

Special Issue on **Exercise in the Prevention and Management of Oxidative Stress-Linked Diseases**

CALL FOR PAPERS

The health promoting effects of physical activity are long known. Already in ancient China the need to promote and prescribe exercise for health-related benefits was recognized. Currently, physical inactivity is considered as a risk factor for cardiovascular disease and a widening variety of other chronic diseases. Conversely, regular physical activity is considered to produce healthy effects, so that it is able to prevent several chronic diseases, particularly during aging.

The beneficial effects of training could appear to conflict with reports indicating that physical unaccustomed or strenuous exercise, particularly that characterized by remarkable component of eccentric contraction, causes damage, including structural and functional alterations in skeletal muscle and other tissues.

The opposite effects of acute exercise and training are in great part due to the ability of ROS to play a dual role in animal organisms. Indeed, the high levels of ROS produced during a single session of strenuous or prolonged exercise lead to cellular damage and dysfunction, whereas the low levels of ROS produced during the single sessions of a training program can induce adaptive responses beneficial for the organism. During physical activity, several ROS sources are activated contributing to the oxidative damage and/or to the adaptive processes.

The beneficial effects of exercise are evident, not only in healthy persons but also in patients, because, suitably graded, exercise is useful as an adjunctive therapy in the treatment of patients with several chronic diseases.

The purpose of this special issue is to publish high-quality research articles as well as reviews that seek to address recent development in the knowledge of the effects of physical activity in the preventions of the detrimental effects of conditions in which oxidative stress plays a role in the onset of dysfunctions or illness.

Thus, potential topics include but are not limited to the effects of physical activity in the prevention and management of metabolic, cardiovascular, and neurodegenerative diseases and to the mechanisms underlying such effects.

We invite authors to submit original researches and review articles that seek to refine the aforementioned topics.

Potential topics include but are not limited to the following:

- ▶ Aging
- ▶ Diabetes
- ▶ Cancer
- ▶ Obesity
- ▶ Hypertension
- ▶ Bone joint diseases
- ▶ Depression

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

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

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