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Nota di contenuto	Part I. Role of Branched Chain Amino Acids in Healthy Individuals -- 1. Tolerability of leucine -- 2. Leucine-protein supplemented recovery and exercise -- 3. Use of whey and leucine on muscle -- 4. Branched chain amino acids and muscle atrophy protection -- 5. Role of branched chain amino acids in cellular and organ damage: the prognostic significance of the preoperative branched chain amino acid to tyrosine ratio -- Part II. Branched Chain Amino Acids: Status in Disease States -- 6. Branched chain amino acids in heart failure -- 7. Mitochondrial tRNA valine in cardiomyopathies -- 8. Branched chain amino acids on psychomotor performance -- 9. The branch chain amino acids in the context of other amino acids in traumatic brain injury -- 10. Branched chain amino acids in chronic obstructive pulmonary disease -- 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 -- 12. Branched chain amino acids supplementation and plasma albumin -- 13. Late evening snack, branched chain amino acids and cirrhosis -- 14. Branched chain amino acids and organ transplantation -- 15. Basic aspects in prevention of post-transplant bacteremia by branched chain amino acids -- 16. Branched chain amino acids and postoperative quality of life -- Part IV. Branched Chain Amino Acid Supplementation Studies in Certain Patient Populations -- 17. Leucine-protein functional adaptation in the clinical setting -- 18. Branched chain amino acids supplementation and glycemic control -- 19. Leucine supplementation and insulin resistance -- 20. Weight loss and branched chain amino acids and their metabolites -- 21. Branched chain amino acid cocktails and skin -- 22. Branched chain amino acids in inherited muscle disease: the case of Duchenne muscular dystrophy -- 23. Use of branched chain amino acids (BCAA) during radiotherapy -- 24. Oral branch chain amino acids and encephalopathy -- 25. Web based resources, and suggested readings.

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### Sommario/riassunto

This is the second volume in a 2-volume compendium that is the go-to source for both research- and practice-oriented information on the importance of branched chain amino acids in maintaining the nutritional status and overall health of individuals, especially those with certain disease conditions. Over 150 well recognized and respected contributors have come together to compile these up-to-date and well-referenced works. The volumes will serve the reader as the benchmarks in this complex area of interrelationships between dietary protein intakes and individual amino acid supplementation, the unique role of the branched chain amino acids in the synthesis of brain neurotransmitters, collagen formation, insulin and glucose modulation and the functioning of all organ systems that are involved in the maintenance of the body's metabolic integrity. Moreover, the physiological, genetic and pathological interactions between plasma levels of branched chain amino acids and aromatic amino acids are clearly delineated so that students as well as practitioners can better understand the complexities of these interactions. Branched Chain Amino Acids in Clinical Nutrition: Volume 2 covers the role of branched chain amino acids in healthy individuals, and branched chain amino acid status in disease states, liver diseases, and supplementation studies in certain patient populations.

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