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.

Guest Editors

Dr. Maria Scuto

Department of Medicine and Surgery, Kore University, Cittadella Universitaria, 94100 Enna, Italy

Prof. Dr. Angela Trovato

Department of Biomedical and Biotechnological Sciences, University of Catania, via S. Sofia n.97, Catania 95125, Italy

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Nutrients
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nutrients@mdpi.com

mdpi.com/journal/ nutrients





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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.

Editors-in-Chief

Prof. Dr. Lluis Serra-Majem

- Centro de Investigación Biomédica en Red Fisiopatología de la Obesidad y la Nutrición (CIBEROBN), Institute of Health Carlos III, 28029 Madrid, Spain
- Research Institute of Biomedical and Health Sciences (IUIBS),
 University of Las Palmas de Gran Canaria, 35001 Las Palmas, Spain
 Preventive Medicine Service, Centro Hospitalario Universitario
- Insular Materno Infantil (CHUIMI), Canarian Health Service, 35016 Las Palmas, Spain

Prof. Dr. Maria Luz Fernandez

Department of Nutritional Sciences, University of Connecticut, Storrs, CT 06269, USA

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