

Book review

Developments in Sweeteners — 1, edited by C A M HOUGH, K J PARKER, AND A J VLITOS, Applied Science Publishers Ltd, London, 1979, 192 pages + 28 Tables + 66 illustrations, \$37 50

The desire for sweet things is long-standing and intense (the latter exemplified by an average *per capita* consumption in the United States in 1978 of approximately 58 kilograms of sucrose) and has given rise to a large, economically significant, agriculture–processing–distribution complex. Additionally, the desire for consuming sweet goods without paying the physiological price (over-weight, dental caries, etc.) has occasioned a considerable non-caloric or reduced-caloric research effort and industry.

Developments in Sweeteners — 1 is a multi-authored volume describing the existing situation in the sweetener industry. The first chapter is a review of sucrose: its history, economic importance, agricultural sources, industrial extraction and purification, and uses (both food and non-food). Chapter 2 discusses the use and production of D-glucose and D-fructose syrups (usually derived from starch). Alternative sweeteners form the subject matter of chapters 3 through 6: polyhydric alcohols, proteins, peptides, and “less-common” substitutes, respectively. The seventh and final chapter is concerned with a theory of sweetness.

On the whole, the book is informative, well written, and adequately illustrated, it provides interesting reading, and I would recommend it to the non-specialist (as is this reviewer) for general information regarding this interesting and economically important aspect of chemistry. Purchase of the book is probably best reserved for those working directly in the field, and for libraries.

However, the book is not without its faults. At times, it is too defensive of a particular aspect of the industry, for example, in the chapter about sucrose, many of the alleged detrimental consequences of sugar consumption appear to be too lightly dismissed. The chapter on the theory of sweetness, although comprehensively reviewed, could have been more critical. These faults are, however, relatively minor and do not seriously detract from the book.

*Food and Drug Administration,
Bethesda, Maryland 20205*

WILLIAM M. EGAN