

## Special Issue

# Polyphenols and Metabolic Diseases

### Message from the Guest Editors

In the coming decades, metabolic diseases (MetDs) will represent a significant burden across the world.

Metabolic signaling pathways, especially those involved in glucose, lipid and gut microbiota modulation, are highly associated with MetDs including cancer, cardiovascular diseases, diabetes, obesity, arthrolithiasis, etc. The regular consumption of dietary polyphenols may be associated with a lower incidence of MetDs. Although the basic and molecular mechanisms underpinning the role of polyphenols in MetDs are now more understood, the exact mechanisms and crosslinks remain unknown. This Special Issue is devoted to multi-omics technologies in nutrition and health, covering topics such as polyphenols' interaction with one or more components and their incorporation in foods, and the effects of these on MetDs; regulation of polyphenols in MetDs via multi-omics analysis using in vitro or in vivo models; mechanisms of cell redox balance and inflammatory signaling pathways; modulations of intestinal epithelia, gut microbiota, gut–liver axis and gut–liver–brain axis; new findings on the clinic diagnosis of MetDs.

### Guest Editors

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### Deadline for manuscript submissions

closed (30 August 2023)



## Metabolites

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Impact Factor 3.7  
CiteScore 6.9  
Indexed in PubMed



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## About the Journal

### 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.

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### Editor-in-Chief

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