

Special Issue

Chrononutrition: New Strategies for Approaching the Study of Bioactive Compounds in Metabolic Syndrome

Message from the Guest Editors

Circadian rhythms, which orchestrate physiological and metabolic processes, are strongly influenced by external cues such as food intake. Indeed, disruption of these rhythms, often caused by modern eating habits, contributes to metabolic disorders such as obesity and insulin resistance. In this context, chrononutrition, which explores the impact of meal timing on metabolic regulation, emerges as a new perspective for the study of bioactive compounds in metabolic syndrome. Recent evidence suggests that bioactive compounds such as polyphenols can modulate the clock system and restore metabolic homeostasis. In turn, several studies have also reported that the efficacy of these compounds may depend on their timing of administration, highlighting the need to integrate chrononutrition into research on bioactive compounds. Understanding the interaction between circadian rhythms and the effect of bioactive compounds could improve the efficacy of dietary interventions and optimise metabolic health. This Special Issue seeks to explore new strategies in chrononutrition for the study of bioactive compounds.

Guest Editors

Dr. Begoña Muguerza

Nutrigenomics Research Group, Department of Biochemistry and Biotechnology, Universitat Rovira i Virgili, 43007 Tarragona, Spain

Dr. Jorge R. Soliz-Rueda

Department of Molecular Metabolism and Precision Nutrition, German Institute of Human Nutrition Potsdam-Rehbruecke, 14558 Nuthetal, Germany

Deadline for manuscript submissions

15 November 2025



Nutrients

an Open Access Journal
by MDPI

Impact Factor 5.0
CiteScore 9.1
Indexed in PubMed



mdpi.com/si/238088

Nutrients
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nutrients@mdpi.com

[mdpi.com/journal/
nutrients](https://mdpi.com/journal/nutrients)





Nutrients

an Open Access Journal
by MDPI

Impact Factor 5.0
CiteScore 9.1
Indexed in PubMed



[mdpi.com/journal/
nutrients](https://mdpi.com/journal/nutrients)



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.

Editors-in-Chief

Prof. Dr. Lluís Serra-Majem

1. Centro de Investigación Biomédica en Red Fisiopatología de la Obesidad y la Nutrición (CIBEROBN), Institute of Health Carlos III, 28029 Madrid, Spain
2. Research Institute of Biomedical and Health Sciences (UIBS), University of Las Palmas de Gran Canaria, 35001 Las Palmas, Spain
3. Preventive Medicine Service, Centro Hospitalario Universitario Insular Materno Infantil (CHUIMI), Canarian Health Service, 35016 Las Palmas, Spain

Prof. Dr. Maria Luz Fernandez

Department of Nutritional Sciences, University of Connecticut, Storrs, CT 06269, USA

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, MEDLINE, PMC, Embase, PubAg, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Nutrition and Dietetics) / CiteScore - Q1 (Nutrition and Dietetics)