

**Table I**—Some Parameters Defining the Pharmacokinetics of Amphetamine in Man

Subject	Weight, kg.	Half-life, hr. Blood	Half-life, hr. Urine	% Dose Excreted Unchanged	Vol. of Distribution, l.	Renal Clearance, ml./min.
A	66	12.5	13.5	42	275	103
B	71	11.0	12	46	250	115
C	63	13.0	13.5	48	290	139

the initial or maintenance dose can obviously lead to the patient still being stimulated at night, in which case they would offer no advantage over the readily adjustable uncoated tablet dosage regimen.

Simple tablets or capsules of amphetamine are probably absorbed within 4 hr. after administration, whereas this may take up to 12 hr. with prolonged-release dosage forms (5). Extensive samples are therefore required during this period so that the absorption kinetics can be adequately defined. This is readily achieved using blood studies but, for reasons discussed above, meaningful urinary excretion studies are inconvenient especially in extensive clinical evaluations. Consequently it is recommended that blood studies be carried out and that excretion data be used mainly to confirm the half-life of amphetamine beyond levels which are conveniently measured in the blood. Similar arguments hold for other basic drugs which behave in

an analogous manner to amphetamine. At present a more complete pharmacokinetic study of amphetamine is being conducted in man.

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## Books

**Biological Oxidations.** Edited by THOMAS P. SINGER, Interscience Publishers, A Division of John Wiley and Sons, 605 Third Avenue, New York, N.Y. 10016, 1968. ix + 722 pp. 15 × 22.5 cm. Price \$19.75.

Due to the wealth of information that is available today in many different research areas, it is probably true that multiauthored books will increasingly become the standard method of publication. Two difficulties arise with this type of book: (a) one tardy contribution delays publication of the whole book and (b) there may be considerable overlap of subject matter in the several related chapters. There was, in fact, a long delay in the submission of certain chapters for this book, but the editor has avoided the frequent pitfall of unnecessary overlap of discussion in the various chapters.

The organization of the book is excellent; it fulfills the goal of allowing the nonexpert to gain an overview of this important field. The book is divided into two parts. The first third of the book is devoted to the gross processes in biological oxidations whereas the last two thirds of the volume is devoted to the enzyme and coenzymes involved in the biological oxidations. Many, but not all chapters contain a summary or concluding remarks. There is an abundance of structural formulas, tables, and graphs which allow one to visualize easily the reactions or inspect the experimental data. Mechanisms of the catalytic reactions are emphasized and usually speculations are clearly distinguishable from rather firmly established mechanisms. Limited information concerning the importance of enzyme inhibitors as a tool to study reaction mechanism is described.

In reviewing this book, it becomes abundantly clear that the term "mechanism" is used differently in the various chapters. In some cases mechanism means the sequence of reactions that occur; in other cases it means a detailed description of the reaction of the substrate and/or the coenzyme but, in few cases, is there invoked a detailed mechanistic role for the enzyme. These statements are not meant as a criticism but rather a description of the present state of knowledge. Thus, for those who would study this book an appreciation of the elegant research in a difficult field will be developed and a recognition of future areas of research will be apparent.

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**The Biochemistry of Foreign Compounds.** By DENNIS V. PARKE, Pergamon Press Inc., 44-01 21st St., Long Island City, NY 11101, 1968. ix + 269 pp. 14.5 × 22 cm. Price \$10.00.

This is Volume 5 of the International Series of Monographs in Pure and Applied Biology, Biochemistry Division. The book is divided into two sections, Biochemical Mechanisms and Applications. In general, the book is well written but gives only a telescoped view of