



# Nutrition and Metabolism

Journal of Nutrition, Metabolic Diseases and Dietetics

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## Index

### No. 1

<i>Haralambie, G.</i> : Vitamin B <sub>2</sub> Status in Athletes and the Influence of Riboflavin Administration on Neuromuscular Irritability . . . . .	1
<i>Osifo, B.O.A. and Adadevoh, B.K.</i> : Serum Vitamin B <sub>12</sub> Levels in Protein-Malnourished Children . . . . .	9
<i>Pachauri, S.P.; Jacotot, B., and Beaumont, J.L.</i> : Circulating Lipophages and Aortic Foam Cells in Experimental Atherosclerosis of Rabbits under Altered Reticuloendothelial Activity . . . . .	14
<i>Johnson, O. and Olivecrona, T.</i> : Metabolism of Liver Triacylglycerols in Rats Tube-Fed a Threonine-Devoid Diet . . . . .	27
<i>Marshall, M.W.; Haubrich, M.; Washington, V.A.; Chang, M.-L.W.; Young, C.W., and Wheeler, M.A.</i> : Biotin Status and Lipid Metabolism in Adult Obese Hypercholesterolemic Inbred Rats . . . . .	41
<i>Davies, J.E.W.; Wilson, H.K., and Hughes, R.E.</i> : Food Intake, Dietary Supplements and Survival Time of Scorbutic Guinea Pigs . . . . .	62
<i>Sirek, A.M.T.; Horvath, E.; Ezrin, C., and Kovacs, K.</i> : Effect of Starvation on Pituitary Growth Hormone Cells and Blood Growth Hormone and Prolactin Levels in the Rat . . . . .	67

### Review

<i>Shmerling, D.H.</i> : Development of Digestive and Absorptive Function in the Human Fetus . . . . .	76
Varia . . . . .	80

### No. 2

<i>Pachauri, S.P. and Mukerjee, S.K.</i> : Effect of Reticuloendothelial Stimulators on the Tissue Changes and Evolution of Experimental Atheroma in Rabbits . . . . .	81
<i>Hulstaert, C.E.; Molenaar, I.; Goeij, J.J.M. de; Zegers, C., and Pijpen, P.L. van</i> : Selenium in Vitamin-E-Deficient Diets and the Occurrence of Myopathy as a Symptom of Vitamin E Deficiency . . . . .	91

<i>Dinesen, B. and Clausen, J.</i> : The Influence of Vitamin E Deficiency and Combined Deficiency in Vitamin E and Polyunsaturated Fatty Acids on the Biosynthesis and Degradation of Rat Central Nervous System Myelin . . . . .	95
<i>Hassam, A.G. and Crawford, M.A.</i> : Influence of Maternal Dietary $\gamma$ -Linolenic Acid on the Milk and Liver Lipids of Suckling Rats . . . . .	112
<i>Bučko, A.; Kopec, Z.; Kapeller, J., and Mikulajová, M.</i> : Adaptation of Pancreatic Amylase Activity to Enhanced Parenteral Carbohydrate Intake in Rats, and Electron Microscopic Findings . . . . .	117
<i>Miller, D.S. and Wise, A.</i> : The Energetics of 'Catch up' Growth . . . . .	125
<i>Chooi, M.K.; Todd, J.K., and Boyd, N.D.</i> : Influence of Age and Sex on Plasma Zinc Levels in Normal and Diabetic Individuals . . . . .	135
<i>Peret, J.; Chanez, M., and Pascal, G.</i> : Schedule of Protein Ingestion and Circadian Rhythm of Certain Hepatic Enzyme Activities Involved in Glucose Metabolism in the Rat . . . . .	143
Book Reviews . . . . .	158
Varia . . . . .	160

### No. 3

#### Second European Nutrition Conference

Munich 14th–17th September, 1976

Abstracts . . . . .	161
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### No. 4

<i>Birch, G.G. and Etheridge, I.J.</i> : Short Term Effects of Feeding Male Subjects with Glucose Syrup Fractions and <i>D</i> -Glucose . . . . .	209
<i>Mahoney, A.W. and Hendricks, D.G.</i> : Effect of Dietary Iron Level on Efficiency of Converting Food Iron into Hemoglobin by the Anemic Rat . . . . .	222
<i>Lakshmi, A.V. and Bamji, M.S.</i> : Regulation of Blood Pyridoxal Phosphate in Riboflavin Deficiency in Man . . . . .	228
<i>Madar, Z.; Tencer, Y.; Gertler, A., and Birk, Y.</i> : The Comparative Effect of Prolonged Feeding with Raw and Heated Soybean Meal on the Growth Response, Pancreatic Enlargement and Pancreatic Enzymes of Chicks . . . . .	234
<i>Lenner, R.A.</i> : The Importance of Motivation in the Adherence to Dietary Advice. A One-Year Follow-up Study of Middle-Aged Women with a Supposed Risk to Develop Diabetes . . . . .	243
<i>Andersson, H.</i> : Effects of a Fat-Reduced Diet on the Faecal Excretion of Radioactivity following Administration of $^{14}\text{C}$ -Cholic Acid and on the Duodenal Concentration of Bile Salts in Patients with Ileal Disease . . . . .	254
<i>Hustvedt, B.-E.; Løføy, A., and Reichl, D.</i> : The Effect of Ventromedial Hypothalamic Lesions on Metabolism and Insulin Secretion in Rats on a Controlled Feeding Regimen . . . . .	264

<i>Mahboob, S.</i> : Thymic Weight in Pantothenic Acid Deficiency . . . . .	272
<i>Miller, J.</i> : Erythropoietic Response of Anemic Rats to Enriched White Bread and Bread Ash . . . . .	278
Book Reviews . . . . .	285
Varia . . . . .	288

## No. 5

<i>Winand, J.; Hebbelinck, M.; Wodon, C., and Christophe, J.</i> : Influence of Litter Size on Lipid Composition in Infant Mice . . . . .	289
<i>Nahani, J.; Nik-Aeen, A.; Rafii, M., and Mohagheghpour, N.</i> : Effect of Malnutrition on Several Parameters of the Immune System of Children . . . . .	302
<i>Weigand, E. and Kirchgessner, M.</i> : Radioisotope Dilution Technique for Determination of Zinc Absorption <i>in vivo</i> . . . . .	307
<i>Weigand, E. and Kirchgessner, M.</i> : <sup>65</sup> Zn-Labeled Tissue Zinc for Determination of Endogenous Fecal Zinc Excretion in Growing Rats . . . . .	314
<i>Pento, J.T.</i> : The Influence of Interrupted Vitamin D Metabolism on Acute Low Calcium Adaptation in the Rat . . . . .	321
<i>Vondra, K.; Rath, R.; Bass, A.; Kužela, L., and Slabochová, Z.</i> : Effect of Protracted Intermittent Fasting on the Activities of Enzymes Involved in Energy Metabolism, and on the Concentrations of Glycogen, Protein and DNA in Skeletal Muscle of Obese Women . . . . .	329
<i>Kirtland, J.; Gurr, M.I., and Widdowson, E.M.</i> : Body Lipids of Guinea Pigs Exposed to Different Dietary Fats from Mid-Gestation to 3 Months of Age. I. The Cellularity of Adipose Tissue . . . . .	338
<i>Pavey, D.E.; Widdowson, E.M., and Robinson, M.P.</i> : Body Lipids of Guinea Pigs Exposed to Different Dietary Fats from Mid-Gestation to 3 Months of Age. II. The Fatty Acid Composition of the Lipids of Liver, Plasma, Adipose Tissue, Muscle and Red Cell Membranes at Birth . . . . .	351
<i>Gurr, M.I.; Robinson, M.P.; Kirtland, J., and Widdowson, E.M.</i> : Body Lipids of Guinea Pigs Exposed to Different Dietary Fats from Mid-Gestation to 3 Months of Age. III. The Fatty Acid Composition of the Lipids of Plasma, Adipose Tissue, Liver and Muscle at 3 Months of Age . . . . .	364
Book Reviews . . . . .	378
Varia . . . . .	380

## No. 6

### Editorial

<i>Heyden, S.</i> : The Workingman's Diet . . . . .	381
<i>Schaik, T.F.S.M. van</i> : Nutrition Surveys in a Population . . . . .	387

## Original Papers

<i>Katiyar, G.P.; Agarwal, K.N.; Shanker, R., and Nagchaudhuri, J.</i> : Effect of Protein Energy Deprivation on the Brain Enzymes of Glutamic Acid in Preweanling Rats . . . . .	396
<i>Hems, D.A.; Davies, M.G.; Thomas, A.J., and Whitton, P.D.</i> : Utilisation of Amino Acids by the Perfused Rat Liver . . . . .	404
<i>Kunachowicz, H.; Pieniążek, D., and Rakowska, M.</i> : Changes in the Available Methionine and Lysine Content of Isolates and Concentrates of Milk and Plant Proteins . . . . .	415
<i>Basu, T.K.; Jenner, M., and Williams, D.C.</i> : The 'Thiamin-Sparing' Effect of Ascorbic Acid . . . . .	425
<i>Cheng Kuan-Chyun and Fisher, L.B.</i> : Infant Death and Epidermal Dysplasia Induced by Linoleate Deficiency in Mice . . . . .	432
<i>Alling, C.; Bruce, Å.; Karlsson, I., and Svennerholm, L.</i> : Effect of Different Dietary Levels of Essential Fatty Acids on Liver and Serum Lipids in the Rat . . . . .	440
<i>Bondjers, G.; Brattsand, R.; Hansson, G.K., and Björkerud, S.</i> : Cholesterol Transfer and Content in Aortic Regions with Defined Endothelial Integrity from Rabbits with Moderate Hypercholesterolemia . . . . .	452
<i>Reiser, S.; Hallfrisch, J.; Putney, J., and Lev, F.</i> : Enhancement of Intestinal Sugar Transport by Rats Fed Sucrose as Compared to Starch . . . . .	461
Author Index . . . . .	471
Subject Index . . . . .	476

## Supplement 1

## Parenteral Nutrition

Proceedings of a Symposium held in Copenhagen, March 1975

Arranged by S. Jarnum and V. Larsen

Guest Editor: H.D. Cremer, Giessen

**32 Alimentary Iodine Deficiency in the Federal Republic of Germany: Current Inefficiency of Goitre Prophylaxis**

*J. Habermann, K. Horn and P.C. Scriba, Munich, FRG*

Iodine deficiency is the most important factor in the etiology of endemic goitre. Recent epidemiologic surveys showed that goitre is endemic in the FRG, with an average incidence of 15 % among recruits, and that the alimentary iodine intake of 30–70  $\mu\text{g}$  iodine/day is less than 30 % of the optimum recommended by the WHO. A successful iodine prophylaxis, as introduced for a long time in Switzerland and Austria, is hitherto not possible in the FRG: the law on dietetic food restricts the iodine content of iodized salt to 5 mg iodine/1 kg. Also, there must be a label on the packing, indicating that the salt is only to be used for 'medically established' iodine deficiency. Therefore, the voluntary prophylaxis is, e.g., only used by less than 20 % of the population of Bavaria. When 10 g of this iodized salt are consumed daily, this will amount to an extra intake of 50  $\mu\text{g}$  iodine. However, we measured the content of iodine in the iodized salts, and found this to vary, generally depending upon conditions of storage, between 2.1 and 4.2 mg iodine/kg (table salt and sea salt below 0.7 mg/kg). The true iodine intake is therefore much lower, and a sufficient prophylaxis of endemic goitre by this salt is hardly possible. The Thyroid Section of the German Society for Endocrinology recently recommended a goitre prevention program by compulsory iodization of salt with 10 mg iodine/kg. Because of its superior stability potassium iodate should be preferred instead of potassium iodine for iodization.