

### Book review

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*Developments in Food Carbohydrate* — 2, edited by C. K. LEE, Applied Science Publishers Ltd., London, 1980, xii + 390 pages + Subject Index. US \$37.50. [Volume 1 of this series was reviewed in *Carbohydr. Res.*, 65 (1978) c3.]

The naturally occurring disaccharides and trisaccharides have attracted considerable attention because of their industrial importance. Thus, sucrose is the world's most widely produced, pure chemical, and  $\alpha,\alpha$ -trehalose constitutes 15% of the dry weight of single-cell, protein foods. Maltose, cellobiose, and lactose are all available in considerable quantities, and raffinose is probably the most abundant oligosaccharide of the plant world. Furthermore, the naturally occurring disaccharides have been used as starting materials for the synthesis of the sugar moieties of antibiotics, and, with the ever-rising cost of petroleum, oligosaccharides may one day become a feedstock for the chemical industry.

The present text is divided into eight chapters, six of which deal with specific oligosaccharides. These are "Trehalose" by C. K. Lee, "Sucrose" by M. R. Jenner, "Raffinose and Melezitose" by E. B. Rathbone, "Maltose" by E. Tarelli, "Cellobiose" by R. G. Edwards, and "Lactose" by L. A. W. Thelwall. Four of these authors are chemists at Tate & Lyle Ltd., and the remaining two are respectively affiliated with the Wellcome Foundation Ltd. (R.G.E.) and the National Institute of Biological Standards and Control (E.T.). Chapter seven, on "Surface Active Agents Derived from Some Selected Disaccharides", is authored by J. R. Hurford of the Wellcome Foundation Ltd., and the last chapter by B. Coxon of the U.S. National Bureau of Standards, is on "Carbon-13 Nuclear Magnetic Resonance Spectroscopy of Food-Related Disaccharides". All of the chapters are well written and thoroughly documented. A minor criticism is an occasional misrepresentation of pyranose and furanose rings, with C-1 to the left and C-5 or C-4 to the right (see, for example, page 146). Otherwise, the book has been admirably edited by Dr. Lee who was able to bring together eight excellent chapters written by an able team of experts. Volume 2 will be particularly appreciated by chemists, biochemists, and nutrition experts for its exhaustive review of the recent literature.

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