

Book Review

Lipid Metabolism, edited by Konrad Bloch, Department of Chemistry, Harvard University. John Wiley and Sons, Inc., New York and London, 1960. 8.5 × 23.5 cm. xiii + 411 pp. Eight chapters and 1,954 references. \$10.50.

Contributors: J. Asselineau; S. Bergström; B. Borgström; H. Danielsson; D. Green; M. Kates; G. Langdon; E. Lederer; J. Mead; R. Rossiter; B. Samuelsson; K. Strickland and S. Wakil.

This book attempts to summarize the current information pertaining to the intermediary metabolism of lipids for the investigator in the field of metabolic and degenerative diseases. *Lipid Metabolism* is written as a companion to Hanahan's *Lipid Chemistry* to complete a two-volume set on the principles and concepts of lipids. The review deals with the enzymatic mechanism of oxidation and synthesis of fatty acids and is limited to the degradation of fatty acids to 2-carbon units and the synthesis from 2-carbon units. Unsaturated fatty acids are considered as to reactions at their double bonds. Although this review is admittedly not complete, the subject is covered quite extensively. The formation and function of phosphatides in the biological system are discussed at great length. The book summarizes the results of recent investigations of the metabolism of triglycerides and of related fatty acids. In the section on lipolytic enzymes, the preparation, purification, characteristics and mechanism of action of the reasonably well understood lipolytic enzymes, such as lipases and phosphatidases, are primarily emphasized, while other known lipolytic enzymes are less extensively treated. Representative examples are given of important changes of normal biosynthesis and metabolism of fatty acids, which can be attributed to the action of certain hormones. The isotopic labelling and chromatographic separation of bile acids are appropriately considered, thus giving an introduction to the splendidly written section covering the formation and metabolism of bile acids. Chapter 8 departs somewhat from the general theme of the book by discussing the chemistry as well as the metabolism of bacterial lipids. The literature is reviewed quite completely through 1958, and a few important monographs that appeared in 1959 are cited. The medicinal chemist and biochemist should find this review most helpful in approaching problems of metabolism and degenerative diseases.

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