

Special Issue

Biochemical Mechanisms of Natural Compounds in Chronic Diseases

Message from the Guest Editors

Chronic diseases, including cardiovascular disorders, diabetes, neurodegenerative conditions, and cancer, represent major global health challenges. Natural compounds derived from plants, fungi, and marine organisms have shown promising therapeutic potential due to their biochemical properties. These compounds modulate key cellular pathways, such as oxidative stress, inflammation, and apoptosis, through interactions with molecular targets such as transcription factors (e.g., NF- κ B, Nrf2), enzymes, and signaling proteins. Polyphenols, alkaloids, flavonoids, and terpenoids exhibit antioxidant, anti-inflammatory, and immunomodulatory effects, limiting disease progression. A greater understanding of the biochemical mechanisms underlying these natural compounds could facilitate their integration into preventive and therapeutic strategies. For this Special Issue, we welcome all narrative and systematic reviews and original research articles on exploring the biochemical mechanisms of extracted natural compounds in chronic diseases.

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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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