

and nonalkylating inhibitors bind less efficiently to the enzyme than folic acid ( $K_M = 6.2 \times 10^{-6} M$ ). Variation of the chain length of the 6-substituent has a relatively small effect on the  $[I/S]_{50}$  ratios for both the alcohols (III-VII,  $[I/S]_{50}$  range, 2.9-5.6) and the chloro compounds (VIII-XII,  $[I/S]_{50}$  range, 1.9-3.0). However, incubation of the enzyme with the inhibitor before addition of the substrate resulted in varying degrees of irreversible inactivation of the enzyme. Enzyme inactivation in the presence of the reversible inhibitors (III-VII) was identical to that occurring in the absence of these inhibitors.

The data presented in this communication seem to establish the existence of a nucleophilic site on the enzyme folic acid reductase that can be specifically alkylated by appropriately designed antagonists. Further work is in progress, using analogs of these antagonists, that may further establish the position of this nucleophilic site relative to other binding sites of folic acid reductase.

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## Books

### REVIEWS

*Accepted Dental Remedies 1966.* Council on Dental Therapeutics. American Dental Association, 222 E. Superior St., Chicago, Ill. 60611, 1965. xvi + 275 pp. 15 × 22.5 cm. Price \$3.00. Paperbound.

The 1966 edition is the thirty-first edition of this well-known handbook of dental therapeutics. Revision once again has resulted in changes in the organization of the material and division into five sections; the previous edition had three. Of the five sections, one represents new material—Therapeutic Guides. The indexes have been incorporated into the fifth section, and the first three—General Principles of Medication, Therapeutic Agents, and Therapeutic Aids—remain the same.

Therapeutic Guides includes a chapter in which conditions such as bleeding, hairy tongue, moniliasis, leukoplakia, etc., are discussed and suggestions for treatment given. Another new chapter is Current Therapeutic Trends in which brief monographs on recently marketed drugs are presented. These drugs are widely advertised, and although some may eventually be accepted by the Council, others are included especially to emphasize the hazards associated with their use.

The discussion on reporting drug reactions has been expanded. The Council on Therapeutics is now cooperating with the FDA in its program on adverse reactions and to further aid the practitioner, brief adverse reaction report forms have been included inside the back cover of the book.

*Basic Biochemistry.* By M. E. RAFELSON, JR., and S. B. BINKLEY. The Macmillan Co., 60 Fifth Ave., New York 11, N. Y., 1965. xi + 350 pp. 15.5 × 24 cm. Price \$8.50 hardbound; \$6.50 paperbound.

This brief textbook provides a basic outline of the principles of biochemistry. The material is presented in a clear and readable style. Discussion is limited but this fact is acknowledged by the authors who suggest more complete reference texts which can be consulted for supplementation of this material. The first few chapters are devoted to descriptive chemistry of acids, bases, and buffers; carbohydrates; lipids; proteins; nucleic acid and nucleoproteins; enzymes; and high energy compounds and oxidative phosphorylation. The remaining chapters are devoted to the metabolic pathways which utilize these compounds. The text