

## Special Issue

# Non-Enzymatic Antioxidant Molecules and Their Defense Mechanisms

### Message from the Guest Editors

The imbalance between the production of reactive oxygen species (ROS) and the capacity of antioxidants to counteract the deleterious effects of oxidants, results in an increase of risk including multiple chronic disorders or cancer development. Various antioxidant enzymes and nonenzymatic antioxidants are engaged in the regulation of the oxidation/reduction (redox) balance. While enzymatic antioxidants function by converting oxidized metabolic products to hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) and then to water using cofactors through multi-step processes, nonenzymatic antioxidants intercept and terminate free radical chain reactions. Examples of nonenzymatic antioxidants are vitamin E, A, C, flavonoids, carotenoids, glutathione, plant polyphenols, uric acid, theaflavin, allyl sulfides, curcumin, melatonin, bilirubin, and polyamines. We invite researchers to submit research articles on new aspects of nonenzymatic antioxidants in the regulation of oxidative stresses and their action of mechanism. The topic includes the biological effects of non-enzymatic antioxidants and regulatory signaling pathway in the alleviation or prevention of chronic diseases.

### Guest Editors

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### Deadline for manuscript submissions

closed (30 September 2024)



## Antioxidants

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## About the Journal

### 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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### Editor-in-Chief

Prof. Dr. Alessandra Napolitano

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