



nutrients



an Open Access Journal by MDPI

The Regulation of Human Skeletal Muscle Metabolism by Nutrients across the Lifespan

Guest Editors:

Prof. Dr. Philip J. Atherton

School of Medicine, Royal Derby Hospital, University of Nottingham, Nottingham, UK

Dr. Bethan E. Phillips

Clinical, Metabolic & Molecular Physiology, MRC-ARUK Centre for Musculoskeletal Ageing Research & NIHR Nottingham BRC, Division of Medical Sciences & Graduate Entry Medicine, School of Medicine, University of Nottingham, Royal Derby Hospital Centre, Nottingham, UK

Deadline for manuscript submissions:

closed (31 May 2020)

Message from the Guest Editors

Skeletal muscle is the body's largest organ by mass, and one which plays a crucial role in locomotion and the regulation of homeostasis, e.g., glycaemic control, thermogenesis, substrate liberation in response to illness/injury. This is reflected by the robust epidemiological links between *low* skeletal muscle mass and *all-cause* morbidity/mortality.

In healthy, weight-bearing individuals, skeletal muscle mass is regulated by nutrition and contractile activity (movement/exercise). As such, the manner by which muscles respond to nutrients—across the human lifespan—are critical determinants of muscle mass maintenance.

Therefore, optimising nutrition (e.g., protein quantity/quality, energy, eating patterns, novel nutraceuticals) to maximise muscle maintenance across the lifespan, both in isolation and in tandem with physical activity, is highly important; as is the identification of mechanisms underlying nutrient mishandling, and propagating a failure in muscle homeostasis, i.e., in ageing and co-morbidities. The purpose of this Special Edition is to help to address these questions via encouraging submission of relevant reviews and clinical studies in humans.



mdpi.com/si/32367

Special Issue



nutrients



an Open Access Journal by MDPI

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 & Dietetics*) / CiteScore - Q1 (*Nutrition and Dietetics*)

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.

Contact Us

Nutrients Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/nutrients
nutrients@mdpi.com
[X@Nutrients_MDPI](https://twitter.com/Nutrients_MDPI)