

# Book Review

## *High Altitude and Man.*

J. B. West and S. Lahiri (Editors)

Bethesda, MD: Am. Physiol. Soc., 1984, 207 pp, 109 illus., \$39.00 (nonmembers), \$31.00 (members).

*High Altitude and Man*, edited by John B. West and Sukhamay Lahiri, is a two-hundred page, multiauthored monograph that is the outgrowth of a symposium on man at high altitude which was sponsored by the American Physiological Society and held during the fall meeting in San Diego in 1982. The volume includes sixteen chapters grouped into three sections: 1) man at extreme altitude, 2) sleep and respiration at high altitude, and 3) physiology of permanent residents at high altitude.

The symposium on man at high altitude was really an opportunity to present and discuss some of the data collected during the 1981 American Medical Research Expedition to Everest. This book also reports some of those data, but by and large the chapters are very uneven. The most interesting ones are those presenting findings from the Medical Research Expedition; the others are essentially review articles, albeit not very comprehensive ones. Moreover, they do not contain much information that has not previously been presented.

John West wrote the Introduction and the first chapter, entitled, "Man on the Summit of Mount Everest." This chapter is an excellent summary of several original articles published in the *Journal of Applied Physiology* and *Respiration Physiology*. It is the only one that is entirely based on the findings of the Expedition. Chapters 2, 3, and 4 all describe some data from the Expedition as well as findings from previous studies. Two of them are especially interesting: Chapter 2 by Schoene discusses the relationship of the ventilatory response to hypoxia with exercise performance. It demonstrates that the level of hyperventilation at the top of Everest was higher than expected, a factor which led to greater performance than was predicted. Chapter 3, by Townes et al., describes "Human Cerebral Function at Extreme Altitude." This is a relatively unexplored field of research, and there is no doubt that this particular study will stimulate further investigations. The other eleven chapters are reviews of prior studies conducted in various parts of the world: the Andes, the mountains of Colorado, or the Himalayas. In at least one instance (Chapter 12), the site of the study is not named, but it may be assumed that the experiments reported were conducted on Mount Logan in the St. Helen range of Canada. Some of the chapters make token reference to data from the 1981 Medical

Research Expedition. Chapter 15 reports measurement of ventilatory function made in Tibet. Although there is nothing unique about these measurements, the chapter gives an interesting glance at some physiology research in the People's Republic of China.

*High Altitude and Man* is not just another book on high-altitude stress and adaptation, because it reports some of the findings of the American Medical Research Expedition. It would have been better and of more lasting value as a book if it had been exclusively about this expedition. It is unlikely that an expedition like that one will ever be repeated; thus its participants and its leaders should have endeavored to give students of high-altitude physiology a true reference book about the expedition rather than a collection of review articles. Nonetheless, this is a good book that is easy to read!

C. Lenfant

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## HIGH ALTITUDE AND MAN

Edited by **John B. West, MD, PhD, DSc**, University of California, San Diego and **Sukhamay Lahiri, PhD**, University of Pennsylvania

*Clinical Physiology Series*  
**Published by the American Physiological Society**

The wide-ranging features of acclimatization have long fascinated physicians and physiologists. In the last few years, interest in the physiology of man at high altitude has burgeoned. Many people in the world are natives to altitudes over 3,000 meters, and many others have recently moved to these altitudes. The study of human performance under these conditions thus carries increasing social and economic importance. Furthermore, such study provides unique information about the effects of severe hypoxia, with clear relevance to the pathophysiology of patients with lung and heart disease.

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