

Bioactive Compounds from Plant Origin

Extraction, Applications, and Potential Health Benefits

This new volume explores the importance of phytochemicals from plants in therapeutics, focusing on the extraction of bioactive compounds and their applications in human health. Natural products and their bioactive compounds are increasingly utilized in preventive and therapeutic medication as well as for the production of pharmaceutical supplements and, more recently, as food additives to increase the functionality of foods.

The first section of the volume describes recent advances in the extraction of bioactive compounds from various sources. It looks at advanced extraction techniques such as enzyme-assisted, microwave-assisted, ultrasound-assisted, pressurized liquid extraction, and supercritical extraction techniques. Part 2, on bioactive compounds and health claims, covers the roles of different bioactive compounds and their health-promoting potential for lifestyle diseases. This section explains the botany, physical characteristics, uniqueness, uses, distribution, importance, phytochemistry, bioactivities, and future trends of different functional foods.

ABOUT THE EDITORS

Hafiz Ansar Rasul Suleria, PhD, is the Alfred Deakin Research Fellow at Deakin University, Geelong, Victoria, Australia. Dr. Suleria was awarded an International Postgraduate Research Scholarship and an Australian Postgraduate Award for his PhD research at the University of Queensland School of Medicine, the Translational Research Institute, in collaboration with the Commonwealth and Scientific and Industrial Research Organization. He was previously affiliated with the Department of Food Sciences at the Government College University, Faisalabad, Pakistan; the PAK-US Joint Project funded by the Higher Education Commission, Pakistan, and the Department of State, USA, with the collaboration of the University of Massachusetts, USA; and the National Institute of Food Science and Technology, University of Agriculture, Pakistan. Dr. Suleria has published more than 60 peer-reviewed scientific papers.

Colin Barrow, PhD, is the Alfred Deakin Professor and Chair of Biotechnology at Deakin University, Victoria, Australia, where he is Director of the Centre for Chemistry and Biotechnology. He has previously published two books, including one entitled *Marine Nutraceuticals and Functional Foods*. Dr. Barrow has an H-index of 43, with more than 300 peer-reviewed publications and over 8000 total citations. Prior to joining Deakin University, he was Executive Vice President of Research and Development at Ocean Nutrition Canada. He served on the Expert Advisory Committee for the Canadian Natural Health Product Directorate, is a founding member of the International Society for Nutraceuticals and Functional Foods, and was a member of Board of Directors for the International Society for the Study of Fatty Acids and Lipids.

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ISBN: 978-1-77188-786-1



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