



*foods*



an Open Access Journal by MDPI

## The Formation, Control and Risk Assessment of Harmful Substances during Food Processing

Guest Editors:

**Dr. Jie Zheng**

Department of Food Science and Engineering, Jinan University, Guangzhou 510632, China

**Dr. Hao Dong**

College of Light Industry and Food Sciences, Zhongkai University of Agriculture and Engineering, Guangzhou, China

**Dr. Yuchen Zhu**

College of Food Science and Nutritional Engineering, China Agricultural University, Beijing 100083, China

Deadline for manuscript submissions:

**closed (30 November 2023)**

### Message from the Guest Editors

Dear Colleagues,

Food processing, such as cooking, drying, pasteurization, and preservation, provides products with longer shelf lives, preferred organoleptic characteristics, and the enhanced digestibility of nutrients. However, at the same time, processing introduces or generates diverse harmful substances, including endogenously-derived hazards (such as polycyclic aromatic hydrocarbons, heterocyclic amines, acrylamide, 3-monochloropropanediol, 5-hydroxymethylfurfural, and acrolein), environmental contaminants, food packaging migrants, mycotoxins, bacterial toxins, etc.

Therefore, research on the determination, formation mechanisms, mitigation strategies, and risk assessment of hazardous food substances are extremely necessary to control food safety and improve public health. This research topic aims to fill the knowledge gap concerning the harmful substances derived from food processing by introducing the latest research to related areas. The control of food-borne hazards is necessary to guarantee public health, which relies on the theoretical elucidation of the mechanisms related to the formation and mitigation of the hazards.



[mdpi.com/si/136325](https://mdpi.com/si/136325)

# Special Issue



*foods*



an Open Access Journal by MDPI

## 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

## 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.

## 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](#), [PMC](#), [FSTA](#), [AGRIS](#), [PubAg](#), and [other databases](#).

**Journal Rank:** JCR - Q1 (Food Science and Technology) / CiteScore - Q1 (Health Professions (miscellaneous))

## Contact Us

---

*Foods* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

[mdpi.com/journal/foods](http://mdpi.com/journal/foods)  
[foods@mdpi.com](mailto:foods@mdpi.com)  
[X@Foods\\_MDPI](https://twitter.com/Foods_MDPI)