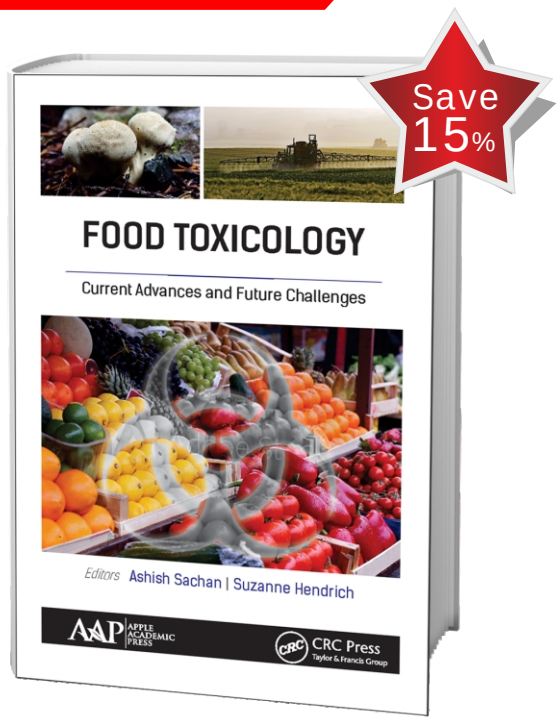
New Book Announcement

FOOD TOXICOLOGY

Current Advances and Future Challenges

Available **November** 2017



Editors: Ashish Sachan, DVM, MS, PhD

Suzanne Hendrich, PhD
University Professor and Lura M. Lovell Fellow, Department of Food Science and Human Nutrition, Iowa State University

Food Toxicology: Current Advances and Future Challenges covers a selection of important research in the multifaceted field of food toxicology. With more than seven billion people in the world today and counting, advances in food toxicology have a direct bearing on food safety issues that are of concern to all humanity for the foreseeable future. Massive globalization, industrialization, and commercialization have affected every aspect of food production, the food supply chain, and food consumption.

This informative volume offers the global perspectives of scientists in important areas related to biomarkers and nanosensors in food toxicology, toxicology of nanomaterials, chemicals in sanitation and packaging, additives, mycotoxins, endocrine disruptors, radionuclides, toxic metals, and waste-burning residues in food. The book emphasizes regulatory toxicology and includes an interesting example case study.

The volume covers a selection of important topics, including

- biomarkers in food toxicology
- toxicity of ingested nanomaterials
- safety evaluation of chemicals used in food and beverage processing and packaging
- developmental neurotoxicity considerations for food additive safety
- mycotoxins
- endocrine-disrupting chemicals in foodstuffs
- metal toxicity in foods
- toxicological risks of waste-burning residues
- regulation and monitoring of pesticide residues in water and food

The challenge of sustainable and safe food for everyone needs a multidisciplinary and multi-sectorial approach in related industries and governments alike. Food chemical safety is an underappreciated aspect of consumer safety. This volume seeks to help fill the gap. It provides informative research for food scientists and researchers and many others.

Key features:

- covers a selection of important research in the multifaceted field of food toxicology
- offers the global perspectives of scientists in important areas related to biomarkers and nanosensors in food toxicology, toxicology of nanomaterials, chemicals in sanitation and packaging, additives, mycotoxins, endocrine disruptors, radionuclides, toxic metals, and waste-burning residues in food emphasizes regulatory toxicology

CONTENTS

APPLE ACADEMIC PRESS

US office: 9 Spinnaker Way
Waretown,NJ 08758 USA
Tel: 732-998-5302 / Fax: 866-222-9549
Email: info@appleacademicpress.com

Canadian office: 3333 Mistwell Crescent
Oakville, Ontario L6L 0A2 Canada
Tel: 289-937-6300, Fax: 866-222-9549
Email: info@AppleAcademicPress.com

Exclusive worldwide distribution by
CRC Press, a Taylor & Francis Group

www.appleacademicpress.com

Contents continued on side 2

FOOD TOXICOLOGY

Current Advances and Future Challenges

ABOUT THE EDITORS

Ashish Sachan, DVM, MS, PhD, is a veterinarian licensed in toxicology by the College of Veterinarians of Ontario (CVO), Canada. He has more than fifteen years of toxicology experience in both the university and industrial settings. Dr. Sachan completed his DVM in 1996 and Masters in Veterinary Pharmacology in 1998 from Veterinary College, Bangalore, India. Dr. Sachan received his PhD in Toxicology from the Department of Biochemistry, Biophysics and Molecular Biology, Iowa State University, USA. His PhD involved the development of nanosensor technologies to detect toxic chemical species of forensic significance. During his tenure as an Assistant Professor, his research focused on ethnopharmacology and genetic toxicology. Dr. Sachan has also been inducted into the Iowa State University chapter of the Honors Society of Agriculture $\frac{1}{M}$ Gamma Sigma Delta. His current professional interests involve regulatory affairs and, scientific and business development of agricultural and veterinary products.

Suzanne Hendrich, PhD, is a University Professor and the Lura M. Lovell Fellow at the Department of Food Science and Human Nutrition at Iowa State University, where she has been on the faculty since 1987. Dr. Hendrich has authored more than 150 research papers and abstracts, mainly on the bioavailability of dietary constituents, such as soybean isoflavones, which may prevent chronic diseases. Her mycotoxin research has focused mainly on fumonisin and deoxynivalenol metabolism, bioavailability, and detoxification. Her current food toxicology interests include safety of dietary ingredients such as digestion-resistant starches, interactions between gut bacteria and foodborne toxicants, and safety of dietary supplements. Dr. Hendrich compiles an annual report based on data from the American Association of Poison Control Center comparing foodborne toxicants, including dietary botanical, vitamin and mineral supplements, seafood toxins, and other foodborne toxicants for their adverse effects. She writes a "foodtox" blog (https://foodtoxicologyprof.wordpress.com/) for which she critiques research on food chemical and dietary supplement safety. Dr. Hendricks earned her BA in biology from UCLA and her PhD in nutrition, UC Berkeley.

9 color and **8** b/w illustrations

480 pages with index.

ISBN hard: 978-1-77188-617-8. Cat#: N11958.

ISBN ebook: 978-1-315-16107-5. Cat#: NE12215.

$179.95 US | £139.00 hardback.

November 2017.