



# Oxidative Medicine and Cellular Longevity

## Special Issue on **Dietary Supplements/Antioxidants: Impact on Redox Status in Brain Diseases**

# CALL FOR PAPERS

Oxidative stress plays a major role in neurodegenerative diseases and many other chronic diseases. Healthy diets rich in natural products could decrease the risk and outcome of brain diseases. Nature has gifted mankind with a plethora of flora-bearing fruits, vegetables, and nuts. Accumulated evidence suggests that naturally occurring phytochemicals, such as polyphenolic antioxidants found in fruits, vegetables, herbs, and nuts, may potentially hinder neurodegeneration and improve memory and cognitive function. Considering the limits of effective preventive agents and/or methods, intervention strategies using antioxidant and flavonoid-rich natural products such as fruits, vegetables, and nuts are of paramount importance. Usage of neuroprotective antioxidants is being considered as a promising approach to delay the progression of various chronic diseases and has the ability to reduce the functional neuronal loss in acute and chronic neurodegeneration of the brain. Diets rich in phytochemicals such as alkaloids, terpenes, flavonoids, isoflavones, and saponins are known to possess protective activity against many neurological diseases. The molecular mechanisms underlying the curative effects rely mainly on the action of phytonutrients on distinct signaling pathways associated with protein folding, oxidative modifications, and neuroinflammation. The diverse array of bioactive nutrients present in these natural products plays a pivotal role in prevention and cure of various neurodegenerative diseases including Alzheimer's disease, Parkinson's disease, and other neuronal dysfunctions.

This special issue aims to update the benefit of healthy diet rich in natural products and its importance in controlling the status of oxidative stress, inflammation, cognition, memory, behavior, and other biochemical abnormalities in neurodegenerative diseases and other brain disease conditions.

We invite investigators to contribute original research as well as review articles that will stimulate continuing efforts to improve or delay the progression of various brain diseases and finding novel leads for the development of possible therapeutics.

Potential topics include, but are not limited to:

- ▶ Recent advancements in the involvement of oxidative stress in neurodegeneration
- ▶ Effect of natural products and antioxidants on neurodegenerative diseases
- ▶ Effect of diet on brain function
- ▶ Role of neuroinflammation in neurodegenerative diseases and effect of natural antioxidants
- ▶ Ethnopharmacological approach and evaluation on brain related disorders

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/omcl/dsna/>.

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