Special Issue

Use of Mechanical Variables to Prescribe Training and Evaluate Physical Fitness

Message from the Guest Editors

Mechanical variables are known to provide useful information to optimise training prescription and to refine the testing procedures intended to assess physical fitness. Due to advances in technology, researchers, coaches and health practitioners have now at their disposal affordable methods that allow the monitoring of important mechanical variables for guiding their training and testing procedures. For example, new training methods are being developed due to the possibility of assessing velocity during resistance training exercises or power output during continuous activities, such as running and cycling. Monitoring mechanical variables may be valuable to improve physical fitness and health in different populations from athletes to the elderly. The analysis of mechanical performance in acute studies may also help to better understand long-term adaptations in physical fitness. The aim of this Special Issue is to provide new insights into how different mechanical variables (velocity, acceleration, etc.) can be used to optimise the training prescription and evaluate physical fitness.

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Addressing the environmental and public health challenges requires engagement and collaboration among clinicians and public health researchers. Scientific discoveries and advances in this research field play a critical role in providing a rational basis for informed decision-making toward control and prevention of human diseases, especially the illnesses that are induced from environmental exposure to health hazards.

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Editor-in-Chief

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