

Special Issue

Nutritional Modulation of Glucose Metabolism and Metabolic Disease: Dietary Patterns, Bioactive Compounds, and Underlying Mechanisms

Message from the Guest Editor

This Special Issue focuses on how dietary patterns—ranging from traditional Mediterranean and plant-based diets to emerging nutritional strategies—can improve glucose homeostasis and mitigate metabolic disease. We welcome both basic and clinical studies, including human trials, animal models, and cellular investigations, as well as high-quality reviews. Submissions addressing bioactive compounds such as dietary fibers, functional foods, polyphenols, and micronutrients are encouraged, particularly those elucidating mechanisms involving gut microbiota, hormonal regulation, mitochondrial function and biogenesis, endoplasmic reticulum stress, oxidative stress, inflammation, and related gene and protein regulation. By integrating mechanistic and translational perspectives, this Special Issue aims to advance nutrition-based strategies for the prevention and management of glucose-related metabolic diseases. We invite researchers from diverse disciplines to submit their original research and review articles.

Guest Editor

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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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