

## Special Issue

# Edible Plants and Their Components as Functional Foods Promoting the Health of the Gut Barrier

### Message from the Guest Editors

Edible plants are sources of macromolecules, vitamins, minerals, and functional compounds, engaged in either homeostatic or pathological processes. These food components interact with gut barrier, which plays a crucial role in homeostasis. For instance, polyphenols and fibers are known to modulate the diverse functions of the gut epithelia, such as the biological barrier, immunity, antioxidant defense, and nutrient transport. Therefore, this Special Issue will gather the most recent findings concerning the compositions of edible plants and derived ingredients with potential roles as functional foods that protect the gut barrier. Collecting novel evidence should prompt the development of innovative functional food and nutraceuticals. The Special Issue welcomes articles and reviews concerning the following topics: - The compositions of edible plants with renewed interest as functional foods; - The formulation and oral delivery of food ingredients from edible plants; - The fates of edible plants and their components at gut level; - The biological roles of edible plants in the gut barrier.

### Guest Editors

Dr. Stefano Piazza

Department of Pharmacological and Biomolecular Sciences "Rodolfo Paoletti", University of Milan, Via Balzaretti 9, 20133 Milan, Italy; Laboratory of Pharmacognosy (<https://farmacognosia.unimi.it/>)

Dr. Paolo Governa

Department of Biotechnology, Chemistry and Pharmacy, University of Siena, 53100 Siena, Italy

### Deadline for manuscript submissions

closed (30 June 2025)



## Nutrients

an Open Access Journal  
by MDPI

Impact Factor 5.0  
CiteScore 9.1  
Indexed in PubMed



[mdpi.com/si/199857](https://mdpi.com/si/199857)

*Nutrients*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[nutrients@mdpi.com](mailto: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)