Special Issue

Chemical Properties and Functional Roles of Bioactive Compounds in Natural Foods

Message from the Guest Editor

Bioactive compounds naturally present in foods, such as polyphenols, peptides, polysaccharides, fatty acids, and phytosterols, have attracted increasing attention due to their diverse chemical properties and health-promoting functions. These compounds play critical roles in maintaining food quality, modulating metabolism, and preventing chronic diseases. Understanding the relationship between their chemical structures and biological functions is essential for developing functional foods and improving human health. However, their stability, bioavailability, and mechanisms of action within complex food matrices remain major challenges. This Special Issue aims to collect studies on recent advances in the identification, structural characterization, and functional elucidation of bioactive compounds from natural food sources. Topics include analytical approaches, structure-activity relationships, metabolism, and health-related mechanisms, as well as innovative delivery systems that enhance stability and functionality.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Foods (ISSN 2304-8158) is an open access and peer reviewed scientific journal that publishes original articles, critical reviews, case reports, and short communications on food science. Articles are released monthly online, with unlimited free access. Currently, Foods has been indexed by the Science Citation Index Expanded (SCIE - Web of Science), PubMed, and Scopus. Our aim is to encourage scientists, researchers, and other food professionals to publish their experimental and theoretical results as much detail as possible. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global food science community.

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