## **Index of Subjects**

alcohol, effects on haemostasis 124 anaemia, pernicious, vitamin B<sub>12</sub> deficiency 13 ascorbic acid see vitamin C beriberi, thiamin deficiency 6 biotin, levels in breast milk and formula feeds 7, 9, 18 blood, effects of nutrition on coagulation 117-118, 120 effects of nutrition on fibrinolysis 118, 120 platelet aggregation 118-120 body weight see also obesity changes after pregnancy 38-41, 66-75 increase with age 67-71 bones see osteoporosis breast cancer, effect of lactation on risk 48 breast feeding see lactation breasts see also lactation changes during weaning and menopause 38 effect of lactation on risk of cancer 43-47 caeruloplasmin, ferroxidase activity, effect of vitamin C 17 cancer, effects of lactation on risks 43-47 carbohydrates, effects on haemostasis 127-128 food content, estimation by near infrared spectroscopy 107 - 108carotenoids see vitamin A chicken, geometrical model for nutrition 151-179 cholecalciferol see vitamin D cholesterol, metabolism, effects of lactation 41 cobalamins see vitamin B12 concentrates, estimation by near infrared spectroscopy 97-101 corrinoids see vitamin B12 diabetes, gestational 41 endometrial cancer, effect of lactation on risk 48 energy, balance in pregnancy, effects on obesity 1-25 effects on haemostasis 120-124 estimation by near infrared spectroscopy 101-102, 104-106 ergocalciferol see vitamin D exercise, effects on haemostasis 121-124 fats and oils effects on haemostasis 125-127, 129 fatty acids, effects on haemostasis 126 estimation by near infrared spectroscopy 95-96 polyunsaturated, effect on requirement for vitamin E 21 feeds, nutritive value estimation by near infrared spectroscopy 83-114 fertility, effects of lactation 41-42 fibrin see haemostasis

fish oils, effects on haemostasis 126-127 folate, effects of deficiency 14 levels in breast milk and formula feeds 7, 9, 14-15 foods, nutritive value estimation by near infrared spectroscopy 106-114 forages, nutritive value estimation by near infrared spectroscopy 89–97 voluntary intake, estimation by near infrared spectroscopy 94-95 formula feeds, vitamin contents 1-33 geometrical model, nutrition of insects and vertebrates 151-179 glucose, metabolism, effects of lactation 41 haemorrhage, effects of nutrition on haemostasis 115 - 135haemostasis, effects of nutrition 115-135 health, effects of lactation 35-56 insects, geometrical model for nutrition 151-179 integrative model, nutrition of insects and vertebrates 151-179 intrinsic factor, absorption of vitamin B<sub>12</sub> 13 lactase, deficiency 141-142 metabolism of lactose 138-147 lactation, effects on health 35-56 effects on risks of cancer 43-48 lactose, digestion, developing countries 137-149 intolerance 140-141 levels in human milk, factors affecting 145 lipids, food content, estimation by near infrared spectroscopy 107-108 metabolism, effects of lactation 41 lipoproteins, metabolism, effects of lactation 41 locust, geometrical model for nutrition 151-179 menadione see vitamin K milk, human, vitamin content 3-26 intolerance, effect on milk consumption 142 nutritive supplement, developing countries 145-146 niacin, conversion of tryptophan 15 effects of deficiency 15 levels in breast milk and formula feeds 7, 9, 15-16 nonstarch polysaccharides, effects on haemostasis 127 - 128nutrient balancing, insects and vertebrates 151-179 nutrition, geometrical model, insects and vertebrates 151-179 postingestive regulation 170-175

obesity, effects of pregnancy 57-81 effects on haemostasis 120 osteocalcin, marker for bone turnover 23 osteoporosis, effect of lactation 48-50 ovarian cancer, effect of lactation on risk 47-48 pantothenic acid, levels in breast milk and formula feeds 7, 9, 17-18 performance of insects and vertebrates, geometrical model of nutrition 175-176 platelets see haemostasis polyglutamates see folate polysorbate, vehicle for vitamin E, toxicity 22 pregnancy, effects on obesity 57-81 protein, crude, estimation by near infrared spectroscopy 96-97 food content, estimation by near infrared spectroscopy 106-108 prothrombin see also haemostasis effects of vitamin K 24-25 pyridoxine, effects of deficiency 11-12 levels in breast milk and formula feeds 7, 9, 11-12 quinones see vitamin K rat, geometrical model for nutrition 151-179 retinoids see vitamin A riboflavin, effects of deficiency 10-11 levels in breast milk and formula feeds 7, 9-11

scurvy, vitamin C deficiency 16

spectroscopy, near infrared, food and feed assessments 83-114

taste, effect on nutrient intake 165-169 thiamin, levels in breast milk and formula feeds 6-10 tocopherols see vitamin E triglycerides, metabolism, effects of lactation 41 tyrosine, metabolism, effect of vitamin C 17 vitamin A, effects of deficiency and excess 19 levels in breast milk and formula feeds 8, 9, 19-20 vitamin B<sub>1</sub> see thiamin vitamin B<sub>12</sub>, levels in breast milk and formula feeds 7, 9, 13-14 vitamin B2, see riboflabin vitamin B<sub>6</sub> see pyridoxine vitamin C, levels in breast milk and formula feeds 7, 9, 16-17 vitamin D, effects of deficiency and excess 22-23 levels in breast milk and formula feeds 8, 9, 22-24 vitamin E, effects of deficiency and excess 20-22 levels in breast milk and formula feeds 8, 9, 20-22 vitamin K, effects of deficiencies and excess 24-25 levels in breast milk and formula feeds 8, 9, 24-26 synthesis of osteocalcin 24 vitamins, breast milk 3-26 effects on haemostasis 128-129 requirements of babies 1-33

water, food content, estimation by near infrared spectroscopy 106-107