Special Issue

Nutrition and Regulation of Muscle Protein Synthesis

Message from the Guest Editor

Skeletal muscle is a crucial tissue for human health. since it controls several metabolic activities. Protein synthesis and degradation are two important regulated processes to maintain muscle mass. In atrophic conditions, protein synthesis impairment is associated with several conditions, including physical inactivity, sarcopenia and malnutrition. The availability of nutrients is one of the factors which can influence protein turnover. In fact, when muscle protein breakdown exceeds the rate of muscle protein synthesis, loss of protein occurs involving the ubiquitin-proteasomal system, autophagy, and the calpain signaling. The knowledge of these pathways helps to understand their role in muscle remodeling and in response to diet, knowing that a balanced nutrition intake represents a potential clinical intervention to reactivate protein synthesis during atrophy. The aim of this Special Issue is to collect original articles or reviews which discuss the therapeutic strategies, based on current nutrition interventions, able to modulate muscle protein turnover in muscle wasting conditions.

Guest Editor

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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.

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