

This clinically oriented treatise brings together structure and function in health and disease. It succeeds admirably in synthesizing and correlating basic principles along with sufficient details to give precise thought.

The content of this monograph of 354 pages with 237 illustrations of excellent quality gives one a comprehensive discussion of the biophysical aspects of the subject of pulmonary circulation in the normal and diseased states. The limitations of knowledge in this field are stressed wherever necessary. The authors have succeeded remarkably well in limiting the monograph to essential material in a field which has been rapidly advancing during recent years. All advanced techniques of study have been well utilized and beautifully illustrated. The organization of the material and style of presentation make the contents easily understandable. One of the greatest attributes of the book is presentation in a manner of great usefulness to the undergraduate, as well as graduate student, in the field of pulmonary circulation. The authors are amply qualified and are to be congratulated on the production of this outstanding piece of work.

WILLIAM E. ADAMS, M.D.

**Physiology of the Kidney and Body Fluids.**  
By ROBERT F. PITTS, PH.D., M.D. Cloth.  
\$8.50. Pp. 243, with 102 figures. Year  
Book Medical Publishers, Inc., Chicago,  
1963.

This is an introductory text, written by the professor of physiology at Cornell University Medical College. The theme of the text is illustrated by this quotation from the Preface: "The kidneys are commonly described as excretory organs, but the assignment of such a limited role scarcely does them justice. They are primarily organs which regulate volume and composition of the internal fluid environment; their excretory function is incidental to their regulatory function." With this basic philosophy, the author presents these regulatory organs in terms of their anatomy, mechanical processes, chemical processes, role in maintaining a normal internal environment, and effects of various stresses upon their function.

The organism presents to the kidneys, through their blood vessels, chemical laden

fluids in varying concentrations and volumes, depending upon vagaries of food and fluid intake, and derangements of other organ systems. By selective excretion, reabsorption, and chemical alteration, the kidneys restore the internal environment to normal. Inability to restore the environment to normal may result from intrinsic disease of the kidney, or from excessive derangements in the chemicals and fluids with which it deals.

One of the virtues of this text is its presentation of complicated phenomena in terms progressing from simple to complex. The chapters on body fluids, buffer mechanisms, acid-base balance, and renal circulation are particularly valuable. In two chapters diseases of the kidney are discussed, indicating how these contribute to the failure of regulatory function.

Selected references are given at the end of each chapter. Clear type on glossy paper, careful sectional headings, numerous charts, graphs, tables, and diagrams add to the book's value. This book is recommended for anesthesiologists as a good review of a complex subject.

JAY JACOBY, M.D.

**Symposium on the Placenta.** EDITED BY ALBERT A. PLENTL, M.D., *American Journal of Obstetrics and Gynecology*, Vol. 84, No. 11, Part 2. December 1, 1962. Paper. \$1.50. Pp. 257 with 135 illustrations. C. V. Mosby Company, St. Louis, Mo.

Part 2 of the December 1, 1962 issue of the *American Journal of Obstetrics and Gynecology* contains a valuable collection of papers on the placenta. Dr. Albert A. Plentl, the guest editor, has combined the talents of 17 authors to produce a symposium with a distinctly international flavor. Scientists from England, Scotland, France, Germany and the United States discuss the latest interpretation of recent research on the structure and function of the mammalian placenta. Seven articles are concerned chiefly with the circulation and vascular anatomy, while the remaining seven deal with placental metabolism and transfers of various substances from mother to fetus and vice versa. The illustrations are excellent and the bibliography extensive.

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