

Special Issue on **From Oxidative Stress to Ageing via Lifestyle, Nutraceuticals, Polypharmacy, and Neuropsychological Factors**

CALL FOR PAPERS

Lifestyle factors including dietary habit, physical activity, smoke, and physiological stress are modifiable determinants of the oxidative stress and the chronic low grade inflammation involved in the pathogenesis and progression of many ageing-associated diseases.

Ageing per se is associated with a decline in the antioxidant defenses, with telomere-shortening processes, with immunosenescence, with mitochondrial dysfunction, and with a higher susceptibility to ischemia/reperfusion and toxicants injuries. In particular, both cachexia and sarcopenic obesity are associated with impaired immune function and increased susceptibility to infection in aged frail people.

Although diet and exercise are the major players in the prevention of frailty in the elderly, moods can affect both the antioxidant defense and the immune system.

In addition to gender-related hormonal factors, socioeconomic status and moods influence nutritional status and physical activity in the elderly. On the other hand, physical activity and hedonic foods can improve moods. Therefore, there is a crosstalk between diet, genetic aspects, exercise, and mental health.

Controversies surrounding the usefulness of nutraceuticals in elderlies exist and possible food-drug interactions in aged people is an underlooked aspect of geriatric patients that could affect metabolic pathways.

Behavioral, epigenetic (dietary phytochemicals, drugs), and lifestyle (dietary intake, physical activity, and smoking habit) factors must be taken into account in the management of geriatric patients in order to assess individual risk or benefit of dietary and/or physical activity advice in the context of a personalized drug therapy.

In this special issue, we invite investigators to contribute original research articles based on both preclinical and clinical data, short or comprehensive reviews, and perspective articles aiming to evaluate the complex relationship between lifestyle, polypharmacy, and neuropsychological factors affecting oxidative stress-related diseases progression and management in the elderly.

Potential topics include but are not limited to the following:

- ▶ Human or animal studies evaluating the effects of food, functional foods, nutraceuticals, and exercise on oxidative stress
- ▶ Recent insights into the relationship between neuropsychological factors and oxidative stress
- ▶ Molecular mechanisms of food-drug interaction, including genetic and epigenetic factors important in the area of geriatric polypharmacy
- ▶ Recent studies on nongenetic or genetic influences that affect telomere attrition and possibly delay ageing-related diseases
- ▶ New therapeutic interventions: immune, anti-inflammatory, and antioxidant aspects related to protection of accelerated ageing
- ▶ Human evidence concerning the necessity of personalized nutrition and therapy in the elderly
- ▶ Redox-modulated molecular pathways involved in aged-associated diseases (cancers, sarcopenia, osteopenia, immune-senescence, and metabolic, cardiovascular, and neurodegenerative diseases)

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

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

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