Special Issue

Molecular Mechanisms of Diet-Associated Cardiac Metabolism

Message from the Guest Editors

With cardiovascular diseases remaining a leading cause of global mortality, understanding how specific nutrients and dietary patterns impact the heart at the molecular level is essential for developing targeted prevention and treatment strategies.

This Special Issue aims to explore the intricate molecular pathways through which diet influences cardiac metabolism and function. Research areas may include the following:

Mechanistic studies on how macronutrients and micronutrients affect cardiac metabolism.

The role of dietary interventions in modulating cardiac metabolic pathways and outcomes.

Molecular signaling pathways affected by diet in cardiac tissue.

Impact of nutrient-derived metabolites and gut microbiota on cardiac metabolism and function. Epigenetic, transcriptional, and post-translational modifications in cardiac cells induced by dietary factors. Inter-organ and intercellular communication in response to dietary changes.

Identification and characterization of novel molecular targets for dietary prevention or treatment of cardiac metabolic disorders.

Translational and clinical studies linking dietary patterns and molecular cardiac outcomes, including biomarker discovery.

Guest Editors

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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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