



North African Journal of Food and Nutrition Research (NAJFNR)

Special Issue: Potential of food by-products: Biofunctional compounds and valorization strategies

Guest Editors: Dr. Imene Chentir, Dr Hela Kchaou and Prof. Souhail Besbes

Call for Papers

Introduction

Food and food processing industries generate significant amounts of by-products representing a vast potential source of biofunctional compounds, holding significant potential for both industrial applications and health benefits. These compounds encompass a diverse range array of valuable resources, including edible biomasses, eco-friendly biomaterials & hydrocolloids, natural dyes, antioxidants, and antimicrobials.

Aims

This special issue aims to convene researchers at the forefront of biofunctional compound research, providing a platform to showcase the latest advancements and foster knowledge exchange in this dynamic field.

Scope

We invite original research articles, review articles, and short communications that contribute to the following thematic areas:

- **Extraction, Purification, and Fermentation Techniques:**
Exploration and evaluation of novel efficient techniques for extracting, purifying, and fermenting bioactive and functional compounds from food by-products.
- **Characterization of Biofunctional Compounds:**
In-depth studies elucidating the chemical composition, structural properties, techno-functional and nutritional attributes of biofunctional compounds derived from food waste and by-products, as well as their safety through microbial and contaminants assessment.

- **Food and Feed Applications:**
Investigation of the incorporation of bioactive and functional compounds into food and feed formulations to enhance nutritional value, health-promoting properties and consumers' acceptance.

- **Food Preservation and Safety:**
Evaluation of the utilization of bioactive and functional compounds in developing new alternative for food preservation such as coatings, active and intelligent packaging, aiming to extend the shelf life, enhance food safety and minimize food waste.

- **Biocontrol Applications:**
Research exploring the utilization of bioactive compounds as potent bioagents for controlling soilborne pathogens in agricultural settings, and potentially promoting crop productivity.

Significance

Contributions to this special issue will advance our understanding of the valorization (conversion into valuable products) of food waste and by-products. This knowledge can lead to the development of sustainable strategies for harnessing biofunctional compounds for diverse applications in the agri-food, pharmaceutical and cosmetics industries. We encourage researchers to submit their cutting-edge research findings and critical insights to facilitate knowledge exchange and drive innovation in this prom field.

Key Deadlines

Opening date for manuscripts submissions: **20/06/2024**

Closing date for manuscripts submission: **31/12/2024**

For submission instructions and further details, please visit: <https://najfnr.com/home/about/submissions>

For inquiries and information, please go to: <https://najfnr.com/home/about/contact> or send an email to: contact@najfnr.com