

Special Issue

Polyamines in Food, Human Nutrition and Health: From Molecular Mechanisms to Clinical Applications and Innovative Functional Foods

Message from the Guest Editors

Polyamines are functional bioactive compounds ubiquitously present in all living organisms, yet their roles in human health and food systems are still being fully elucidated. The most studied polyamines are involved in a wide range of biological processes, including cell proliferation, differentiation, and apoptosis. These compounds also exhibit antioxidant and anti-inflammatory properties, contributing to the prevention of chronic diseases such as cardiovascular disorders, metabolic syndrome, neurodegenerative diseases, and dementia.

Recent research has highlighted the dietary relevance of polyamines. Although the human body can synthesize them endogenously, dietary intake becomes increasingly important with age, as endogenous production declines. Polyamines are found in a wide variety of foods: spermidine is abundant in plant-based foods, while spermine is more prevalent in animal-derived products. Putrescine, on the other hand, may also originate from microbial activity in fermented foods. This Special Issue seeks to stimulate new research on the presence of polyamines in food systems, their dietary intake, and their potential applications as innovative functional ingredients.

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About the Journal

Message from the Editorial Board

Nutrients is an on-line open access journal that was first published in 2009. *Nutrients* adheres to rigorous peer-review and editorial processes and publishes only high quality manuscripts that address important issues related to the impacts of nutrients on human health. The Impact Factor of *Nutrients* has risen rapidly since its establishment and it is now ranked in the first quartile of journals publishing in the field of nutrition and dietetics research.

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