

# CALL FOR PAPERS

Bioactive components show a variety of health effects, which take an important role in the determination of food quality. However, the low stability and bioavailability of most bioactive components limit their applications in the food industry. Additionally, there are concerns surrounding the safety of food with added bioactive components (e.g., oxidized fish oil). At present, the construction of food-grade carriers to increase absorption and utilization of bioactive components has become an interesting scientific issue. Biopolymers such as proteins and polysaccharides play important roles in the shelf life and texture of most foods in addition to their functional properties as nutrients. Therefore, construction of multifunctional carriers using proteins and/or polysaccharides provides a new concept for solving the limitations of biological utilization of bioactive components.

Proteins and polysaccharides can be used in their natural forms, or they can be physically, chemically, or enzymatically modified to extend their functionality as carriers. A great deal of work has been done in designing delivery systems with protein, polysaccharide, or protein-polysaccharide complexes. However, a series of challenges still remain such as the interaction mechanisms between proteins and polysaccharides, the formation processes of the delivery systems, the stability and gastrointestinal fate of loaded bioactive components, and the relationship between carrier structures and the release properties of bioactive compounds. Understanding these features of protein and polysaccharide carriers is important in appreciating the effect that they will have on the quality of food products, in terms of the preservation, taste, texture, aesthetics, and impact on the digestive system and other health effects.

This special issue aims to present the development on the design and fabrication of structured delivery systems by proteins or polysaccharides for bioactive components such as vitamins, minerals, and nutraceuticals and studies into the quality of food products with bioactive protein or polysaccharide additives. This issue welcomes both original research articles and review papers. We anticipate that this special issue will provide timely aspects of the structures, stability, and functional properties of the delivery systems formed by proteins and polysaccharides and their impacts on food quality.

Potential topics include but are not limited to the following:

- ▶ Interactions between food biopolymers and their effects on the physicochemical, sensory, and nutritional properties of foods
- ▶ Design and characterization of proteins and/or polysaccharides-based delivery systems for bioactive components to be used in food and studies on the resulting effects on the food quality
- ▶ Fabrication and characterization of biopolymer-based delivery systems for food-based applications
- ▶ The gastrointestinal fate of biopolymer-based delivery systems
- ▶ Development of structural design principles to create functional foods and the impact of these design principles on the quality of the functional food products

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jfq/bpdsb/>.

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

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