

Pharmacopoeias and Formularies

THE NATIONAL FORMULARY OF THE UNITED STATES OF AMERICA. TWELFTH EDITION, 1965. (N.F.XII.) Published by the American Pharmaceutical Association, Washington, D.C., U.S.A. (pp. xlv + 618 (including Index). \$10.00.

This New Formulary becomes effective on September 1, 1965. Responsibility for it rests with the Council of the American Pharmaceutical Association which appoints a Committee of Ten under Dr. E. G. Feldman as Director of Revision. This committee appoints its vice-chairman and secretary from amongst its members. The Director in turn nominates to Council an Advisory Panel not exceeding 50 (48 on this for N.F.XII) all of whom have special contributions to make in some pharmaceutical or therapeutic field. There is an Advisory Committee—largely medical—on “Admissions” and 26 Advisory Panels on subjects ranging from Arsenic Tests and Nomenclature to Dental Drugs, Veterinary Drugs and Vitamin Preparations. Apart from these panels two hundred other participants in the Revision Programme are listed—including advisers from Canada (3), England (2), Holland, Sweden and Switzerland (1 from each).

The need for revision within five years of standard pharmaceutical works of reference, as has been general since 1940, would seem to be supported by this volume with its 248 new “admissions” and 280 monographs of N.F.XI now deleted. Interestingly enough, in spite of this net loss of 32 monographs, N.F.XII is 100 pages larger than N.F.XI. The Committee started by striking out “Extent of Use” as a significant criterion in determining suitability of a drug for inclusion—recommendations for admission are now based solely on “Therapeutic Value”. In this the Committee anticipated the requirements on efficacy of Congress in 1962. Since 1955 three editions have seen 729 deletions. In this country we would not support all these admissions or all these deletions but there are fashions and local fashions in prescribing, as in skirt lengths and trousers widths.

The nearest equivalent to N.F.XII in U.K. is B.P.C., the more impressive—and expensive—volume, partly because of its “Action and Uses” sections, whereas N.F. merely gives a “Category”. Such categories as Anticonvulsant, Antiemetic, Antihypercholesterolemic, Antitussive—amongst many anti—Neoplastic Suppressant, Pharmaceutical Necessity and Solvent are helpful, but hardly justify the claim that the Formulary “has also assumed added importance as a therapeutic guide to pharmacists and physicians” except that the strict criterion of therapeutic value as the basis for admission gives a cachet to its monographs. B.P.C. also has the advantage of being comprehensive in that it includes modified monographs on B.P. preparations whereas N.F. supplements but does not cover U.S.P. With admissions and deletions at the rate of about one of each per week it is clear that any volume is a little out of date before it is published. Interim Revision Announcements (there were four to N.F.XI) are provided upon request while Supplements, covering a wider scope, are mailed without charge to every owner of the book.

The two column format of N.F.XI is here repeated but in narrower columns with wider margins. This may facilitate readability at the price of elegance. The paper used is either not quite thick enough or not quite opaque enough to prevent some of the print from being quite noticeable from the other side of the page. There are pp. 53 of Introductory Matter, 418 of Monographs, 97 on General Tests, Processes and Apparatus, 20 on Reagents and Test Solutions,

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43 on General Information, including a useful synopsis of the Federal Regulations on Narcotic Drugs, and 30 of Index. Tables of Atomic Weights, Metric Doses and Apothecaries' Equivalents usefully decorate the fly leaves at the back—"good measure-running over!" Gm. not G. is used for gram and L., ml. and μ l. are retained with ml. taken as the equivalent of the cc.

Pharmacists will be specially interested in the tests and assays directed to quality control. There are many new assays and many improvements in standards for tablets which are now subject to individual assay. Half the tablets have had their disintegration times reduced—in most cases by at least 50%. Increasing use is made of modern and instrumental methods of analysis. N.F.XII is primarily a book of standards and introduces in this edition for the first time gas-liquid chromatography, flame spectrophotometry, thin-layer chromatography, polarography and delta-pH titrimetry amongst other techniques. Spectrophotometric Reference Standards have increased from 42 in N.F.XI to 91 in N.F.XII—59 of these are provided for the first time. Virtually all the spectrophotometric assay formulae have been converted to calculations based upon absorbance values.

Although the U.S.P. has recently deleted its monograph on meprobamate on the ground that this drug is not a "true tranquiliser," it is included here and categorised as such! Only one typographical error has been detected—or does U.S.A. refuse to differentiate between principal and principle? In his closing tribute to his committees and participants the Director of Revision refers to their "Contribution to the fulfilment of the obligation to advance the public welfare which was assumed by the National Formulary more than 75 years ago". Perhaps such dedicated volumes are of limited value here because of differences in names, standards, practices. But the pattern has its values.

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Book Review

INTRODUCTION TO PHARMACOLOGY. By J. J. Lewis. Third edition. Pp. xvi + 1048 (including Index). E. & S. Livingstone, Ltd., Edinburgh and London, 1964. 63s.

This textbook is now well-established and its success is evidenced by the appearance of this third edition barely four years since the first edition was published in 1960. With thirty-seven chapters comprising nearly one thousand pages it is certainly a comprehensive "Introduction" to the subject. This edition is one chapter and over 100 pages longer than the 2nd Edition.

The first chapter deals with general aspects of the subject such as administration, absorption, distribution and fate of drugs and theories of drug action which are important but which students so often fail to appreciate or to enjoy at the beginning of the subject. This may be because an understanding of these topics in perspective depends so much on having studied what appears in the rest of the book. This section would probably have more significance for the student if it were placed at the end of the book.

The next three chapters deal mainly with the pharmacology of the autonomic nervous system and with drugs related to this topic. The beginning is rather abrupt as there is no introduction to the concept of humoral transmission. The treatment is immediately very specialised with a pronounced chemical bias. It is up-to-date, but beginner students will find it heavy going. In the bibliography there is no reference to the appropriate sections in "Goodman and Gil-