

Book Review

Protective Effects of Tea on Human Health, edited by Narender K Jain, Maqsood Siddiqi and John Weisburger, published by CAB International, 2006, pp viii + 211, price not mentioned
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The health beneficial properties of tea the world's most popular beverage have gained prominence during the last two decades. In the book, the editors have brought together under once cover, various health-related aspects of tea. The twenty different chapters of the book review varying health promoting benefits and proposed mechanisms of the action of tea. Contributions by eminent scientists and researchers form the various chapters, each of which represents a well-referenced review of evidence from *in vitro*, *in vivo* and clinical models on a specific health ailment.

The book is divided into two parts. Part-I, comprising of seven chapters, deals with exhaustive reviews related to general protective effects of tea, whilst Part-II reveals the protective effect of tea against specific ailments.

In different chapters, throughout the book, authors emphasise the protective role played by several important bioactive molecules present in tea. The flavonoids, catechins and polyphenols with their potent antioxidant and scavenging properties, have been demonstrated to exercise their protective actions via multiple mechanisms in different ailments. Epidemiological techniques, supplemented by clinical and laboratory studies conducted on animal models, human volunteers and *in vivo* studies, provide information of the mechanism of action of tea and its constituents and on its metabolism. Tea has been demonstrated to play a major role in reducing the

risks associated with life-style and environment related killer diseases viz, cardiovascular disease, cancer, diabetes, obesity, liver and pulmonary ailments, arthritis, influenza, SARS, dementia, Alzheimer's and even AIDS.

Though encouraging, the experimental and epidemiological data as elaborated in different studies is still preliminary and hence not conclusive. The researcher should use this valuable information as the basis for further extensive and in-depth studies. Further details on bioavailability of polyphenols of tea in plasma and tissue, coupled with a careful consideration of the factors affecting the bioavailability and design of effective intervention trials are necessary to gain complete understanding of the biological actions of tea.

The contents of each chapter impart precise up-to-date information on the protective role of tea and its constituents in different health ailments, but there tends to be frequent repetition of some contents. This is probably due to the fact that the book is a theme compilation of several authors' contribution. The lack of a general introductory chapter and a final summary chapter in a compilation, stand out as lacunae.

The defects are minimal and outweighed by the overall utility of this well-presented and well-referenced compilation of information. This book will be especially useful to researchers, health specialists and professionals in the beverage industry. It will undoubtedly be an invaluable asset in scientific and public libraries.

Dr. Annie Shirwaikar

Department of Pharmacognosy
MCOPS, Manipal 576104