



## Antioxidants and Their Role in the Prevention and Treatment of Chronic Kidney Disease

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### Message from the Guest Editors

Oxidative imbalance is widely recognized as a key component of the pathogenesis of chronic kidney disease (CKD). Indeed, it is recognized as a potential cause and consequence of reduced kidney function. In this regard, several recent *in vitro* (cells), *ex vivo* (tissues and specimens), *in vivo* (animals) and clinical studies have shown that the use of dietary antioxidants (the Mediterranean diet, polyphenols, curcumin, sulforaphane, quercetin, probiotics, etc.), antioxidant supplements (vitamins C, E, N-acetylcysteine, L-arginine, etc.) or their combination has potential protective effects for CKD and its main complications such as hypertension, atherosclerosis, inflammation, and anemia.

This Special Issue aims to provide a forum collection of the latest *in vitro*, *in vivo*, and clinical studies on antioxidants and their biological activities, with a view to a possible therapeutic application for CKD and its complications. Furthermore, as biomarkers of oxidative stress are critical for the development of novel treatments for CKD, studies on the discovery of novel oxidative stress biomarkers and other innovative biomarkers are also welcome.





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## Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of "oxidative stress" a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

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