

## Special Issue

# The Traditional and Innovative Approaches for Bioactive Compound Extraction from Plant Food Waste and By-Products

### Message from the Guest Editors

Bioactive compounds like polyphenols, carotenoids, phytosterols, peptides, and aromatic compounds are crucial for their nutritional and health benefits. With a growing focus on sustainability, extracting these compounds from plant food waste has become a research priority. Traditional methods like solvent extraction and distillation, though reliable, face issues such as lower yields and higher solvent usage. Innovative green extraction techniques, such as supercritical fluid extraction, ultrasound-assisted extraction, microwave-assisted extraction, and enzyme-assisted extraction, offer promising alternatives. These methods enhance efficiency, and maintain the bioactivity of the compounds while being environmentally friendly. This Special Issue aims to highlight the synergy between traditional and innovative extraction methods. By assessing their efficiency, sustainability, and applications in the food and pharmaceutical industries, we emphasize their unique strengths and contributions. Researchers are encouraged to present their latest discoveries, advancing our knowledge in this dynamic field and moving towards a more sustainable and health-conscious future.

### Guest Editors

Prof. Dr. Aniela Pinto Kempka

Probiotics and Bioactive Substances Research Group, Food and Chemical Engineering Department, Santa Catarina State University—UESC, Florianópolis, Brazil

Prof. Dr. Renata Dias de Mello Castanho Amboni

Department of Food Science and Technology, Federal University of Santa Catarina, Florianópolis 88034-001, SC, Brazil

### Deadline for manuscript submissions

closed (30 July 2025)



## Foods

an Open Access Journal  
by MDPI

Impact Factor 5.1  
CiteScore 8.7  
Indexed in PubMed



[mdpi.com/si/207968](https://mdpi.com/si/207968)

*Foods*

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

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





# Foods

---

an Open Access Journal  
by MDPI

---

Impact Factor 5.1  
CiteScore 8.7  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

*Foods* (ISSN 2304-8158) is an open access and peer reviewed scientific journal that publishes original articles, critical reviews, case reports, and short communications on food science. Articles are released monthly online, with unlimited free access. Currently, *Foods* has been indexed by the Science Citation Index Expanded (SCIE - Web of Science), PubMed, and Scopus. Our aim is to encourage scientists, researchers, and other food professionals to publish their experimental and theoretical results as much detail as possible. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global food science community.

---

### Editor-in-Chief

Prof. Dr. Arun K. Bhunia

1. Department of Food Science, Purdue University, West Lafayette, IN 47907, USA

2. Department of Comparative Pathobiology, Purdue University, West Lafayette, IN 47907, USA

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, FSTA, AGRIS, PubAg, and other databases.

#### Journal Rank:

JCR - Q1 (Food Science and Technology) / CiteScore - Q1 (Health Professions (miscellaneous))

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.9 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).