

Index of Subjects

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

Numerals followed by the letter A refer to pages in Abstracts of Communications read at Meetings for Original Communications of The Nutrition Society.

- Absorption, small and large intestine, relation between minerals and dietary sodium and fibre, growing pig 56A
 Absorption, stomach, magnesium, ruminant 32A
 Adipose tissue, role in lipostatic control of food intake, rat 129A
 Age, effect on activity of small intestine carbohydases, pig 26A
 Algal protein, feeding stuff, pig 95
 Amino acid *see also* Lysine, Methionine
 Amino acids, rumen bacteria, relationship with dietary protein 52A
 Amino acids, inborn errors of metabolism, man 33
 Amino acid(s), limiting, barley-soya bean-fish meal diet, pig 87
 Amino acids, rumen metabolism, silage diet, cow 16A
 Amino acid requirements, pig 87
 Ammonia, concentration in rumen, effect on rumen fermentation, sheep 40A
 Anthropometric study, height and weight changes, 7-year period, Sudanese children 146A
 Antimethanogens, effect on biohydrogenation of C₁₈ unsaturated fatty acids, rumen, sheep 31A
 Ascorbic acid, brain distribution, effects of ascorbic acid-deficient diet and leptazol, guinea-pig 7A
 Ascorbic acid, effect on copper acetate-induced ovulation, rabbit 10A
 Ascorbic acid, mechanism of involvement in allergic response, man 121A
 Ascorbic acid, metabolism, rheumatoid arthritis, man 8A
 Ascorbic acid, plasma and tissue levels, cancer patients 9A
 Ascorbic acid, recommended intakes, man 7
 Ascorbic acid, relationship between dietary levels and tissue mercury, guinea-pig 118A
 Ascorbic acid, relationship between drug treatment and plasma and cerebrospinal fluid levels, man 57A
 Ascorbic acid, therapeutic use, man 27
 Ascorbic acid, tissue saturation levels, age effect, guinea-pigs 117A
 Ascorbic acid status, effect of dietary flavonoids, guinea-pigs 120A
 Arsanilic acid, relationship to dietary selenium and vitamin E, pig 83A
 Bacteria, *see Salmonella gallinarium* infection, *Tetrahymena pyriformis*
 Bacterial protein, feeding-stuff, pig 97
 Biohydrogenation, ruminal, C₁₈ unsaturated fatty acids, effect of antimethanogens, sheep 31A
 Biotin, role in fatty liver and kidney syndrome, chickens 130A
 Blood, platelet aggregation, effect of dietary uricase inhibitor, rats 54A
 Blood, serum composition, biochemical profile, variations over 2-week period, man 146A
 Breast-feeding, relationship between energy intake and adequacy of milk supply, man 62A
 Calcium, recommended intakes, man 10
 Carbohydases, small intestine mucosa, pig 26A
 Carbohydrate, *see also* Fructose, Glucocorticoid, Lignin, Polyalcohols, Polysaccharides, starch, Tannins
 Carbohydrate, dietary form, interrelationship with lipid metabolism, sex differences, man 155
 Carbohydrate(s), digestion and absorption, pig 57
 Carbon metabolism, effect of poor-quality herbage diet, sheep 103A
 Carcass composition, effect of restricted postnatal nutrition, lamb 12A
 Carcass fat, melting point and fatty acid composition, effect of cereal-rich diet, lamb 12A
 Cells, function, effect of nutrition 357
 Cells, multiplication, effect of nutrition 357
 Cereal-based diets, effect of processing grain on nutritive value, ruminants 245
Cervus elaphus, digestion of roughage diets 98A
 Cholesterol, excretion, effect of dietary fibre, rat 38A
 Chromic oxide, recovery measurements in cannulated cows 100A
 Circadian rhythms, influence on food intake 66
 Coeliac disease, malabsorption, man 37
 Copper, availability, effect of dietary molybdenum and sulphur, sheep 22A
 Copper, distribution in plasma, effect of dietary molybdenum and sulphate, sheep 21A
 Copper, liver and whole-body accumulation, foetal lamb 86A
 Copper, metabolism, pregnancy, rat 4A
 Critical temperature, thermal regulation, pig 81
 Cyclamate, preference, taste, pig 72
 Diabetes, effect of dietary carbohydrate and fat, man 72A
 Dieldrin, effect on egg production and calcium and phosphorus utilization, quail 144A
 Diet and health 1, 15, 23, 31, 37, 41
 Diet, cereal-rich, effect on carcass fat, lamb 12A
 Diet, effect on nutritional status, primary school children 36A
 Diet, forages, effect of physical processing on nutritive value, ruminants 191

- Diet, grass silage, barley supplement, effect on eating behaviour, steer 15A
- Diet, lactating women, Nigeria 25A
- Diet, molybdenum and sulphate content, effect on plasma copper, sheep 21A
- Diet, molybdenum and sulphur content, effect on availability of dietary copper, sheep 22A
- Diet, protein and energy content, interrelationship in foetal growth response, rat 124A
- Diet, protein and sucrose content, effect on insulin secretion, postweaning rats 123A
- Diet, roughages, digestion in red deer and sheep 98A
- Diet, silages, effect of method of conservation on nutritive value, ruminants 201
- Diet, silages, relation between intake and methionine supplementation, sheep 111A
- Diet, sulphur compounds, effect on lead availability, rat 33A
- Diet, utilization of fractionation products of green crops, pigs and ruminants 213
- Diet, therapeutic, hyperlipidaemia, man 3A
- Diet(s), therapeutic, inborn errors of metabolism, man 31
- Digestibility, dried grass, effect of concentrate supplement, sheep 101A
- Digestive system, development, pig 49
- Drugs *see also* Anthimethanogens, Leptazol, Pentobarbitone, Triamcinolone acetonide
- Energy balance, effect of low energy intake, man 1A
- Energy metabolism, efficiency of meat production, pig 75
- Energy metabolism, heat loss, relation to plane of nutrition and temperature, pig 81
- Energy metabolism, relation to dietary protein and energy, rats 59A
- Energy metabolism, sex differences in intake and expenditure, man 145
- Energy value, effect of processing of lucerne, sheep 97A
- Environmental temperature, effect on energy balance, pig 60A
- Enzymes *see also* Carbohydrases, Lactase
- Ethanol, effect on resting metabolic rats, man 139A
- Exercise, hypoglycaemia, alleviation by glucose syrup ingestion, man 136A
- Exercise, relation between carbohydrate metabolism and fat mobilization, man 135A
- Fat(s), digestion and absorption, pig 59
- Fatty acids, long-chain polyunsaturated, dietary requirement, man 125A
- Fatty acid composition, carcass lipids, sex differences, lean and obese Zucker rats 77A
- Fatty acid composition, depot triglycerides, effect of barley-rich diet, goods 89A
- Fatty acid metabolism, $\Delta 6$ -desaturase activity, cat 67A
- Fatty acid metabolism, effect of barley-rich diet, sheep 90A
- Fatty acid requirement, relation between dietary and plasma polyunsaturated fatty acid levels, cat 66A
- Fatty liver, effect of fasting, non-lactating cow 112A
- Fatty liver and kidney syndrome, role of biotin, chickens 130A
- Feeding practices, infants, Edinburgh study 79A
- Feeding practices, infant, sources of advice, Edinburgh study 80A
- Fermentation, gastrointestinal tract, pig 51
- Fibre, cellulose, wheat bran and mould, effect on cholesterol excretion 38A
- Fibre, cereals, effect on cation metabolism, man 79A
- Field bean (*Vicia faba* L.), milk-substitute, calf 115A
- Field bean (*Vicia faba* L.), nutritional effect of protease inhibitors, rat 84A
- Fish-protein hydrolysate, suitability as protein source for artificially-reared lambs 91A
- Flavonoids, effect on ascorbic acid status, guinea-pigs 120A
- Folate deficiency, effect on DNA synthesis, rats 144A
- Folic acid, 'free' and total activity measurement in fresh and cooked food 143A
- Folic acid, inborn errors of metabolism, man 34
- Folic acid, recommended intakes, man 12
- Food consumption, Ireland 1961-71 1A
- Food intake, effects of dietary hydrochloric and lactic acids, rat 19A
- Food intake, effect of dietary hydrochloric acid, rat 18A
- Food intake, effects of dietary sodium sulphate and sodium chloride, rat 20A
- Food intake, effect of gastrointestinal tract parasites, lamb 13A
- Food intake, regulation, pig 63
- Food preferences, sex differences, man 181
- Food processing, effect on digestibility of barley-based mixed diet, cattle 105A
- Food processing, effect on energy value of lucerne, sheep 97A
- Food processing, effect on nutrition of farm animals 191, 201, 213, 221, 231, 237, 245
- Fructose, ingestion, metabolic effects, serum composition, man 69A
- Fungal protein, feeding-stuff, pig 98
- Gastric secretion, denervated fundic pouch, piglet 28A
- Genetics and nutrition, effect on body composition 351
- Gliadin, effect on intestinal mucosa, coeliac disease, man 38
- Glucagon, stimulation of hepatic gluconeogenesis, foetal and suckling lamb 30A
- Glucocorticoid, role in starvation-refeeding stress response, rat 138A
- Gluconeogenesis, hepatic, effect of glucagon, foetal and suckling lamb 30A
- Glucoreceptors, role in control of food intake, pig 64
- Glucose, preference, taste, pig 71
- Glucose-tolerance test, oral, results in eating disorders, man 2A
- Growth, critical periods 309
- Growth, effect of nutrition and infection, rural Africa 369
- Growth, effect of overfeeding and underfeeding 363

- Growth, energy requirement 339
 Growth, model of response to nutrient input 383
 Growth, manipulation of 323
 Growth, nutritional status, child 315
 Growth hormone, secretion, obesity and anorexia nervosa, man 3A
 Growth-promoting substances, animal production 377
 Growth rate, effect of restricted postnatal nutrition, lamb 12A
- Heat loss, relation to plane of nutrition, thermal environment, pig 81
 Histocompatibility antigens, coeliac disease, man 38
 Hormones *see also* Glucagon, Growth hormone
 Hormones, affecting gastric motility and secretion, pig 66
 Hydrochloric acid, dietary, effect on food intake, rat 18A, 19A
 1 α -Hydroxycholecalciferol, effect on calcium and phosphorus metabolism, relation to milk fever, dairy heifer 55A
 Hyperlipidaemia, dietary control, man 3A
 Hypocholesterolaemia, potency of *Fusarium* extracts, hamster 127A
- Immune response, essential fatty acid metabolism, effect of dietary factors, mice 148A
 Infant feeding practices, Nigeria 25A
 Infection, effect on growth and nutrition, rural Africa 369
 Insulin, secretion, effect of variations in postweaning diet, rat 123A
 Iron, absorption and distribution, effect of *Salmonella gallinarum* infection, chicks 122A
 Iron, recommended intakes, man 8
 Iron, sex differences in absorption and regulation of balance, man 169
- Ketogenesis, effect of glucose, fasted lactating cow 113A
- Lactase, intestinal mucosa, changes with age, pig 50
 Lactation, effect on zinc metabolism, rat 5A
 Lactic acid, dietary, effect on food intake, rat 19A
 Lactic acid, utilization, baby pig 27A
 Lead, availability, effect of dietary sulphur compounds, rat 33A
 Leaf protein, feeding-stuff, pig 98
 Leaf-protein concentrate, mineral source 35A
 Leaf-protein concentrate, vitamin source 6A
 Leptazol, effect on brain ascorbic acid distribution, guinea-pig 7A
 Leucine, oxidation in muscle, effect of protein-free diet, rat 48A
 Lignin, relation between dietary source and plasma lipids, rats 71A
 Lignosulphonate, calcium, sodium and magnesium salts, effect on colon, guinea-pig 76A
 Linoleic acid requirement, human infant, relation between deficiency and artificial feeding 65A
 Lipid(s) *see also* Fatty acid(s), Fatty liver, Fatty liver and kidney syndrome, Hypocholesterolaemia, Linoleic acid requirement
 Lipid metabolism, effect of dietary sucrose and glycerol, sex difference in response, baboon 70A
 Lipid metabolism, effect of dietary sucrose substitution, man 68A
 Lipid requirement, human infant, assessment by erythrocyte long-chain polyunsaturated fatty acid levels 63A
 Lipogenesis, effect of dietary tryptophan, rat 37A
 Lysine, availability, determination using *Tetrahymena pyriformis*, barley 88A
 Lysine, reactive, estimation in foods, dye-binding method 23A
- Malabsorption, nutritional deficiencies, man 37
 Marker, recovery, measurement in cannulated cows 100A
 Meat production, energy utilization, pig 75
 Methionine, rapid determination by gas-liquid chromatography, legume seeds 148A
 Methionine metabolism, in vivo measurement, young pigs 150A
 Microbial protein synthesis, effect of feeding frequency and dietary energy source, sheep 108A
 Milk fever, treatment with 1 α -hydroxycholecalciferol, dairy heifer 55A
 Minerals *see* Copper, Iron, Sodium, Zinc
 Mineral(s), absorption, intestinal, pig 60
 Mushrooms, changes during storage, effect on nutritional quality 122A
- Nicotinic acid, recommended intakes, man 4
 Nitrogen balance, day-to-day variation, man 49A
 Non-protein nitrogen, supplements, comparison, urea and ammonium salts, sheep 41A
 Nucleic acid turnover, rumen bacteria, in vitro study, steer 53A
 Nutrient intakes, recommended, comparison, man 1
 Nutrient requirement, calcium, magnesium and phosphorus, sex differences, man 163
 Nutrition, farm animals, effect of food processing 191, 201, 213, 221, 231, 237, 245
 Nutrition, pig 49, 57, 63, 69, 75, 81, 87, 93
 Nutritional quality, effect of storage, mushrooms 122A
 Nutritional status, effect on growth, child 315
 Nutritional stress, response in males and females, man 175
 Nutritional survey, food intake and anthropometric data, preschool children 74A
 Nutritional survey, relation between nutritional knowledge and food habits, Sheffield children 73A
 Nutritional variables, response of males and females, man 145, 155, 159, 163, 175, 181
 Nutritive value, effect of foodstuff processing, pigs 237
 Nutritive value, effect of pretreatment of diet, poultry 231
 Nutritive value, effect of processing, dried grass diets 102A
 Nutritive value, forage diets, ruminants 191, 201

- Obesity, response to cold stress, rats and mice 133A
 Overfeeding, clinical consequences, growth 363
 Ovulation, copper acetate-induced, effect of ascorbic acid, rabbit 10A
- Parasitism, gastrointestinal tract, effect on food intake and utilization, lamb 13A
 Parenteral nutrition, design 42
 Parenteral nutrition, recommended daily allowances, man 11
 Parenteral nutrition, use in gastrointestinal failure, man 41
 Pentobarbitone, relation between duration of anaesthesia and dietary sucrose, rat 132A
 pH, gastrointestinal tract, changes with age, pig 52
 Phenylketonuria, dietary treatment, man 31
 Plants, genetic improvement, feeding-stuff protein yield 94
 Polyalcohols, in vitro fermentation study, rumen microbes 140A
 Polysaccharides, digestibility of acetyl groups, rumen, sheep 94A
 Polysaccharides, relationship between acetyl groups and individual sugars, leaves and plants 93A
 Pregnancy, effect on copper metabolism, rat 4A
 Pregnancy, effect on zinc metabolism, rat 5A
 Production efficiency, effect of heat losses, pig 85
 Protease inhibitors, field-bean (*Vicia faba* L.), nutritional effects, rat 84A
 Protected protein, casein, effect on nitrogen flow to intestine, calf 42A
 Protected protein, effectiveness of formaldehyde treatment, ruminants 221
 Protein, dietary deprivation, effect on skin collagen, rat 81A
 Protein(s), digestion and absorption, pig 60
 Protein, leaf, effect of tannins on release during mastication, cattle 95A
 Protein, metabolism, muscle and liver, effect of glucocorticoids, rat 47A
 Protein, recommended intakes, man 6
 Protein deficiency, effect on brain-cell size and cell number, weanling rat 51A
 Protein quality, soya-bean concentrate, nitrogen balance study, man 116A
 Protein requirement, lactation, beef cows 106A
 Protein sources, feeding-stuffs, pig 93
 Protein turnover, measurement technique, genetically obese rats 128A
 Protein utilization, effect of dietary carbohydrate, growing pig 149A
 Pyridoxine, deficiency, form of supplementation in liver disease, man 141A
- α -Retinol, mechanism of vitamin A activity, rats 142A
 Rumen contents, dewatered and ensiled, sheep ration 17A
 Rumen, fermentation, effect of ammonia concentration, sheep 40A
- Saccharin, preference, taste, pig 72
Salmonella gallinarium infection, effect on iron absorption and distribution, chicks 122A
 Secretions, digestive, changes with age, pig 50
 Selenium, blood level, New Zealand, man 34A
 Sex differences, response to nutritional variables, man 145, 155, 159, 163, 175, 181
 Sex differences, fatty acid composition of carcass lipids, lean and obese Zucker rats 77A
 Silage, non-protein nitrogen, rumen metabolism, cow 16A
 Single-cell protein, feeding-stuff, pig 94
 Slaughter weight, effect on production efficiency, pig 77
 Sodium, dietary form, mechanism of buffering action, calf 61A
 Soya-bean-protein concentrate, nitrogen balance study, man 116A
 Starch, milk-substitute diet, intestinal digestion, preruminant calf 104A
 Stress, starvation-refeeding, role of glucocorticoid, rat 138A
 Sucrose, preference, taste, pig 71
- Tannins, effect on release of soluble leaf protein during mastication, cattle 95A
 Taste, preferences, quantitative studies, pig 69
 Technique, determination of origin of bacterial amino acids, [¹⁵N] urea, calf rumen 52A
 Technique, dye-binding, reactive lysine content of foods 23A
 Technique, dye-binding, lysine content of barley 44A
 Technique, estimation of digestibility of digesta fractions, nitrogen balance studies, sheep 110A
 Technique, isolates hepatocytes, liver metabolism studies 29A
 Technique, measurement of flow of intestinal contents, sheep 107A
 Technique, measurement of heat loss, man
 Technique, measurement of liver protein turnover, labelled amino acid, genetically obese rats 128A
 Technique, 3-methyl histidine determination, myofibrillar protein breakdown rate 45A
 Techniques, microbial protein estimation, duodenal digesta, sheep 39A
 Technique, microbiological assay, tryptophan in proteins 43A
 Technique, operant conditioning, measurement of taste preference, pig 72
 Technique(s), study of digestion and absorption, pig 57
Tetrahymena pyriformis, determination of lysine availability, barley 88A
 Thermogenesis, cold stress, obesity, rats and mice 133A
 Thermoregulation, role in control of food intake, pig 64
 Thiamin, recommended intakes, man 5
 Trace element(s), deficiency states, man 20
 Trace element(s), requirement, man 15

- Triamcinolone acetonide, effect on muscle and liver protein metabolism, rat 47A
- Tryptophan, dietary, effect on lipid metabolism, rat 37A
- Underfeeding, clinical consequences, growth 363
- Vitamins, see Ascorbic acid, Biotin, Folic acid, α -Hydroxycholecalciferol, Nicotinic acid, Pyridoxine, α -Retinol, Thiamin, Vitamin A, Vitamin E
- Vitamin(s), intake, Western diet, man 23
- Vitamin A, intakes, Western man 25
- Vitamin E, requirement, man 27
- Yeast protein, feeding-stuff, pig 95
- Zinc, liver and whole-body accumulation, foetal lamb 86A
- Zinc, metabolism, pregnancy and lactation, rat 5A