Handbook of Sweeteners

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Preface

The study of sweetness and sweeteners has recently been an area well-served by books at all levels, but this volume was planned to fill what we perceived as a gap in the coverage. There appeared to be no book which attempted to combine a study of sweetness with a thorough but concise coverage of all aspects of sweeteners. We set out to include all the important classes of sweeteners, including materials which do not yet have regulatory approval, so that clear comparisons could be made between them and their technological advantages and disadvantages. To achieve our first aim, of sufficient depth of coverage, the accounts within this volume are comprehensive enough to satisfy the requirements of a demanding readership, but cannot be exhaustive in a single volume of moderate proportions. The second aim, of breadth and conciseness, is satisfied by careful selection of the most pertinent material.

For the purposes of this book, a sweetener is assumed to be any substance whose primary effect is to sweeten a food or beverage to be consumed, thus including both the nutritive and non-nutritive varieties, from the ubiquitous sucrose to the lesser known, newer developments in alternative sweeteners.

The volume has its contents structured in a logical manner to enable it to be used in an ordered study of the complete subject area or as a convenient reference source. The book opens with a study of sweetness and its influence on food selection, to set the scene for the following chapters discussing how this demand for sweetness is satisfied, and its implications. The following five chapters discuss the major classes of sweeteners, including their sources and technological applications. The following chapter discusses the marketing of sweeteners and their uses in product development. No study of sweeteners can be complete without a consideration of the health implications of what may constitute a significant proportion of the diet, and this is included in the next three chapters covering dental health, metabolic disorders and body weight. The final chapter considers the legislative framework providing for control of sweeteners as food ingredients.

It is anticipated that this volume will be read by all those seeking an authoritative review of the whole subject of sweeteners in a single volume. Its appeal should thus be wide, attracting readers such as food scientists and technologists, and developers of food, beverage and pharmaceutical products. Selective reading is also expected by workers concerned with dental health, metabolic disorders such as diabetes mellitus, and weight control, as well as those, such as psychologists interested in sweetness as a perceptual phenomenon, seeking background information.

The reader must judge whether we have succeeded in our aim of producing a complete but concise review of sweetness and sweeteners. If so, it is due to the help of all those concerned: the many contributors who have worked hard to turn our ideas into print; and the publisher's staff, for their encouragement, patience, and skilled work.

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