

Special Issue on
Dietary Fiber: Chemistry, Structure, and Properties

CALL FOR PAPERS

Dietary fiber is mostly derived from the plant cell wall. It mainly includes cellulose, hemicellulose, pectic polysaccharides, oligosaccharides, resistant starch, and lignin. Dietary fiber cannot be digested and absorbed in the human small intestine. Instead, it can be fermented in the large intestine by colon microorganisms to produce short chain fatty acid, which in turn can be absorbed and contributes to human health such as antitumor and anti-inflammation properties. In recent years, diabetes, obesity, and other health issues of human beings increased significantly due to low dietary fiber intake. Dietary fiber has gained a lot of public attention.

This special issue focuses on the chemistry, structure, and functional and bioactive properties of dietary fiber. Understanding of the structure and chemical physical properties of dietary fiber is very important to the application, new product development, novel material exploration, and so on.

Potential topics include but are not limited to the following:

- ▶ Molecular structure of dietary fibers from various sources: agriculture by-product, bran, hemicellulose, and so on
- ▶ Development of novel extraction/ processing methods of dietary fibers
- ▶ Hemicellulose and cellulose dissolution method development for the exploration of potential utilization
- ▶ Physical, chemical, or structural study of novel dietary fiber material
- ▶ Dietary fiber characterization and application
- ▶ Dietary fiber interaction with other ingredients in food products
- ▶ Functional properties of soluble dietary fibers, such as rheological properties
- ▶ The structure and function relationship of dietary fiber
- ▶ Novel dietary fiber sources of commercial potential
- ▶ Method of dietary fiber determination

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jchem/food.chemistry/dfsp/>.

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

Lead Guest Editor

Ji Kang, Kansas State University,
Manhattan, USA
jkang12@uoguelph.ca

Guest Editors

Qingbin Guo, University of Guelph,
Guelph, Canada
qingbin@uoguelph.ca

Yanjie Bai, Soochow University, Suzhou
Industrial Park, China
baiyanjie@suda.edu.cn

Feng Xu, Merck & Co., Inc., Kenilworth,
USA
ksuedooo@gmail.com

Submission Deadline

Friday, 18 August 2017

Publication Date

January 2018