effects of early zinc deficiency, rat 1053

Protein utilization, effect of ruminal bypass, various diets, sheep 803

Protein, vitamin A interrelationships, milk-fed lamb 11

Proteolytic enzyme activity, gut tissue and contents, analytical method 830

Protozoa, rumen ciliate populations, effect of level of feeding, pelleted barley diet, cattle 160, 169, 172

Pruritus of cholestatic jaundice, effect of dietary lignin, man 1029

Rabbit 61, 259

Radioactive bacteria, method of preparation 130 Rat 3, 29, 97, 357, 405, 581, 635, 727, 735, 797, 929, 971, 983, 989, 1040, 1053, 1061

Rate of passage, digesta, artificial rearing, young pig 841

Rate of passage, digesta, effect of nematode parasitism, sheep 291

Rate of passage, digesta, effect of proportions of straw and concentrates, complete diets, cow 1013

Retinyl palmitate, β-carotene, relative biological potency, milk-fed lamb 23

Retinyl palmitate, dietary, effect on liver retinol reserves, milk-fed lamb 18

Riboflavine deficiency, amino acid incorporation into liver protein, rat 635

Riboflavine metabolism, germ-free rabbit 259 Riboflavine metabolites, relation to alimentary

symbiotic bacteria, ruminant 45 Rumen see also Fermentative organs

Rumen, ammonia concentration, effect of water and protein intake, sheep, deer 848 Rumen bacteria, chemical composition, sheep 119 Rumen buffering systems, effect of dietary phosphate and carbonate-bicarbonate, sheep 653

Rumen bypass, effect on protein utilization various diets, sheep 803

Rumen digestion, comparison of markers, sheep, steer 961

Rumen, distribution of vitamin B₁₂ activity, sheep 860

Rumen fermentation, effect on dietary volatile fatty acid utilization, sheep 695

Rumen fluid volume and outflow, effect of diet, cattle 169

Rumen fluid volume and outflow, effect of feeding schedule, concentrate diet, cattle 186

Rumen, microbial nucleic acid formation from food nitrogen, cattle 545

Rumen, microbial protein synthesis from ammonia, sheep 589

Rumen, microbiology and biochemistry, pelleted barley diet, cattle 157

Ryegrass diets, effect of stage of maturity, aromatic acid excretion, sheep 943

Salt intake, survey method, Ceylon 811

Secretion, minerals, digestive tract, sheep 197 Selenium, effect on tocopherol metabolism, nutritional muscular dystrophy, sheep 917

Serum amino acids, changes in malnourished pig 557

Serum cholesterol levels, relationship to diet, young man, Antarctica 307

Serum glyceride level, effect of dietary glycerol, man 537

Serum lipid concentration, effect of dietary essential fatty acids, rat 971

Serum, retinol concentration, milk-fed lamb 19, 26

Sheep see also Lamb

Sheep, 45, 119, 129, 197, 291, 589, 615, 653, 661, 671, 695, 769, 785, 803, 815, 843, 857, 879, 905, 917, 943, 961, 1083

Sex difference, glycerol metabolism, man and woman 537

Sodium, urine, effect of dietary carbohydrate proportion, obese woman 42

Soya-bean flour, unheated, effect on vitamin B_{12} and methionine metabolism, rat 735

Soya-bean meal, effect of heat treatment, germfree chick 213

Starch digestion, large intestine, effect on digestion in caecum, sheep 671

Starch, relationship to anomalous bacterial counts, rumen, cattle 173

Stearate metabolism, pig 705

Steatorrhoea, effect on α-tocopherol absorption, man 1033

Sucrose, effect of intake frequency, man 413

Sulphur metabolism, formaldehyde-treated protein supplements, sheep 1083

Survey, salt intake, Ceylon 811

Sweating, effect on ascorbic acid status, tropical environment, Europeans 801

Technique, testing effectiveness of treatment, protein protected from rumen degradation 1089

Temperature, rectal, effect of diet, calf 445

Temperature, rectal, effect of level of fat, milk substitute diets, calf 464

Thiosulphate sulphurtransferase activity, cyanide metabolism, rat 799

Thymidine incorporation into DNA, effect of zinc deficiency, rat 1055

Tissue distribution, injected cobalamins, vitamin B_{12} -deficient sheep 872

Tocochromanols, absorption and tissue distribution, rat 581

Tocochromanols, tissue analysis 582

α-Tocopherol, absorption, man 1033

Toxicity, carbon tetrachloride, effect of vitamin E and synthetic antioxidants, rat 357

Trace element complexes, ryegrass 279

Triglycerides, intravenous infusion, effect on milk fat composition, sow 269

Trypsin inhibitors, effect on pancreatic and intestinal enzyme activities, soya-bean diets, chick 893

Tryptophan concentration, plasma, East Africans
397

Tryptophan metabolism, phenylketonuric child 525

Twin monozygotic cows, use in mineral excretion studies 71, 85

Urea measurement, blood, value in assessing protein quality, rat 983

Urea metabolism, late pregnancy, sheep 905 Urea, plasma concentration, effect of water and protein intake, sheep, deer 848

Vitamin(s) see also Ascorbic acid, β-Carotene, Cyanocobalamin, Folic acid, Hydroxyethylflavine, Isoalloxazines, Retinyl palmitate, Riboflavine, Tocochromanols, α -Tocopherol

Vitamin A, protein interrelationships, milk-fed lamb 11

Vitamin B₁₂ activity, liver, effect of antibiotics, rat 409

Vitamin B₁₂ deficiency, effect of antibiotics, rat

Vitamin B₁₂ deficiency, metabolic aspects, sheep

Vitamin B₁₂ metabolism, effect of unheated soyabean flour, rat 735

Vitamin B₁₂ production, absorption, distribution, excretion, sheep 857

Vitamin B₁₂ requirement, sheep 615

Vitamin D, effect on bone mineralization, rat 29 Vitamin D metabolism, effect of dietary calcium and phosphorus, rat 929

Vitamin E, effect on carbon tetrachloride toxicity, rat 357

Vitamin E metabolism, sheep 917

Volatile fatty acid(s) see Fatty acid(s), volatile

Water and protein intake, effect on digestion and nitrogen metabolism, sheep, deer 843

Woman 39, 489, 565, 689, 1029

Wool, use in preparation of nutritious protein 717

Zinc, concentration and solubility, various sites, alimentary tract, sheep 769

Zinc, copper, manganese complexes, ryegrass 279 Zinc deficiency, effect on DNA and protein synthesis, rat 1053

Zinc deficiency, effects on food intake and feeding patterns, rat 1061

Zinc deficiency, experimental production, rat 989

Zinc-deficient diet, preparation technique 990