

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.

Guest Editors

Dr. Sara Salucci

Cellular Signalling Laboratory, Department of Biomedical and NeuroMotor Sciences (DIBINEM), University of Bologna, 40126 Bologna, Italy

Dr. Irene Faenza

Department of Biomedical and NeuroMotor Sciences, University of Bologna, 40126 Bologna, Italy

Deadline for manuscript submissions

closed (25 January 2025)



Nutrients

an Open Access Journal
by MDPI

Impact Factor 5.0
CiteScore 9.1
Indexed in PubMed



mdpi.com/si/208277

Nutrients
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nutrients@mdpi.com

[mdpi.com/journal/
nutrients](https://mdpi.com/journal/nutrients)





Nutrients

an Open Access Journal
by MDPI

Impact Factor 5.0
CiteScore 9.1
Indexed in PubMed



[mdpi.com/journal/
nutrients](https://mdpi.com/journal/nutrients)



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

Prof. Dr. Lluís Serra-Majem

1. Centro de Investigación Biomédica en Red Fisiopatología de la Obesidad y la Nutrición (CIBEROBN), Institute of Health Carlos III, 28029 Madrid, Spain
2. Research Institute of Biomedical and Health Sciences (IUIBS), University of Las Palmas de Gran Canaria, 35001 Las Palmas, Spain
3. Preventive Medicine Service, Centro Hospitalario Universitario Insular Materno Infantil (CHUIMI), Canarian Health Service, 35016 Las Palmas, Spain

Prof. Dr. Maria Luz Fernandez

Department of Nutritional Sciences, University of Connecticut, Storrs, CT 06269, USA

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Nutrition and Dietetics) / CiteScore - Q1 (Nutrition and Dietetics)