

Special Issue

Physical Activity: Relationship between Mitochondrial Energetics and Muscle Quality

Message from the Guest Editor

Efficient energy production and overall mitochondrial health are crucial for maintaining skeletal muscle function. Recent data indicate an important link between mitochondrial energetics and the control of muscle mass, suggesting a central role for mitochondrial energetics in regulating muscle mass. For example, mitochondrial oxidative stress has been shown to stimulate muscle protein breakdown by activating lysosome autophagy and proteasome systems and energetic stress, due to reduced ATP production, activating the adenosine monophosphate-activated protein kinase (AMPK)–FoxO3 pathways, leading to increased protein degradation.

Papers related to any aspect of the regulation of skeletal muscle energy metabolism and the adaptations that occur with physical training will be considered for this Special Issue.

Guest Editor

Prof. Dr. Loredana Capobianco

Department of Biological and Environmental Sciences and Technologies, University of Salento, 73100 Lecce, Italy

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle
Marche, Via Ranieri 65, 60100 Ancona, Italy

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