

**Handbook of Vitamins 2nd Edition.** Dekker 1991. Edited by L. J. Machlin. M. Dekker, New York, 1991. X + 595 pp. ISBN 0-8247-8351-4. Price US\$ 150 00.

This imposing book is clearly one of the most authoritative scientific texts on the vitamins, combining chemical, compositional, nutritional and metabolic data. Each chapter has a thoroughly indexed account of a vitamin with individual chapters for members of the B complex. The chapter on vitamin C, for example, has over 250 references. There are even sections on pseudo vitamins and substances without vitamin status. This edition of the book has been extended with a chapter on the quaternary amine compound, carnitine, though there is no evidence that this is a necessary vitamin in the human diet. Dr Machlin is to be congratulated on this excellent volume.

Gordon Birch

**Milk and Dairy Products. Properties and Processing.** By I. Rosenthal. VCH, Weinheim, 1991. xii + 217 pp. ISBN 3-527-27989-X. Price: £46.50.

The stated aim of this book is to provide, in some two hundred pages, a comprehensive guide to dairy science and technology, with sufficient detail to interest the specialist but, at the same time, using language that is intelligible to the lay-man. This is a daunting task indeed, and hence it is perhaps not surprising that this book fluctuates so wildly in quality.

The introductory chapter, for example, covers the chemical and physical properties of milk, and many undergraduates embarking upon a course in food or dairy science would find this section a most useful introduction to the subject.

The second chapter deals with the production of milk at a fairly elementary level, and then proceeds with a brief coverage of dairy microbiology. This latter section highlights the dilemma facing an author in this situation, because the need to generalise leads to state-

ments which border on the misleading. 'Molds multiply by spores of various kinds which are produced as a result of sexual or asexual reproduction, depending on external condition'—certainly most fungi reproduce by spores, but to cite, in this specific context, external conditions as the controlling factor is a travesty of the truth. If this, and other similar distortions, can be excused on the grounds that the text had to be condensed, there would appear to be no excuse for the employment of out-of-date nomenclature for micro-organisms of importance to the dairy industry. Names like *Streptococcus lactis*, *S. cremoris* and *Leuconostoc citrovorum* went out of use over a decade ago, and *Streptococcus faecalis* became *Enterococcus faecalis* well before the last edition of *Bergey's Manual of Systematic Bacteriology* in 1986.

Equally unfortunate is the use of 'lbs/in.<sup>2</sup>' for pressure rather than current S.I. Units, and unqualified statements like 'the churned butter grains are washed with cold water'. Thus, most butter manufacturers in western Europe dispensed with this washing stage years ago, and yet it appears in the text as though it is the standard process. Obviously, the limitations of space have to be recognised, but this pressure does not excuse the promotion of inaccurate or out-of-date information. In addition, it is not helpful to new comers if authors attempt to invent new concepts, and it is far from clear why 'Yogurt' should be defined as an 'Emblematic fermented product'.

The question of accuracy is also raised, on the opening page, in the form of a curious disclaimer to the effect that, 'Readers are advised to keep in mind that statements, data, illustrations, procedural details or other items may inadvertently be inaccurate'. Obviously, typographical errors are bound to occur in most books, but for such a warning to appear at the beginning of a serious scientific textbook seems to defeat the object of the exercise—what is the point of publishing such a book if the reader does not know whether to believe what he/she is reading?

R. K. Robinson