

HANDBOOK OF FOOD BIOENGINEERING
VOLUME 13

FOOD QUALITY: BALANCING HEALTH AND DISEASE



Edited by
Alina Maria Holban
Alexandru Mihai Grumezescu



Food Quality: Balancing Health and Disease

Handbook of Food Bioengineering,
Volume 13

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Food Quality: Balancing Health and Disease, a volume in the *Handbook of Food Bioengineering* series, provides essential information for researchers, scientists, and students about the relationship between the quality of foods and disease at the biological level. It presents different technological approaches to detect food properties and their capabilities to balance health and disease to deliver high quality food products to consumers. This book explores the dynamic potential of how food bioengineering can improve traditional foods through modern methods to make a positive impact on human's health and fostering innovation.

Key Features

- Provides information on how bioavailability of nutrients and food formulation can be used to prevent or treat disease
- Includes the most recent research methods of food engineering, metabolomics and genomics to detect best outcomes
- Includes innovative applications for anti-aging effects and curative properties in foods
- Presents research examples on how both human gut microbiota and food components control the way our organisms develop and react in different environmental conditions

About the Editors

Dr. Alina Maria Holban holds a Phd in Biology and is Lecturer in Microbiology. She is conducting research in applied microbiology, molecular biology and nano-delivery at the Department of Microbiology and Immunology, Faculty of Biology, University of Bucharest. Her contribution on these research fields is supported by 71 international papers, 14 book chapters, 2 monographs and 20 edited books. She also serves as Editor and Reviewer for several notable journals in the fields of nanobiomedicine and alternative antimicrobial strategies. Her current research focus is on the design of efficient antimicrobial and virulence-modulating nanoshuttles with implications in medicine, pharmacology and food and beverage industry. Other details are available at <https://alina.amgtranscend.org/>.

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