

## CONTENTS

|                                                                                                                                                                                                                                                                                                                                                                                                           |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Severity of Insulin Resistance in Critically Ill Medical Patients<br><i>Alexandra Zauner, Petra Nimmerrichter, Christian Anderwald, Martin Bischof, Mark Schieffermeier, Klaus Ratheiser, Bruno Schneeweiss, and Christian Zauner</i>                                                                                                                                                                     | 1  |
| Effect of Experimental Hypo- and Hyperthyroidism on Serum Adiponectin<br><i>Christina Nogueira Aragão, Luana Lopes Souza, Adriana Cabanelas, Karen Jesus Oliveira, and Carmen Cabanelas Pazos-Moura</i>                                                                                                                                                                                                   | 6  |
| Divergent Effects of Epinephrine and Prostaglandin E <sub>2</sub> on Glucose-Induced Insulin Secretion From Perifused Rat Islets<br><i>Walter S. Zawulich, Kathleen C. Zawulich, and Hanae Yamazaki</i>                                                                                                                                                                                                   | 12 |
| Short-Chain Aliphatic Amines in Human Urine: A Mathematical Examination of Metabolic Interrelationships<br><i>Stephen C. Mitchell, Mary E. Bollard, and AiQin Zhang</i>                                                                                                                                                                                                                                   | 19 |
| Thiazolidinediones Increase Hepatic Insulin Extraction in African Americans With Impaired Glucose Tolerance and Type 2 Diabetes Mellitus: A Pilot Study of Rosiglitazone<br><i>Kwame Osei, Trudy Gaillard, and Dara Schuster</i>                                                                                                                                                                          | 24 |
| Circulating Leptin and Adiponectin Levels in Patients With Primary Hyperparathyroidism<br><i>Enrica Delfini, Luigi Petramala, Chiara Caliumi, Darlo Cotesta, Giorgio De Toma, Giuseppe Cavallaro, Giuseppe Panzironi, Daniele Diacinti, Savatore Minisola, Emilio D' Erasmo, Gian Franco Mazzuoli, and Claudio Letizia</i>                                                                                | 30 |
| Predicting More Accurately the Overall Glucose Response to a Lunch Meal by Using the Postprandial Glucose Peak<br><i>Didier Chapelot, Corinne Marmonier, and Paul Valensi</i>                                                                                                                                                                                                                             | 37 |
| Association of the C825T Polymorphism of the G-Protein $\beta 3$ Subunit Gene With Hypertension, Obesity, Hyperlipidemia, Insulin Resistance, Diabetes, Diabetic Complications, and Diabetic Therapies Among Japanese<br><i>Tetsuo Hayakawa, Toshinari Takamura, Toshio Abe, and Shuichi Kaneko</i>                                                                                                       | 44 |
| Sepsis-Induced Suppression of Skeletal Muscle Translation Initiation Mediated by Tumor Necrosis Factor $\alpha$<br><i>Charles H. Lang and Robert A. Frost</i>                                                                                                                                                                                                                                             | 49 |
| Effects of a Carbohydrate-Restricted Diet With and Without Supplemental Soluble Fiber on Plasma Low-Density Lipoprotein Cholesterol and Other Clinical Markers of Cardiovascular Risk<br><i>Richard J. Wood, Maria Luz Fernandez, Matthew J. Sharman, Ricardo Silvestre, Christine M. Greene, Tosca L. Zern, Sudeep Shrestha, Daniel A. Judelson, Ana L. Gomez, William J. Kraemer, and Jeff S. Volek</i> | 58 |
| Insulin Dose Response Analysis of Free Fatty Acid Kinetics<br><i>Michael D. Jensen and Søren Nielsen</i>                                                                                                                                                                                                                                                                                                  | 68 |
| Nontraditional Atherosclerotic Risk Factors and Extent of Coronary Atherosclerosis in Patients With Combined Impaired Fasting Glucose and Impaired Glucose Tolerance<br><i>Andrzej Surdacki, Ewa Stochmal, Magdalena Szurkowska, Stefanie M. Bode-Böger, Jens Martens-Lobenhoffer, Anna Stochmal, Artur Klecha, Kalina Kawecka-Jaszcz, Jacek S. Dubiel, Bohdan Huszno, and Zbigniew Szybiński</i>         | 77 |
| Metabolic Syndrome in Women With Chronic Pain<br><i>Barbara L. Loevinger, Daniel Muller, Carmen Alonso, and Christopher L. Coe</i>                                                                                                                                                                                                                                                                        | 87 |
| Longitudinal Hair Chromium Profiles of Elderly Subjects With Normal Glucose Tolerance and Type 2 Diabetes Mellitus<br><i>Janez Štupar, Matjaž Vrtovec, and Franci Dolinšek</i>                                                                                                                                                                                                                            | 94 |

(Contents continued)

|                                                                                                                                                                                                                                                                                                                                 |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Does the Ornithine- $\alpha$ -Ketoglutarate Ratio Influence Ornithine $\alpha$ -Ketoglutarate Metabolism in Healthy Rats?<br><i>Cécile Loï, Djamel Hamani, Christophe Moinard, Laurent Bishoff, Nathalie Neveux, Christiane Garbay, and Luc Cynober</i>                                                                         | 105 |
| Effects of a Palatinose-Based Liquid Diet (Inslow) on Glycemic Control and the Second-Meal Effect in Healthy Men<br><i>Hidekazu Arai, Akira Mizuno, Masae Sakuma, Makiko Fukaya, Kaoru Matsuo, Kazusa Muto, Hajime Sasaki, Motoi Matsuura, Hisami Okumura, Hironori Yamamoto, Yutaka Taketani, Toshio Doi, and Eiiji Takeda</i> | 115 |
| Temporal and Dietary Fat Content-Dependent Islet Adaptation to High-Fat Feeding-Induced Glucose Intolerance in Mice<br><i>Maria Sörhede Winzell, Caroline Magnusson, and Bo Åhrén</i>                                                                                                                                           | 122 |
| Effect of Metformin Administration on Plasma Advanced Glycation End Product Levels in Women With Polycystic Ovary Syndrome<br><i>Evanthia Diamanti-Kandarakis, Krystallenia Alexandraki, Christina Piperi, Athanasios Aessopos, Thomas Paterakis, Ilias Katsikis, and Dimitrios Panidis</i>                                     | 129 |
| Metabolic Syndrome Prevalence and Characteristics in Greek Adults With Familial Combined Hyperlipidemia<br><i>John Skoumas, Lambros Papadimitriou, Christos Pitsavos, Constantina Masoura, Nikolaos Giotsas, Christina Chrysohou, Marina Toutouza, Demosthenes Panagiotakos, and Christodoulos Stefanadis</i>                   | 135 |
| Dietary Conjugated Linoleic Acid Preserves Pancreatic Function and Reduces Inflammatory Markers in Obese, Insulin-Resistant Rats<br><i>Amy Noto, Peter Zahradka, Natasha R. Ryz, Natalia Yurkova, Xueping Xie, and Carla G. Taylor</i>                                                                                          | 142 |