







Special Issue Reprint

# Molecular Mechanisms of Bioactive Nutrients Promoting Human Health

www.mdpi.com/books/reprint/11684

Edited by Baojun Xu

ISBN 978-3-7258-5447-9 (Hardback) ISBN 978-3-7258-5448-6 (PDF)



Substantial evidence has supported that cellular oxidative damage and chronic neuroinflammation are potential mechanisms involved in the onset and development of non-communicable diseases, including obesity, diabetes, cancers, and even neurodegenerative disease. Some bioactive nutrients, such as phytochemicals, antioxidant enzymes, peptides, polysaccharides, prebiotics, probiotics, essential fatty acids, rare amino acids, minerals, and vitamins, have positive effects on human health and could reduce the likelihood of developing numerous diseases, likely due to their antioxidative and anti-inflammatory properties. However, the underlying mechanism of how natural bioactive components respond to chronic human disease damage is unclear. In this Special Issue, we collected the latest findings, including those from in vitro, animal, and clinical studies, relating to the health-promoting role of bioactive nutrients or their cellular signaling and molecular mechanism in response to disease prevention.





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 Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

