Special Issue

Polyphenols in Plant-Based Foods: Effects of Food Processing on Their Content, Bioaccessibility, Bioavailability, and Bioactivity

Message from the Guest Editor

Polyphenols, which are widely distributed in plants and plant-derived foods, are the most abundant dietary antioxidants. Their presence is related to protective effects on health and their biological activity depends on their bioaccessibility and bioavailability. Bioaccessibility and bioavailavility differ greatly among various chemical structures of polyphenols and are associated with the characteristics of food source and matrix interactions. Food processing (including green extraction technology) induces physical and chemical changes to foods, resulting in both positive and negative impacts on the quality of the products. Polyphenols have demonstrated sensitivities to many conditions encountered through food processing, which means that both the form and content of polyphenols are affected. In fact, food processing can produce degradation of polyphenols; however, it is possible to counteract it by modulating the operating conditions in favor of increased bioaccessibility and bioavailability. It is critical to consider how food processing may alter content, bioaccessibility, bioavailability and biological activity of polyphenols.

Guest Editor

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Deadline for manuscript submissions

closed (30 November 2022)

Foods

an Open Access Journal by MDPI

Impact Factor 5.1
CiteScore 8.7
Indexed in PubMed

mdpi.com/si/121143

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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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