

Special Issue on  
**Smart Millets and Legumes: Novel Processing Technologies and Sustainable Applications**

# CALL FOR PAPERS

The food processing industry is facing numerous challenges, including increasing demand for nutritious and sustainable food sources, as well as the need to reduce food waste and improve food security. Smart food crops like millets and legumes have emerged as promising solutions to these challenges, offering a range of health benefits, improved environmental sustainability, and the potential for novel food applications. Millets and legumes are rich in nutrients, including vitamins, minerals, and antioxidants, and have been used for centuries as staple foods in many cultures around the world. Moreover, these smart food crops meet all the requirements of being beneficial for human health, the environment (through their low carbon emissions), and the farmer, as they are resilient to changing climates and require less water.

However, with the rise of modern food systems, these crops have been largely replaced. Smart food crops offer solutions to many of the challenges facing the food industry, however, in order for these crops to reach their full potential, innovation in food processing technologies is needed to transform them into safe, nutritious, and convenient food products. By leveraging novel food processing technologies, such as green extraction technologies, fortification, non-thermal processing, microencapsulation, fermentation, and hydrocolloid technology, we can harness the potential of millets and legumes to improve food security, minimize food waste, and increase the availability of healthy and nutritious food sources, as well as providing a new platform for innovation in the food sector. Furthermore, these technologies can extract the maximum value from smart food crops, extend their shelf life, and make them more accessible, convenient, and appealing to consumers.

This Special Issue aims to bring together the latest research at the intersection of novel food processing technologies and sustainable food application of smart millets and legumes, and to increase the utilization of smart food crops for health and sustainable food production. We welcome both original research and review articles.

Potential topics include but are not limited to the following:

- ▶ Innovations in food processing technologies for smart millets and legumes, such as new extraction, preservation, and fortification methods
- ▶ Development of novel and sustainable food products made from smart millets and legumes, including functional foods, plant-based protein products, and processed food ingredients
- ▶ Application of novel food processing technologies to enhance the nutritional quality, safety, and sensory properties of smart millets and legumes-based food products
- ▶ Analysis of the environmental sustainability of food processing technologies for smart millets and legumes and the development of eco-friendly food processing methods
- ▶ Challenges and opportunities associated with the commercialization of smart food crops and sustainable functional foods

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.wiley.com/submit?specialIssue=635128>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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