

terns in humans. Although other animal species represent convenient models for studying interstitial fluid distribution patterns of antibacterials, we feel that a significant potential for misinterpretation of the data exists unless the protein-binding characteristics of the antibacterial in the animal species are similar to those of humans.

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BOOKS

REVIEWS

Drug Fate and Metabolism: Methods and Techniques, Vol. 1. Edited by EDWARD R. GARRETT and JEAN L. HIRTZ. Dekker, 270 Madison Ave., New York, NY 10016, 1977. 313 pp. 15 × 23 cm. Price \$35.00.

This volume is the first of a proposed series of texts on drug fate and metabolism. As indicated by the editors, the intent of this volume and future volumes is "to review all the techniques, physical, chemical, biological, medical, and mathematical, which can be applied to the study of drug fate in the organism. It is addressed primarily to the research scientist and is devoted to *methods*, with only the minimal theory given for perspective, appreciation, and proper evaluation of results." Volume I meets these goals, with the major emphasis being placed on the use of analytical methods.

Chapters I and II deal with autoradiography and autoradiography in cytopharmacology. Both chapters were written by experts in their area of speciality and are of particular importance to a novice in autoradiography. Chapters III and IV explore the use of electrophoresis and ion-pair extraction and chromatography. Chapter V reviews protein binding, and Chapter VI briefly looks at atomic absorption spectroscopy. The use of a fairly recent analytical method, spin immunoassay, is discussed in Chapter VII. The last chapter describes facilities and other pertinent information needed in animal care.

The editors state that "it was deemed proper to include chapters on methods that would not be modern methods of choice but are of historical importance in evaluating the significance and limitations of the earlier studies in these fields." The selection of these methods is one notable weakness that occurs in Volume I. All of the volumes in this series apparently will be required if an individual desires to have the methods most frequently used in drug metabolism. Another weakness is that the chapters have no rhyme or reason to their order. It would be more sensible to have the chapter on animal care at the beginning of the book since metabolism studies are based on the use of animals as a testing source.

One strong feature of this text, in addition to its being well written, is a list of the source of supplies and equipment included in Chapters I and III. This list is particularly important in saving time that would otherwise be spent in looking for this material. The reviewer recommends this

volume for the researcher in the area of drug metabolism, especially the analytical chemist, pharmacologist, and toxicologist.

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Martindale: The Extra Pharmacopoeia. 27th Ed. Edited by AINLEY WADE and JAMES E. F. REYNOLDS. The Pharmaceutical Press, 1 Lambeth High Street, London, SE1 7JN, England, 1977. 19 × 25.4 cm. 2077 pp. Price \$60. Available from Rittenhouse Book Distributors, 251 S. 24th St., Philadelphia, PA 19103.

The 27th edition of "Martindale" is the largest ever published. It has been revised thoroughly and updated and extended in coverage. The book is divided into six main sections. Part 1, the largest, contains monographs on more than 3100 drugs and ancillary substances in current use throughout the world. Drugs having similar uses or actions are grouped together. Part 2, Supplementary Drugs and Ancillary Substances, describes 1040 new drugs that are too recently introduced or of insufficient importance to be included in Part 1. Also in Part 2 are monographs on obsolescent drugs about which information may still be required.

Part 3 gives the composition and source of more than 1450 over-the-counter medicines marketed in Great Britain. Part 4 is a Directory of Manufacturers, listing full names and addresses of over 1400 manufacturers throughout the world. The Index to Clinical Uses, Part 5, is a guide to drug usage presented in alphabetical order of diseases.

The final section, the General Index, has more than 43,000 entries. Substances are indexed by generic names, proprietary names, chemical names, and synonyms.

This book represents the most comprehensive reference source of information on drugs used throughout the world. Pharmacists as well as professionals and students in all health-related and scientific fields will find this book most valuable. It is a necessity in every pharmacy and medical library.

Staff review