

Natural Compounds in Cancer Therapy

John Boik (Ed.), Oregon Medical Press, LLC, Minnesota, USA, 2001, 23 Chapters, 13 Appendixes, 521 pp, \$32.00, Soft cover, ISBN 0-9648280-1-4

Cancer is in many ways a complicated disease and often patients are seeking guidance to be cured without paying higher prices and with the hope of recovering their health. In this book the author discusses the use of natural products in cancer treatment targeting especially patients and physicians, but also provides invaluable information for researchers.

According to the author; the Book has three main purposes:

- First is to inform the reader what has been accomplished in the field with descriptions and how natural compounds fit into the mechanism-based approach,
- Second it proposes ideas as how these compounds might best be used in the treatment of cancer, and
- Finally, it is intended to help to guide future research in the field.

The book is organized into three main parts and an introductory chapter, providing a background for the rest of the text. This first chapter briefly describes cancer development and what kind of natural products can be active, providing an overview of anticancer strategies. In part 1 (chapters 2–6) the events involved in cancer progression at the cellular level are presented, while part 2 (chapters 7–12) discusses this at organism level. In part 3 (chapters 13–22) specific natural compounds are discussed. A review of potential interactions between natural compounds and chemotherapy and radiotherapy is given in chapter 23 and at the end we have 13 appendixes with very useful technical information.

I can recommend this book to a wide range of readers, like people with cancer problems, physicians, natural sciences students, and especially researchers in natural products, after reading the book you got an overview of what cancer is, in a broad sense, and how natural compounds can act. For patients it will be very illustrative and they will find no false hopes of cure, for physicians it will help to understand the world of natural products and how they act, and for researchers it is an invaluable compilation that provides ideas for many aspects of research.

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Pharmacodynamic Basis of Herbal Medicine

Manuchair Ebadi. (Ed.), CRC Press, Boca Raton, 2001, 28+726 pages, \$139.95, ISBN 0-8493-0743-0

At first sight this is an impressive book. The author seeks to show that the therapeutic effects claimed for many herbs may be explained in terms of the pharmacological effects of their constituents. In addition, the contribution of natural molecules to the development of many of the drugs used in medicine today is also an important theme.

The book comprises 60 chapters that vary in length from 3 to 40 pages, beginning with 7 introductory chapters covering more general topics including alternative therapies, vitamins and diet, antioxidants, and food/herb-drug interactions. The remaining 53 chapters cover a diverse range of herbal drugs together with chapters on some food items (e.g. brussels sprouts, tomatoes, wine) and a few chapters on specific classes of compounds (e.g. alkaloids, flavonoids). The book does not focus entirely on herbal drugs and chapters on botulinum toxin and yogurt are included and many synthetic drugs are referred to throughout the book. As a whole, the text contains a substantial amount of information and much space is taken up with background explanations of the pharmacology needed to enable the reader to understand the mechanisms by which natural-product derived drugs exert their actions.

Although the text contains a wealth of information it does have significant limitations. The author begins his introduction with a quote ascribed to the Biblical book, Ecclesiastes, chapter 38, verse 4 but in fact the quote is found in the apocryphal book Ecclesiasticus. This error may seem trivial but it serves to illustrate the point that this book generally displays a lack of scholarship. A few more examples will be given to support this view. In the first chapter, alternative therapies are described but many of those included (e.g. geopathic therapy) have little or nothing to do with herbal medicines while those that do are covered very superficially. In the second chapter, entitled "Herbal therapeutics then and now" the authors states that "some ancient herbs have found new uses" but none of the examples given illustrate this point. The following chapter on "Vitamins and diet" includes a figure showing the metabolism and action of vitamin D in the body but there is no reference to vitamin D or to this figure in the text. Chapter 4, "Dietary antioxidants" discusses the role of antioxidant compounds in the prevention of disease but also includes a large section on the chemotherapy of cancer with a review of anticancer drugs. As in other chapters, the author does not always clearly indicate which drugs are of natural origin and which are not. More importantly, the latter section (pages 89–97) is repeated on pages 643–652 as part of a chapter on taxol. These examples suffice to show that more thought should have been put into the content and organization of this book both within the chapters themselves and with respect to the order of the chapters within the book: for example, an introduction to flavonoids is given in chapter