

BOOK REVIEW

HUMAN PHYSIOLOGY BY ANDREW DAVIES, ASA G. H. BLAKELEY AND CECIL KIDD

FIRST EDITION : 2001, CHURCHILL & LIVINGSTONE – A UNIT OF HARCOURT PUBLISHERS, PAGES – 980, PRICE £ 12.00

This text book of HUMAN PHYSIOLOGY has been well written for fulfilling the requirements of medical students and other undergraduate students pursuing courses in Human Physiology. The book contains all recent developments in various systems of Human Physiology and can also serve as a good reference book for research students.

Each section of this Text Book discusses both, basic and applied aspects of Human Physiology. All the chapters are well illustrated with good colourful figures, tables, summaries and clinical examples, so as to draw attention of students forthwith. In addition a separate chapter on *Applied Physiology* is also included at the end of each section that deals with either gastrointestinal, respiratory, cardiovascular, renal, muscular or central nervous system. These chapters discuss the relevant clinical cases to enable the students to learn not only the importance of physiological systems but also how altered functioning of these systems can give rise to various clinical disorders.

A chapter devoted completely to circadian rhythm physiology and its disorders is noteworthy feature of this text book of Human Physiology. The rapid developments of industrialization, air travel,

telecommunication systems have all forced man to work either continuously or on a rotating schedule giving rise to various chronobiological disorders like shift work disorder, jetlag etc, which are due to disturbances of the "circadian time keeping system" present in human beings. In addition, other common disorders like hypertension, myocardial infarction, peptic ulcer, anxiety, menstrual irregularities in women are more common in people in whom functioning of the circadian clock has been effected either due to its intrinsic malfunctioning or due to environmental insult or both. Hence a knowledge about the basic physiology of circadian rhythms is very much essential for the students of Modern Medicine for treating these common disorders.

Similarly, a chapter on Central Neurotransmission discussion on physiology of anxiety disorders and schizophrenia is also worth mentioning. This chapter discusses not only neurotransmitter synthesis secretion, diffusion and interaction with receptors but also how derangement's in central neurotransmitter receptor functioning can give rise to various behavioural abnormalities like anxiety disorders schizophrenia and other psychiatric conditions.

The chapter on Stroke discusses the various causes by illustrations from brain imaging techniques and CT scan pictures that is a novel approach handled by authors for explaining the physiological basis of stroke. Students of Medicine undergoing

courses in Human Physiology, will be really benefited by this technique, since it will give them an opportunity to learn modern diagnostic techniques for understanding the neurological disorders. MCQs discussed at the end of each section are also useful.

V. SRINIVASAN

*Department of Physiology,
PSG Institute of Medical Sciences & Research,
Peelamedu, Coimbatore - 641 004*