Carbohydrate Polymers 4 (1984) 83–84

Book Review

Developments in Food Carbohydrates – 3. Edited by C. K. Lee and M. G. Lindley. Applied Science Publishers Ltd, London and New York. 1982. 216 pp. Price: £26.00.

This book has been designed to bring together a diffuse literature on disaccharidases into one volume which would also provide an appraisal of the current research activity. A unified picture of the disaccharidases emerges from clear treatments of the physiological, nutritional and industrial aspects which have been amalgamated into this book. These standpoints are covered by specialist authors in the eight chapters; a policy which has resulted in strong and complete individual contributions but has almost inevitably detracted from the homogeneity of the whole work.

The book begins with a comprehensive review by Drs J. Woodward and A. Wiseman of the biochemistry of invertase (β-D-fructofuranosidase), a disaccharidase with traditional applications in the food industry. The novel use of disaccharidases is illustrated by considerations of lactose- and maltose-digesting enzymes which are capable of expanding the commercial potential of their substrates, and cellulase and trehalase which respectively are important for the hydrolysis of cellulase into a utilisable form and for the release of a valuable protein source from mushrooms. The physiological, biochemical, nutritional and medical aspects of disaccharidases are represented in considerations of the human sucrose–isomaltase complex by Dr P. S. J. Cheetham, the biosynthesis of food disaccharides by Drs R. G. Hansen and J. D. Brown, and finally the enzymic deficiency and malabsorption of food disaccharides by Drs A. Lutkic and A. Votava.

The reproduction quality of some of the figures was unsatisfactory in our copy, particularly in Chapters 5 and 6. There is a degree of overlap between some of the chapters, but the comprehensive production of each compensates for this. This book, which extensively covers the accumulated knowledge on disaccharidases, should appeal to food chemists, biochemists, nutritionists and food scientists and technologists.

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