# **Special Issue**

# Microplastics and Human Health: Role of Food Nutrients in Metabolic Disorders

## Message from the Guest Editors

The impact of MNPs on human health is a growing concern. They accumulate undetected in the food chain and deposit in tissues like the pancreas, spleen, liver, nervous system, and immune system, causing cytotoxicity, inflammation, and epigenetic damage, which may promote the onset and progression of metabolic disorders such as diabetes and its complications. Food nutrients have attracted attention for enhancing cellular stress resilience to microplastics. as they can modulate Nrf2 signaling and stress resilience proteins to act as a cellular defense mechanism against microplastic damage. This Special Issue focuses on the role of food nutrients: targeting multiple cellular and molecular pathways to regulate impaired barrier function and epigenetic modifications; using innovative in vitro platforms to explore the underlying mechanisms of microplasticinduced damage and chronic disease risk; aiming to develop effective preventive approaches and personalized nutritional therapies to inhibit oxidative stress, apoptosis, and inflammation, thereby protecting human health.

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### Deadline for manuscript submissions

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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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