Special Issue

Natural Compounds' Mitigation of Toxicity: Insights into Health Protection

Message from the Guest Editors

Natural compounds have emerged as promising candidates to counteract the harmful effects of environmental and xenobiotic toxicants. These bioactive molecules exhibit diverse pharmacological properties, including antioxidant, anti-inflammatory, antimicrobial, anticancer, antiaging, antiviral, immunomodulatory, and detoxifying activities. Phytochemicals present in natural compounds can attenuate oxidative stress, modulate xenobiotic-metabolizing enzymes, and help maintain cellular homeostasis. Additionally, several compounds have demonstrated protective effects in experimental models of heavy metal-induced nephrotoxicity, pesticide-induced neurotoxicity, reproductive toxicity, and drug-induced hepatotoxicity. Beyond their cellular protective functions, natural compounds have also been shown to modulate epigenetic mechanisms, reduce DNA damage, and enhance mitochondrial function, further supporting their chemopreventive potential. For this Special Issue, we invite manuscripts exploring the mitigating effects of natural substances on toxicological outcomes, emphasizing therapeutic potential and translational relevance.

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About the Journal

Message from the Editor-in-Chief

Toxics (ISSN 2305-6304) is an international, peer-reviewed, open access journal which provides an advanced forum for studies related to all aspects of toxic chemicals and materials. We aim to publish high quality work that furthers our understanding of the exposure, effects, and risks of chemicals and materials in humans and the natural environment as well as approaches to assess and/or manage the toxicological and ecotoxicological risks of chemicals and materials. Please consider publishing in *Toxics* when preparing your next paper.

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