

Edited by Siegfried Knasmüller, David M. DeMarini,  
Ian Johnson, and Clarissa Gerhäuser

# Chemoprevention of Cancer and DNA Damage by Dietary Factors



Knasmüller · DeMarini  
Johnson · Gerhäuser (Eds.)

Chemoprevention of Cancer  
and DNA Damage by  
Dietary Factors



This reference book provides a comprehensive overview of the field of dietary chemoprevention of cancer. It reviews the wide variety of dietary factors and mechanisms of anticarcinogenesis and antimutagenesis that have been identified in vitro and in animal and human studies. This volume covers the most recent molecular mechanism by which dietary antimutagens and anticarcinogens function, and also notes the needs for further research in this potentially important area of public health. It is a must-have reference for nutritional scientists, medicinal chemists, food scientists, biotechnologists, pharmacists, and molecular biologists working in academia or the pharmaceutical and food industries, as well as governmental and regulatory agencies concerned with nutrition and cancer.

With a foreword by Bruce N. Ames.

#### Sections of the book:

- General Principles
- Experimental Models and Methods Used in Chemoprevention
- Selected Chemoprotective Dietary Factors and Components



**Siegfried Knasmüller** is head of the Environmental Toxicology Group at the Institute of Cancer Research, Medical University of Vienna. He obtained his academic degrees from Vienna University and continued his studies in the fields of genetic toxicology and cancer research at the University of Leiden, at the Case Western Reserve University, at US EPA in North Carolina and at the Institute of Experimental Cancer Research in Innsbruck before taking up his present appointment. Siegfried Knasmüller authored over 160 scientific publications and organized several international conferences. He is member of the editorial board of a number of scientific journals and was involved in a number of EU research projects.



**David M. DeMarini** is a genetic toxicologist at the U.S. Environmental Protection Agency, Research Triangle Park, North Carolina. He received all of his academic degrees from Illinois State University, Normal, Illinois, and he did further studies at the Oak Ridge National Laboratory, Tennessee, and at the National Toxicology Program, NIH/NIEHS, Research Triangle Park, North Carolina. He is the past-president of the Environmental Mutagen Society and of the International Association of Environmental Mutagen Societies. David M. DeMarini is editor and editorial board member of numerous journals, as well as an Adjunct Professor in the Gillings School of Global Public Health, University of North Carolina at Chapel Hill. He has more than 150 scientific publications in the field of mutagenesis.



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**Clarissa Gerhäuser** is heading the Cancer Chemoprevention Group at the German Cancer Research Center in Heidelberg. She studied Pharmacy at the University of Würzburg and obtained a Ph.D. in pharmaceutical biology at the Ludwig Maximilians University of Munich. She then worked as a research assistant professor in the area of cancer chemoprevention at the University of Illinois at Chicago before taking up the present appointment. Her research interest is in the field of novel plant- or diet-derived chemopreventive compounds and synthetic analogs. Clarissa Gerhäuser has authored more than 70 research articles, reviews and book chapters on cancer chemopreventive agents.

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**Siegfried Knasmüller, David M. De Marini, Ian T. Johnson and Clarissa Gerhäuser**

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