

BOOK REVIEW

HUMAN PHYSIOLOGY

Editors: Robert F. Schmidt & Gerhard Thews

Publishers: Springer-Verlag, Berlin, 2nd Edition, 1989, 825 pp.

The book under review is the English translation of a time-honoured textbook of physiology, first published in German by Hermann Rein in 1936. It is now a multiauthor work of 25 contributors who represent the best of present day German physiologists. The book has been edited by Robert Schmidt and Gerhard Thews, the former already having well-established monographs on neurophysiology and sensory physiology to his credit. Although the book is primarily addressed to medical students, the level of presentation would please any postgraduate student in Physiology.

The book is organized into ten parts, which include an introductory part and an appendix. The introductory part is fairly extensive, and deals with cell physiology, transport mechanisms and intercellular communication. In addition, there is also a chapter on general principles of regulation preceding the chapters on autonomic nervous system and endocrinology. Each chapter is followed by a carefully prepared bibliography which is divided into two sections: one listing books and monographs, and the other giving selected original references. There is also an appendix on SI Units which should resolve the confusion for many readers, specially the old-timers.

The presentation of subjects is uniformly masterly, and includes mathematical treatment wherever relevant. The text is admirably assisted by elegant line diagrams, drawn in two colours. Many of the diagrams have a three-dimensional look,

enabling the student to form a more realistic image of a structure. Keeping the medical students' needs in mind, there are frequent welcome digressions to pathophysiology. Among the special features of the book are chapters on work physiology, environmental physiology, nutrition, aging, and information theory, which are subjects not always discussed in a textbook of physiology. There is a slant towards psychophysiology wherever there is scope for it, which probably represents the personal bias of the authors. The book is printed in clear type in a two colour format. The layout, although not lavish, is preeminently readable and facilitates quick reference. Although the book has been translated from German, Dr. Biederman-Thorson has done such a good job of the translation that it could easily pass off as the original. A weakness, if some must be mentioned, is that the treatment of endocrines is too brief, although upto date.

The authors and editors have done a commendable job in compressing a comprehensive account of contemporary physiology within a span of 800 pages. It is a book for a medical student with a good appetite, for a postgraduate trying to carve a career in physiology, and the physiology teacher. The book can teach a lot to the student, and also create in him or her a desire for learning more. Schmidt and Thews' work is 'a valuable addition to textbooks of medical physiology. It brings to the family of English books a contribution from the German school of physiology which has a long unbroken tradition of excellence.

R. L. BIJLANI

*Department of Physiology
All India Institute of Medical Sciences
New Delhi-110 029*