



## Nanotechnology Applied to the Effects of Nutrients on Chronic Diseases

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Deadline for manuscript  
submissions:  
**closed (1 October 2022)**

### Message from the Guest Editor

Many nutrients, phytochemicals, and bioactive compounds have the potential to prevent or even treat chronic diseases. However, their low levels of aqueous solubility, stability, bioavailability, and target specificity, and high levels of side effects including hepatic metabolism, and toxicity if taken at high doses, restrict their applications in combating chronic diseases that need regular doses for long periods. Encapsulation of these nutrients and compounds into biocompatible and biodegradable nanoparticles can significantly increase their aqueous solubility and stability, improve their absorption and bioavailability, protect them from degradation, render their sustained release, prolong their circulation time, and enhance the permeation and retention effect in disease tissues. More importantly, nanoparticles coated with targeting ligands can deliver the encapsulated payload into specific cells or tissues, resulting in a high level of preventive or therapeutic efficacy and a low level of toxicity and side effects.

This Special Issue focuses on effects of nanoparticle-assisted delivery of nutrients, phytochemicals and bioactive compounds on any chronic diseases are welcome.





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