

## Special Issue

# Regulation of Skeletal Muscle Function by Means of Nutraceuticals, Hormones and Physical Activity

### Message from the Guest Editors

The primary function of skeletal muscles is to maintain metabolic health and physical performance. Muscular dystrophies and aging-related sarcopenia are skeletal muscle disorders characterized by muscle mass decline, strength and balance impairment, and a reduction in motility, leading to frailty and increasing the risk of hospitalization. Furthermore, catabolic conditions, including cancer, infections, diabetes, organ failure, and inactivity/disuse, cause a net loss of proteins, organelles, and cytoplasm, which, in turn, leads to muscle wasting. Several pieces of evidence show that nutrition, hormones, and physical exercise interventions can regulate complex pathological and physiological mechanisms, including oxidative stress, inflammation, apoptosis, cytokine release, protein synthesis, and satellite cell activity. This Special Issue would like to collect original papers and reviews with the aim to understand novel insights on nutraceutical, hormone, or physical activity supplementation as potential strategies (also in synergy) for the prevention of muscle dysfunctions.

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### Guest Editors

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### Deadline for manuscript submissions

closed (25 January 2025)



## Nutrients

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## About the Journal

### 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.

### Editors-in-Chief

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