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Nota di contenuto	Chapter 1. Scope and Progress on Anthocyanins -- Chapter 2. Dietary Sources of Anthocyanins -- Chapter 3. Extraction and Identification of Anthocyanins -- Chapter 4. Biosynthesis and Chemistry of Anthocyanins -- Chapter 5. Bioavailability and Bioabsorption of Anthocyanins -- Chapter 6. Modification and Stabilization of Anthocyanins. Chapter 7. Impact of Food Processing on Anthocyanins. Chapter 8. High Pressure -- Chapter 9. Encapsulation -- Chapter 10. The impact of microwave on the storage, stability, and bioavailability of anthocyanins from different sources in food systems -- Chapter 11. Combined Application of Processing Techniques -- Chapter 12. Other Techniques -- Chapter 13. Biological Activity of Anthocyanins -- Chapter 14. Anthocyanins in Health Protection -- Chapter 15. Visual Protection Effect -- Chapter 16. Unveiling the metabolic modulatory effect of anthocyanin and gut microbiota involvement -- Chapter 17. Beneficial effects of anthocyanins on nervous system Introduction -- Chapter 18. Cardiovascular Protection Effect -- Chapter 19. Anti-cancer activity of anthocyanin -- Chapter 20. Immune system promotion and anti-bacterial, anti-virus effects of anthocyanins.

Sommario/riassunto

This book summarizes the current knowledge of anthocyanins, provides systematic information for future exploration of anthocyanin applications. It focuses on several aspects regarding the studying progression in the field of anthocyanins. The first section of the book provides a brief introduction to the scope and progress on anthocyanins, which is followed by the second section that describes the natural sources, structure, extraction approaches, bioavailability, and current stabilizing approach of anthocyanins. Then in the third part, the book focuses on the industrial processing of anthocyanins in foods by discussing the impact of food processing on anthocyanin structure and composition as well as classical processing techniques on anthocyanin-containing foods, including high-pressure, encapsulation, microwave, and combined application of the above techniques. In the last section of the book, the authors explore the currently most popular application of anthocyanins in improving human health, such as the effect of anthocyanin on vision, metabolism, neural system, cardiovascular system, and cancers. The book will facilitate readers' understanding of the progress of anthocyanin studies. And it will benefit researchers and graduate students in the fields of natural products, functional food, and nutrition, etc. .
