

about enzymes' that followed.

10. p. 105 Fig. 7.2 and 7.4 on enzyme action and function of enzymes are examples of poor illustrations.

11. p. 108 Fig. 7.6 top section on 'Mechanism of action of NAD' the presentation is wrong—only one proton (H^+) and two electrons participate in the reduction and not $+2H$ as shown and the reduced form will have $2H$ on the carbon and not one as shown (fourth valency on the carbon?). This is correctly given on p. 202.

12. p. 124 Fig. 7.42, the line should start from the origin (no substrate no rate!).

13. p. 135 Title 'Biologic oxidation reduction'—it is common to use the word biological.

14. p. 247 'Glycolysis in erythrocytes will generate ATP that is not used by the erythrocytes'—the purpose of this statement is not clear especially because the formation of 2,3-DPG was being discussed later.

15. p. 259 line 5 'NADPH or NAD^{+} '?

16. p. 265 Regulation through feedback inhibition 'When HMG-CoA is inhibited, the remaining steps in the pathway are stopped'—stopped?. This is a most confusing statement.

17. p. 290 'hydroxylation of phenylalanine in para (3) position'; also in Fig. 15.27 '3-hydroxyphenyl-pyruvic acid'—These should be shown as '4'.

It is disappointing to see the contents of the book after being titled 'Modern'. Some of the recent textbooks produced in the developed countries include developments occurring in the last few years; some examples: peptidoglycan, glycoproteins, cell-wall structures, cell adhesion, plasma membrane, nuclear envelope, cytoskeleton, cell membrane junctions; protein structure including folds, turn, barrel, saddle, loop and sandwich types; stating that all enzymes are proteins with the exception of catalytic RNA; concepts on regulatory enzymes; prenylation and methylation

of proteins.

I am always reminded that a job can never be completed if we wait for perfection. But that cannot be the reason why a dependable book cannot be aimed for. It is pleasure to read the books produced by the well-known publishers, with concise and informative text and excellent illustrations. They have a large market and therefore can bear the high production costs. While having books at low cost in developing countries is desirable, it is counter-productive if they spread wrong perceptions. I am unable to decide between having a poor one and none at all. I do hope the critical comments will elicit a reaction of challenge for improvement and production of good-quality textbooks by authors and publishers. My advice to the readers of this book is to use it after incorporating the many corrections, and to the publishers not to allow printing of a book without rigorous proof-reading and editorial improvement, essential in scientific publications.

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Ghani—The Traditional Oil Mill of India. K. T. Achaya. Olearius Editions, P.O. Box 250, Kemblesville, Pennsylvania 19347, USA. 1992. Price: USA \$ 30. 128 pp.

Ghani (Chekku, Kolhu) is an ingenious bullock-drawn device of India for pressing out oil from oilseeds based on a mortar and pestle principle. Though at the turn of the century, some 500,000 ghanis scattered all over the country were processing about a dozen oil-bearing materials, there

has been a steady fall in the number of ghanis and today, they probably amount to less than 150,000 and the proportion of oils processed in ghanis amounts to less than 4% in this country.

K. T. Achaya's painstaking effort to compile all aspects of ghani operations including its history and terminology, variations in design, principle and practices of operations, recent modifications and data on processing of specific oilseeds such as sesame, rape-mustard, copra, linseed, castor, niger, sunflower, neem, groundnut, mahua and karanja, with data on composition of oil as well as oil cake is of great archival and documentary importance. Authoritative information on the practices of ghani, different stages of addition of water for effecting extraction and releasing of oil and hydrating and precipitating the phospho-lipid to obtain clear oil are given in a very simple style and clear narrative. Apart from technical aspects, the author has also given a historical and epistemological review of more modern developments in ghani as well as shrewd insights into the development of the oil trade in India. The book also contains some 64 drawings and photographs of different ghani designs in various parts of the country and has excellent glossary of terms used, references and convenient index.

'Ghani' is not only a masterly survey of the technical aspects of oilseed extraction but also deals with them *vis-à-vis* the socioeconomic trends over a span of more than 2000 years. I recommend this volume not only to practitioners in oil and oil trade but also to those interested in the cultural and societal aspects of edible oil usage in the country.

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