# **Special Issue**

# Role of Oxidative Stress, Antioxidants, and Gut Microbiota in Obesity and Metabolic Disorders

## Message from the Guest Editor

Obesity and metabolic diseases, including type 2 diabetes, metabolic syndrome, and non-alcoholic fatty liver disease, represent urgent global health challenges. Extensive research has demonstrated that oxidative stress and chronic low-grade inflammation are central drivers of disease onset and progression. Emerging evidence also emphasizes the critical role of gut dysbiosis in linking oxidative stress to metabolic dysfunction. Modulation of gut microbiota composition and function may, therefore, represent an innovative therapeutic strategy, complementing antioxidant-based approaches. This Special Issue invites original research articles, reviews, and perspectives that address the role of antioxidants in treating obesity and metabolic diseases. We particularly encourage submissions that explore biological mechanisms, gut microbiota interactions, and translational clinical outcomes. By integrating multidisciplinary insights, this Special Issue aims to advance scientific understanding and foster the development of innovative strategies to alleviate the global burden of metabolic disease

#### **Guest Editor**

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#### Deadline for manuscript submissions

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Biomedicines (ISSN 2227-9059) is an open access iournal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

#### Editor-in-Chief

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