

Special Issue

Nanotechnology Applied to the Effects of Nutrients on Chronic Diseases

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.

Guest Editor

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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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