Special Issue

Food Gels: Fabrication and Their Applications as Functional Delivery Systems

Message from the Guest Editor

Gels, in the basic form of hydrogel, oleogel, emulsion gel and/or bigel, have been widely utilized in food formulations for improving quality attributes. Three major gelation mechanisms widely acknowledged are ionotropic gelation, cold-set gelation and heat-set gelation. Various fabrication methods are available for different matrix materials. Structural features of gels in terms of mesh size, degree of crosslinking, swelling ability, stimuli sensitiveness and the rate of degradation can, thus, be tuned by matrix materials as well as by the fabrication conditions. Their impacts on the textural, rheological and time-delayed digestive behaviors of gel-based products endow their diverse applications in reduced fat foods, oral sensation regulation, encapsulation and delivery of bioactive ingredients, etc. In-depth research studies conducted towards exploring new sources of gel materials, novel gelation mechanisms, digestive profiles and specific structural-functional relationships are highly demanded in order to make full use of their precise control features over the textural, sensory, delivery and nutritional properties in food products.

Guest Editor

Prof. Dr. Jie Xiao
Colleage of Food Science, South China Agricultural University, Guangzhou, China

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Foods
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
foods@mdpi.com

mdpi.com/journal/foods

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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

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