Contents

Volume II

Par	t 1 Role of Branched Chain Amino Acids in Healthy Individuals	
1	Tolerability of Leucine in Humans Rajavel Elango, Ronald O. Ball, and Paul B. Pencharz	3
2	Leucine-Protein Supplemented Recovery and Exercise	15
3	Use of Whey and Leucine on Muscle	33
4	Branched Chain Amino Acids and Muscle Atrophy Protection	49
5 Par	Role of Branched Chain Amino Acids in Cellular and Organ Damage: The Prognostic Significance of the Preoperative Branched Chain Amino Acid to Tyrosine Ratio Toru Mizuguchi, Tohsihiro Mitaka, and Koichi Hirata t II Branched Chain Amino Acids: Status in Disease States	65
6	Branched Chain Amino Acids in Heart Failure Haipeng Sun and Yibin Wang	81
7	Mitochondrial tRNA Valine in Cardiomyopathies. M. Esther Gallardo, Teresa Galera, Rafael Garesse, and Belén Bornstein	89
8	Branched Chain Amino Acids on Psychomotor Performance Krystyna Nazar	103
9	The Branched Chain Amino Acids in the Context of Other Amino Acids in Traumatic Brain Injury Melanie K. Bothe and John F. Stover	111
10	Branched Chain Amino Acids in Chronic Obstructive Pulmonary Disease Tomoko Kutsuzawa and Munetaka Haida	127

Contents

Part	III Branched Chain Amino Acids and Liver Diseases	
11	Identification of Branched Chain Amino Acids; Underlying Molecular Pathways Using Transcriptomic Analysis: Application to Cirrhosis Huijuan Jia, Nozomi Tamura, Wanping Aw, Masako Doi, and Hisanori Kato	141
12	Branched Chain Amino Acid Supplementation and Plasma Albumin	159
13	Late Evening Snack, Branched Chain Amino Acids, and Cirrhosis	169
14	Branched Chain Amino Acids and Organ Transplantation	181
15	Basic Aspects in Prevention of Posttransplant Bacteremia by Branched Chain Amino Acids Ken Shirabe, Toru Ikegami, Tomoharu Yoshizumi, and Yoshihiko Maehara	191
16	Branched Chain Amino Acids and Postoperative Quality of Life	201
Par	t IV Branched Chain Amino Acid Supplementation Studies in Certain Patient Populations	
17	Leucine-Protein Functional Adaptation in the Clinical Setting Leonidas G. Karagounis, Magne Hugues, and David S. Rowlands	217
18	Branched Chain Amino Acids Supplementation and Glycemic Control	229
19	Leucine Supplementation and Insulin Resistance	239
20	Weight Loss and Branched Chain Amino Acids and Their Metabolites	251
21	Branched Chain Amino Acid Cocktails and Skin	263
22	Branched Chain Amino Acids in Inherited Muscle Disease: The Case of Duchenne Muscular Dystrophy Jamshid Davoodi, Susan M. Hutson, and Robert W. Grange	277
23	Use of Branched Chain Amino Acids (BCAA) During Radiotherapy	289
24	Oral Branch Chain Amino Acids and Encephalopathy	299
25	Web-Based Resources, and Suggested Readings	313
Ind	PY	221