

Special Issue

Phenolic and Polyphenolic Compounds in Plant-Based Foods: Antioxidant Activity, Mechanisms and Potential Applications

Message from the Guest Editor

Polyphenols are a group of compounds synthesized in plant food to protect plants from UV radiation and predators. There are over 10,000 compounds which are more prevalent in food than vitamins and which are more powerful in in vitro antioxidants. They are the major antioxidants in the diet of humans. They are bound to the plant in fiber, released during digestion, and metabolized in the body, reaching all cells. They were found to be beneficial to human health after the emergence of epidemiological studies in the 1970s. They have been extensively identified in plants and foods by the use of LC-MS techniques. They have been found to work for the benefit of human health by multiple mechanisms, including antioxidant and gut health and others yet to be discovered. Recent advances highlight their potential in human health through mechanisms such as oxidative stress modulation, gut microbiota regulation, and epigenetic regulation. We welcome the submission of original studies and reviews fostering interdisciplinary dialogue between food chemists, nutritionists, and pharmacologists.

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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