



Chitosan-Based Polymers as Promising Materials for a Variety of Biomedical Applications

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Message from the Guest Editors

Chitosan has numerous health benefits, including the alleviation of intestinal inflammation, the enhancement of cell-mediated immune responses, the inhibition of edema, the alleviation of allergic inflammation and diet-induced obesity, as well as antioxidative and antitumor effects. Chitosan has several properties that make it a promising adjuvant for oral vaccine delivery. Additionally, chitosan has been shown to stimulate both systemic and mucosal immune responses. While chitosan has been widely used in various fields, there are still many basic questions that need to be explored in order to fully understand its properties and potential applications. One major challenge in understanding the pharmacokinetics (PK) of chitosan is its molecular size and the way it is administered. To overcome this challenge, modification techniques have to be developed to improve its solubility and activity. This Special Issue will include—but will not be limited to—the potential effects and mechanisms of chitosan and modified chitosan on inflammation, tumors, intestinal flora, fat development, obesity, and diabetes in addition to targeted drug therapy.





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