

BOOK REVIEWS

Basic Biochemistry

by J. Edelman and J. M. Chapman
Heinemann Educational Books; London, 1978
vii + 136 pages. £2.90 (paperback)

This little paperback is subtitled 'A visual approach for college and University students'. The authors believe that the complexities of modern Biochemistry can more easily be grasped pictorially than by conventional description, so they have produced a book in which a bare minimum of text has been heavily supplemented by flow charts, diagrams and annotated comments.

This book at first sight reminded me of the lecture notes taken by the best students in an elementary Biochemistry course. The basics are clearly emphasised and distinguished from supplementary information. As such, the book should be extremely useful to those who require a basic knowledge of Biochemistry as part of another course, such as students of A-level Biology or college-level botany, agriculture, food technology or home economics. Despite the authors' claims, I did not feel that the overall standard was quite up to that of an introductory course for students specialising in Biochemistry or in Medicine. For example, the structure of proteins is dealt with very superficially. ATP, NADH and NADPH are introduced as 'magic molecules' and the details of the way in which they become hydrolysed or oxidised and reduced are relegated to a brief appendix. Also, there are some surprising errors. On p. 43 it is stated that enzymes with high K_m are less important in metabolism than those with low K_m ; one is immediately reminded of the role of liver glucokinase in regulation of blood glucose. The section on glycolysis gives the misleading impression that 'glycolysis-Krebs-ox phos' is by far the most important source of energy to human and other cells. Fat metabolism is dealt with briefly and its key role in animal Biochemistry is not made at all clear. It is certainly unwise to state (as on p. 73) that, after glycolysis, the next most important respiratory pathway is the pentose phosphate pathway! Enzyme activity is still defined in terms of μ moles per minute.

On the basis of such criticisms, I feel that this book cannot be recommended to 'pure' Biochemists. However, it succeeds well in its primary aim of presenting an attractive view of the basics of the subject for nonspecialists. Its cheapness should allow them to purchase it easily.

B. Halliwell

Copies of books for review in FEBS LETTERS should be sent to:

Professor H. R. V. Arnstein, Department of Biochemistry, King's College, Strand,
London WC2R 2LS, England