

## Special Issue

# Effects of Dietary Polysaccharides and Their Molecular Mechanisms

### Message from the Guest Editors

Dietary polysaccharides have been demonstrated to possess a range of beneficial properties, including antioxidant, tumour-inhibiting, anti-allergic, immunomodulatory, hypoglycaemic, and prebiotic activities. However, the digestion and absorption of polysaccharides are influenced by a multitude of structural factors, including monosaccharide composition, molecular weight, type of glycosidic bond, degree of branching, and their interactions with enzymes, digestive fluids, intestinal epithelial cells, and probiotic surfaces. Therefore, it is of great significance to discover the absorption mechanisms of polysaccharide activity at a molecular level and to elucidate the relationship between these molecular mechanisms and their functionalities. In this context, we welcome any papers related to this Special Issue in the following aspects:

- Health-promoting functions of new polysaccharides.
- The advanced characterizations and in silico studies on interactions between polysaccharides and cell receptors.
- Gut microbiota and metabolomics.
- The biological roles of polysaccharides in the gut barrier.

### Guest Editors

Dr. Xiang-Ze Jia

Dr. Chao Li

Dr. Di Wu

### Deadline for manuscript submissions

closed (25 June 2025)



## Nutrients

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## About the Journal

### Message from the Editorial Board

*Nutrients* is an on-line open access journal that was first published in 2009. *Nutrients* adheres to rigorous peer-review and editorial processes and publishes only high quality manuscripts that address important issues related to the impacts of nutrients on human health. The Impact Factor of *Nutrients* has risen rapidly since its establishment and it is now ranked in the first quartile of journals publishing in the field of nutrition and dietetics research.

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### Editors-in-Chief

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