

Host Factors in Human Carcinogenesis. (IARC Scientific Publications, No. 30.) Edited by H. BARTSCH, B. ARMSTRONG, and W. DAVIS. International Agency for Research on Cancer, Health and Biomedical Information Programme, World Health Organization, Geneva 27, Switzerland. 1982. 581 pp. 17 × 24 cm. Price \$50.00 (Sw. Fr. 100).

Current research on carcinogenesis from many laboratories is beginning to elucidate several facets of the complex cascade and progression of events that lead from the initiation of the biochemical lesions to the development of metastatic potential. Along with this progress in the areas of biochemistry and the molecular biology of cancer, other laboratories are reporting both human epidemiological and animal model studies which indicate that conditions within the individual at risk may influence the development of cancer and thereby susceptibility. A knowledge of the interactions between these "host factors" which influence susceptibility and the various stages of carcinogenesis will allow for the development of strategies to aid in the prevention of cancer.

The main goal of this book is to update the knowledge concerning the mechanisms by which various factors inherent in the host may alter the initiation and developmental progression of events leading to cancer. To meet this goal, the editors have drawn together investigators from the most promising research areas concerning host susceptibility to carcinogenesis.

The volume represents a compilation of papers presented at an international symposium and suffers from uneven presentation, as is often the case of such volumes. However, it does make the material presented available to a larger audience. The individual contributions take the format of either short reviews of the literature or reviews of the research efforts of a particular laboratory and presentations of specific research reports. Several of the latter lack sufficient introductory material to determine the significance of the studies in the overall field. This problem is somewhat overcome by the inclusion of a rapporteur's report summarizing and placing in perspective the individual presentations within each section. Most areas of the subject are given adequate coverage, with the exception of diet and nutrition. Only two reports are concerned with this topic (although it is mentioned in several others), which is rapidly being shown to be an important host factor in chemical carcinogenesis and which is generally under the control of the individual. It is hoped that this volume will inspire further studies to develop the mechanisms by which factors inherent within the host alter cancer susceptibility.

Overall, this volume makes a successful attempt to combine the divergent research interests concerned with the role of various host factors in altering susceptibility, and I can recommend it for those who are interested in developing more knowledge in this area. It will be useful for those considering this topic for the first time and even those whose individual research interest in host factors do not allow them to maintain current knowledge of the many areas of research concerned with this topic.

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Techniques of Solubilization of Drugs. (Drugs and the Pharmaceutical Sciences Series, Vol 12.) Edited by SAMUEL H. YALKOWSKY. Marcel Dekker, 270 Madison Avenue, New York NY 10016. 1981. 224 pp. 15 × 23 cm. Price \$34.50 (20% higher outside the U.S.).

Techniques of Solubilization of Drugs is a very useful handbook for researchers involved in drug development. The problem and necessity of proper solubilization of drugs are nicely discussed in the two chapters by the editor, S. Yalkowsky. Of the other four chapters, the one on solubilization in surfactant systems by A. T. Florence deserves particular attention, as the author gives a rather complete overview of the subject. In the chapter on the solid-state manipulation, probably more attention should be given to the very important polymeric carriers and solid dispersions in matrices. The chapter on the use of complex formation for drug solubilization appears to use old literature data, and it seems that either the approach does not have much use or the field was not thor-

oughly searched for this review. The chapter on drug derivatization points out the importance and, in many ways, how to solve the problem of solubility by chemical means, such as prodrugs, but the examples seem to concentrate primarily on the potential usefulness of some amino acid esters. There are some misquotes from the literature.

Overall, the book is a very useful one and it defines the highly multidisciplinary field of effecting drug solubility by a variety of manipulations.

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Diuretics: Chemistry, Pharmacology, and Medicine. Edited by EDWARD J. CRAGOE, Jr. Wiley-Interscience, 605 Third Avenue New York, NY 10016. 1983. 694 pp. 15 × 23 cm. Price \$80.00.

Diuretics: Chemistry, Pharmacology, and Medicine is the second volume in the "Chemistry and Pharmacology of Drugs" series. The series is edited by Daniel Lednicer, and this volume is edited by Edward J. Cragoe, Jr. The book has the following two goals: updating the field of diuretic research since the last comprehensive review was written by George deStevens in 1963 and laying the groundwork for the next era in diuretic research. It succeeds admirably on both counts by giving a balanced account of physiological principles, structure-activity relationships, mechanistic considerations, clinical data, and biochemical perspectives.

The book begins with a chapter on kidney physiology by Edward H. Blaine. Although not an exhaustive treatment, it is appropriate to the beginning of the book and serves as a useful digest of information with a good list of references. Nine subsequent chapters, describing the medical chemistry of diuretics, are divided according to chemical structure. Some decisions regarding chemical class were clearly difficult (4-anilino-3-pyridinosulfonamides are found under six-membered heterocycles rather than under sulfonamides), but any confusion is readily cleared up by consulting the index. The emphasis in these chapters is on structure-activity relationships: molecules have been dissected and the effect of substitution at each chemically accessible atom has been tabulated.

The chapter on sulfonamide diuretics by Richard C. Allen is a comprehensive and thorough treatment of the subject (153 pages). It is richly illustrated with figures and tables, and documents with over 700 references the 20 years of development in this area since the deStevens review. The chapters on (aryloxy)acetic acids and 2-aminomethylphenols have already appeared in large part in a 1978 ACS monograph, "Diuretic Agents," also edited by Dr. Cragoe. To their credit, the authors (Edward J. Cragoe and Robert L. Smith) have updated the tables on older chemical series with additional entries and have included new compounds that have appeared in the literature between 1978 and 1982. The next six chapters—covering pyrazine diuretics, three- and five-membered heterocyclic diuretics, tri- and tetracyclic heterocycles, six-membered monocyclic heterocycles, bicyclic heterocycles, and the inevitable "others"—were all written by Dr. Cragoe and maintain a standard of clarity and conciseness throughout.

The book concludes with a chapter on hormonal regulators of the kidney (R. L. Smith), which this reviewer found to be a lucid and scholarly synthesis of a large amount of diverse information (600 references). This chapter succeeds in bringing together the myriad effects and complex interrelationships among antidiuretic hormone, the renin-angiotensin-aldosterone system, the kallikrein-kinin system, and the prostaglandins, as well as considering the possible role of the hypothetical natriuretic hormone.

Throughout the book, tables have been effectively used to clarify structure-activity relationships, and the chapters have a logical organization, which is reinforced with a detailed outline at the beginning of each chapter. Inexplicably, the figures and tables are printed with a quality that varies from sharp to almost smudged. Although not a serious flaw, this reviewer found it an unfortunate distraction in a book that is otherwise crisply reproduced. Also distracting is the use of various scoring systems (rather than actual data) to present diuretic activity in several chapters. Although the format in which data were presented was clearly out of the authors' control in most cases, these scoring systems never-