



Metabolomics-Based Biomarkers for Nutrition and Health

Guest Editors:

Dr. Cheng Zheng

Department of Biostatistics,
University of Nebraska Medical
Center, Omaha, NE, USA

Prof. Dr. Daniel Raftery

Department of Anesthesiology
and Pain Medicine, Northwest
Metabolomics Research Center,
University of Washington, Seattle,
WA, USA

Deadline for manuscript
submissions:

closed (31 May 2025)

Message from the Guest Editors

This Special Issue focuses on methodology and applied research in the area of metabolomics-based biomarker discovery, evaluation, validation and application for nutrition and health. With technological advancement, various types of high-dimensional objective measurements such as metabolomics data provide great opportunities to develop biomarkers for nutrition and health outcomes. Recent developments in the area showed the usefulness of metabolomics as biomarkers for dietary intake for various macronutrients and helped study the association between dietary intakes and disease outcomes. Additionally, studies showed that metabolites can be used as biomarkers for an early detection of diseases and predict the risk of developing future diseases. However, there are many remaining gaps to be filled. The high dimensionality of these novel metabolomics data combined with their own measurement uncertainty present noteworthy challenges for statistical analysis in biomarker discovery. The potential heterogeneity in metabolomics platforms and technical variation between labs raised the question of the reliability, reproducibility and generalizability of developed metabolite-based biomarkers.





an Open Access Journal by MDPI

Editor-in-Chief

Dr. Amedeo Lonardo

Internal Medicine, Ospedale
Civile di Baggiovara, Azienda
Ospedaliero-Universitaria, 41126
Modena, Italy

Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q2 (Endocrinology, Diabetes and Metabolism)

Contact Us

Metabolites Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/metabolites
metabolites@mdpi.com
[X@MetabolitesMDPI](https://twitter.com/MetabolitesMDPI)