

Special Issue

Nutrient–Antioxidant Enzyme Interactions in the Human Disease

Message from the Guest Editor

Antioxidant enzymes are high-molecular-weight proteins that act as primary defense agents, capable of neutralizing ROS more rapidly than small molecules. These enzymes work synergistically to mitigate the harmful effects of ROS originating from both endogenous metabolism and environmental factors.

Importantly, the activity and expression of these antioxidant enzymes are closely influenced by nutritional status and the intake of specific nutrients, including selenium, zinc, iron, copper, and certain vitamins (such as vitamins C and E), which serve as essential cofactors or regulators of antioxidant pathways. Thus, nutrition plays a critical role in maintaining oxidative balance and enhancing antioxidant capacity.

In summary, antioxidant enzymes, in close interaction with dietary antioxidants and micronutrients, are essential for sustaining cellular integrity and overall health. This Special Issue welcomes the submission of short communications, original research articles, meta-analyses, and reviews that explore the interplay between antioxidant enzymes, nutrient status, and oxidative stress-related health outcomes.

Guest Editor

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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.

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