

Book Review

Nutritive Sweeteners. Edited by G. G. Birch and K. J. Parker. Applied Science Publishers Ltd, London and New York. 1982. 316 pp. Price: £29.00.

Nutritive Sweeteners represents the proceedings of an industry-university cooperation symposium, organised under the auspices of the National College of Food Technology, University of Reading, 30 March to 1 April 1981.

This multi-author volume contains 16 contributions which fall into two categories. The first category and the first part of the book contain eight contributions which are related by their chemical and technological considerations of nutritive sweeteners. In the second part of the book the contributions are concerned with the nutritional and physiological effects of nutritive sweeteners upon the consumers. The first section of this book is thoughtfully given to a treatment of the intrinsic chemistry of nutritive sweeteners by Dr R. S. Shallenberger, with an appropriate introduction and link between the dichotomy of technological and nutritive aspects found in this volume. Sections 2-8 represent an up to date appraisal of the technology of the traditional and novel sweeteners which are, or may be, used in food manufacture. The future of high fructose syrups is discussed by Dr T. J. Palmer in his review of nutritive sweeteners from starch and this is complemented by L. H. Hyvönen and P. Koivistoinen in their assessment of fructose as an alternative to sucrose in the food industry. The first section to deal

with the nutritional aspects of sweeteners examines the role which sweetness plays in the choice and consumption of food. Two sections describe the implication of traditional nutritive sweeteners in the production of diabetes and dental caries and discuss the physicochemical modification of carbohydrates to achieve safer sweeteners. In the next two sections, the extent to which nutritive sweeteners may determine body weight is examined and, in the final three sections, the perception and evaluation of sweetness are explored.

Overall the book is well produced with figures and formulae which are mostly of a high standard. The individual bibliographies provide valuable access to the literature and include up to date references. This is a useful and informative volume, which, by virtue of its balanced consideration of the technological and nutritional aspects of sweeteners, should appeal to a multidisciplinary readership and particularly to research workers and students from carbohydrate oriented food science and medicine. Sadly the cost, which is not unusual for such a publication, will limit its access for students.

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