

Special Issue on **Oxidative Stress Modulation in Skeletal Muscle Disorders: Role of Nutrition**

CALL FOR PAPERS

Oxidative stress has been the subject of intensive research in recent years and it is linked to the pathogenesis of numerous conditions, including those associated with skeletal muscle disorders, such as muscle wasting, dystrophies, and myopathies. Excessive reactive oxygen or nitrogen species production causes damage to proteins, lipids, and DNA, which impairs cell function and may even lead to death. Several interventions have been suggested to counteract or delay skeletal muscle damage. Of note, nutrition could play an important role as a preventive antioxidant tool. Many studies report that diets rich in dietary antioxidants, i.e., high in fruit and vegetables, are associated with a reduced risk of chronic diseases. Antioxidants comprise a large group of endogenous enzymes and a range of exogenous dietary components, which protect against oxidative stress by scavenging or neutralizing the formation of reactive species, inhibiting oxidative chain reactions, chelating reactive metals, and repairing damage to biological molecules.

Despite the great interest in diet supplementation in maintaining the correct tissue homeostasis, there are few reports in current literature which explain whether antioxidant nutrients could retard or prevent both skeletal muscle damage and its dysfunctionality.

The main aim of this special issue is to collect reports on the role of nutrition in the modulation of oxidative stress in skeletal muscle disorders.

Potential topics include but are not limited to the following:

- ▶ Biochemical activities, molecular pathways, and therapeutic potential of antioxidant compounds to counteract skeletal muscle dysfunctions
- ▶ In vitro and in vivo studies in the prevention of cell/tissue damage through diet
- ▶ Epidemiological and clinical studies on the efficacy of nutraceuticals and food supplements specifically developed for skeletal muscle
- ▶ Mitochondria and skeletal muscle disorders: the role of nutrition in the modulation of oxidative stress
- ▶ Role of nutrition in the modulation of oxidative stress in exercise-induced muscle damage

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/omcl/osms/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

Lead Guest Editor

Sara Salucci, University of Urbino Carlo Bo, Urbino, Italy
sara.salucci@uniurb.it

Guest Editors

Cinzia Calcabrini, Alma Mater Studiorum-University of Bologna, Rimini, Italy
cinzia.calcabrini@unibo.it

Gabriella Dobrowolny, Sapienza University of Rome, Rome, Italy
gabriella.dobrowolny@uniroma1.it

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