CONTENTS

Commentary
The Cafeteria Diet—An Inappropriate Tool for Studies of Thermogenesis. Barbara J. Moore 227

Lipids
Effect of Maternal Dietary Linoleic Acid and trans-Octadecenoic Acid on the Fatty Acid Composition and Prostaglandin Content of Rat Milk. Margaret Ann Wickwire, Margaret C. Craig-Schmidt, John D. Weete and Sam A. Faircloth 232

Proteins and Amino Acids
Lymphoid Organ mRNA Translatability in Rats: Effect of Protein Energy Undernutrition in Early Life. Uma S. Srivastava, Manohar L. Thakur, Pradeep K. Majumdar, Gopal M. Bhatnagar and Prakash C. Supakar 242
Pancreatic Response to Long-Term Feeding of Soy Protein Isolate, Casein or Egg White in Rats. B. Diane Richter and Barbara Olds Schneeman 247

Carbohydrate and Fiber
Intestinal Structural Changes in African Green Monkeys after Long Term Psyllium or Cellulose Feeding. Inge Paulini, Tara Mehta and Ann Hargis 253
Metabolizable Energy in Humans in Two Diets Containing Different Sources of Dietary Fiber. Calculations and Analysis. Helen Göranson and Elisabet Forsum 267
Utilization of Intravenously Administered Glycogen by Young Pigs. Dean W. Andersen, Lewis D. Stegink, L. J. Filer, Jr. and A. E. Applebaum 274
Apparent Inability of Channel Catfish to Utilize Dietary Mono- and Disaccharides as Energy Sources. Robert P. Wilson and William E. Poe 280

Vitamins
Modulation of the Flavin-Containing Monooxygenase in Guinea Pigs by Ascorbic Acid and Food Restriction. Joanne L. Brodfuehrer and Vincent G. Zannoni 286
Effect of Dietary Ascorbic Acid Intake on Tissue Vitamin C in Mice. Constance S. Tsao, Ping Y. Leung and May Young 291
Effect of Exercise on Riboflavin Status of Rats. Kay E. Lepisto Hunter and Pirkko R. Turkki 298

Minerals and Trace Elements
Alterations of Pancreatic Digestive Enzyme Content in the Manganese-Deficient Rat. Patsy M. Brannon, Victoria P. Collins and Murray Korc 305
Accumulation and Metabolism of Iron-Dextran by Hepatocytes, Kupffer Cells and Endothelial Cells in the Neonatal Pig Liver. Thomas J. Caperna, Mark L. Failla, Norman C. Steele and Mark P. Richards 312
Absorption of Zinc from Soy Protein Meals in Humans. Brittmarie Sandström, Barbro Kivistö and Åke Cederblad 321

Nutrient Requirements
Growth of Juvenile White Sturgeon (Acipenser transmontanus) Fed Different Purified Diets. Silas S. O. Hung, Brendan J. Moore, Clark E. Bordner and Fred S. Conte 328
Maintenance Nitrogen Requirements and Intestinal Microorganisms in Rats. W. Allen Nipper, Wise Burroughs and Allen Trenkle 335
Growth, Development and Aging

Growth Retardation Induced in Rat Fetuses by Maternal Fasting and Massive Doses of Ergocalciferol. Fumio Ariyuki .................................................. 342

Lipoprotein Lipase Activity in Skeletal Muscle and Brown Adipose Tissue of Pregnant and Lactating Rats. Odette Champigny and Yvonne Hitier .................................................. 349

Effects of Long-Term Moderate Food Restriction on Growth, Serum Factors, Lipogenic Enzymes and Adipocyte Glucose Metabolism in Lean and Obese Zucker Rats. Margot P. Cleary, Susan Muller and Susan Lanza-Jacoby .................................................. 355

Influences of Dietary Restriction and Age on Liver Enzyme Activities and Lipid Peroxidation in Mice. Akio Koizumi, Richard Weindruch and Roy L. Walford .................................................. 361

Metabolism and Hormonal Regulation

Iodothyronine 5'-Deiodination in Rats Fed Low Protein Diets: Lack of Correlation with Energy Balance. F. Bradley Hillgartner and Dale R. Romsos .................................................. 368

Nutrition and Gene Expression

Genetic Differences in Effects of Food Restriction on Aging in Mice. D. E. Harrison and J. R. Archer ..... 376

Nutrition and Disease Interactions

Reversal of Obesity in the Genetically Obese fa/fa Zucker Rat with an Ephedrine/Methylxanthines Thermogenic Mixture. A. G. Dulloo and D. S. Miller .................................................. 383

Nutrition and Physical Activity

Beneficial Effects of Exercise on Growth of Rats During Intermittent Fasting. Kazuko Sakamoto and Katharine K. Grunewald .................................................. 390

Book Reviews ................................................................. 396

Issues and Opinions in Nutrition

Trypsin Inhibitors: Potential Concern for Humans? B. D. Roebuck .................................................. 398
Nutritional Epidemiology and National Surveys. Catherine E. Woteki, Ronette R. Briefel and Christopher Sempos .................................................. 401

Letters to the Editor

Effects of Hydrophilic Fiber Sources in Dry Rat Diets. Ian T. Johnson .................................................. 403
Reply to the Letter of Dr. Johnson. Barbara J. Struthers .................................................. 405
The Effect of Dehydroepiandrosterone on Body Weight Gain. Arthur G. Schwartz and Margot P. Cleary 406

Announcements ................................................................. 408