



## New Functional Food Ingredients to Improve Health

Guest Editors:

**Dr. Isabel Rodríguez Amado**

Food Processing Research  
Group, International Iberian  
Nanotechnology Laboratory, Av.  
Mestre José Veiga s/n, 4715-330  
Braga, Portugal

**Prof. Dr. Lorenzo M. Pastrana**

Food Processing Research  
Group, International Iberian  
Nanotechnology Laboratory, Av.  
Mestre José Veiga s/n, 4715-330  
Braga, Portugal

**Dr. Pablo Fuciños**

Food Processing Research  
Group, International Iberian  
Nanotechnology Laboratory, Av.  
Mestre José Veiga s/n, 4715-330  
Braga, Portugal

Deadline for manuscript  
submissions:

**closed (30 December 2022)**

### Message from the Guest Editors

Functional foods improving physical, mental, or emotional wellbeing are foreseen by consumers and scientists, since the interplay between the diet and the microbiota–gut–brain axis is known to have a pivotal role in the metabolic, immune, and nervous systems.

The recovery of natural compounds bearing promising bioactivities is still the focus of many research efforts, including their purification from food wastes and by-products, and the prospect of new bioactivities from natural sources such as plants, animals, microorganisms and algae. The implementation of these bioactives into functional foods/nutraceuticals is still limited by two major challenges: (i) stabilization of the bioactives and (ii) controlled release at the target site.

The development of new functional food ingredients demands a comprehensive study of their production and characterization, their stabilization using food-grade polymers, and the testing of their functionality and bioaccessibility/bioavailability using in vitro tools or organ-on-a-chip technologies.

Dr. Isabel R. Amado  
Prof. Dr. Lorenzo M. Pastrana  
Dr. Pablo Fuciños  
*Guest Editors*





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**

Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

## 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), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

## Contact Us

*Applied Sciences* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
X@Applsci