







Special Issue Reprint

Biological Mechanisms Underlying Physical Fitness and Sports Performance

www.mdpi.com/books/reprint/6321

Edited by Badicu Georgian Filipe Manuel Clemente Eugenia Murawska-Ciałowicz

ISBN 978-3-0365-5724-3 (Hardback) ISBN 978-3-0365-5723-6 (PDF)



The concept of mechanism in biology has three distinct meanings. It may refer to a philosophical thesis about the nature of life and biology, to the internal workings of a machine-like structure, or to the causal explanation of a particular phenomenon. In this Special Issue, we try to discuss these possible biological mechanisms that underlie the beneficial effects of physical fitness and sports performance, as well their importance and role/influences on physical health.

Despite the significant body of knowledge regarding the physiological and physical effects of different training methods (based on dimensions of load), some of the biological causes for those changes are still unknown. Additionally, few studies have focused on the natural biological variability in humans and how specific properties of humans may justify different effects for the same training intervention. Thus, more original research is needed to provide plausible biological mechanisms that may explain the physiological and physical effects of exercise and training in humans.

In this Special Issue, we gather the contributions that describe and list the links between physical fitness, sports performance, and human biology.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/6321



MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG St. Alban-Anlage 66 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

