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## Download Ebook Sweeteners

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**KEY=SWEETENERS - KADENCE ZAVIER**

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## Handbook of Sweeteners

**Springer Science & Business Media** 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 Sweetener Book

You want to make the right choice for you and your family... But which sweetener is really the best? In reality, there is not a one-size-fits-all answer to this question. The right answer depends on a number of factors, because each sweetener has its pros and cons. Which sweeteners have a low glycemic index? Which ones can upset your digestive system? Which one can aggravate high blood pressure? Which ones work best for baking? This book gives you the science-based information you need to make the sweetener choice that's best for you and your family. This book tells you the advantages and disadvantages of sucrose, brown sugar, turbinado, molasses, fructose, glucose, lactose, isomaltulose, corn syrup, high fructose corn syrup (HFCS), honey, agave nectar, sorbitol, isomalt, lactitol, maltitol, mannitol, xylitol, inulin, fructooligosaccharides, tagatos, erythritol, glycerol, acesulfame, aspartame, neohesperidin dihydrochalcone, neotame, saccharin, sucralose, cyclamate, alitame, stevia (stevioside and rebaudioside), Luo Han Guo (mogrosides), glycyrrhizin, thaumatin, brazzein, monellin, mabinlin, curculin, and miraculin. It tells you about the taste quality, calories, glycemic index, stability, and safety of each of these sweeteners.

## The Ultimate Guide to Sugars and Sweeteners

Discover the Taste, Use, Nutrition, Science, and Lore of Everything from Agave Nectar

## to Xylitol

**The Experiment** “Whether you’re a healthcare provider, a chef, or simply a foodie, you’ll find **The Ultimate Guide to Sugars and Sweeteners** an accurate and complete resource.”—Hope Warshaw, MMS, RD, CDE, BC-ADM, best-selling author of **The Diabetes Food and Nutrition Bible** and **Diabetes Meal Planning Made Easy** An all-in-one reference to sugars and sweeteners—for any sweet-toothed consumer who also craves the facts Today, supermarkets and natural food stores feature a bewildering variety of sugars and alternative sweeteners. The deluge of conflicting information doesn’t help. If choosing a sweetener leaves you scratching your head, this handy guide will answer all of your questions—even the ones you didn’t know to ask: Which sweeteners perform well in baking? Will the kids notice if I sub in stevia? What’s the best pick if I’m watching my waistline, blood sugar, or environmental impact? Are any of them really superfoods . . . or toxic? Perfect for foodies, bakers, carb counters, parents, chefs, and clinicians, this delightfully readable book features more than 180 alphabetical entries on natural and artificial sweeteners, including the usual suspects (table sugar, honey), the controversial (aspartame, high-fructose corn syrup), the hyped (coconut sugar, monk fruit sweetener), and the unfamiliar (Chinese rock sugar, isomaltulose). You’ll also find myth-busting Q&As, intriguing trivia, side-by-side comparisons of how sweeteners perform in classic baked goods, and info on food-additive regulations, dental health, the glycemic index, and more. Your sweet tooth is in for a real education!

## Sweeteners and Sugar Alternatives in Food Technology

**John Wiley & Sons** This book provides a comprehensive and accessible source of information on all types of sweeteners and functional ingredients, enabling manufacturers to produce low sugar versions of all types of foods that not only taste and perform as well as sugar-based products, but also offer consumer benefits such as calorie reduction, dental health benefits, digestive health benefits and improvements in long term disease risk through strategies such as dietary glycaemic control. Now in a revised and updated new edition which contains seven new chapters, part I of this volume addresses relevant digestive and dental health issues as well as nutritional considerations. Part II covers non-nutritive, high-potency sweeteners and, in addition to established sweeteners, includes information to meet the growing interest in naturally occurring sweeteners. Part III deals with the bulk sweeteners which have now been used in foods for over 20 years and are well established both in food products and in the minds of consumers. In addition to the “traditional” polyol bulk sweeteners, newer products such as isomaltulose are discussed. These are seen to offer many of the advantages of polyols (for example regarding dental health and low glycaemic response) without the laxative side effects if consumed in large quantity. Part IV provides information on the sweeteners which do not fit into the above groups but which nevertheless may offer interesting sweetening opportunities to the product developer. Finally, Part V examines bulking agents and multifunctional ingredients which can be beneficially used in combination with all types of sweeteners and sugars.

## Alternative Sweeteners

**CRC Press** Sweeteners are forever in the news. Whether it’s information about a new sweetener or questions about one that has been on the market for years, interest in sweeteners and sweetness continues. Completely revised and updated, this fourth edition of **Alternative Sweeteners** provides information on new, recently evaluated, and numerous other alternative

## Sweeteners

## Nutritional Aspects, Applications, and Production Technology

**CRC Press** **Sweeteners: Nutritional Aspects, Applications, and Production Technology** explores all essential aspects of sugar-based, natural non-sugar-based, and artificial sweeteners. The book begins with an overview presenting general effects, safety, and nutrition. Next, the contributors discuss sweeteners from a wide range of scientific and lifestyle perspectives

## Empty Pleasures

### The Story of Artificial Sweeteners from Saccharin to Splenda

Univ of North Carolina Press Sugar substitutes have been a part of American life since saccharin was introduced at the 1893 World's Fair. In *Empty Pleasures*, the first history of artificial sweeteners in the United States, Carolyn de la Pena blends popular culture with business and women's history, examining the invention, production, marketing, regulation, and consumption of sugar substitutes such as saccharin, Sucaryl, NutraSweet, and Splenda. She describes how saccharin, an accidental laboratory by-product, was transformed from a perceived adulterant into a healthy ingredient. As food producers and pharmaceutical companies worked together to create diet products, savvy women's magazine writers and editors promoted artificially sweetened foods as ideal, modern weight-loss aids, and early diet-plan entrepreneurs built menus and fortunes around pleasurable dieting made possible by artificial sweeteners. NutraSweet, Splenda, and their predecessors have enjoyed enormous success by promising that Americans, especially women, can "have their cake and eat it too," but *Empty Pleasures* argues that these "sweet cheats" have fostered troubling and unsustainable eating habits and that the promises of artificial sweeteners are ultimately too good to be true.

### Alternative Sweeteners, Third Edition, Revised and Expanded

CRC Press A survey of the extensive field of sucrose alternatives, detailing scientific information, technical applications, and regulatory ratings for a wide array of sweeteners. It highlights the change in status of saccharin, the increased use of polyols, and the possibilities provided by the availability of a variety of alternative sweeteners and their uses in combination. This third edition contains new chapters on neotame, tagatose, trehalose, erythritol, and aspartame-acesulfame salt.

## Advances in Sweeteners

Springer Science & Business Media The subject of sweeteners continues to advance and expand, but the progress that is being made may not be apparent for all to see, owing to changes that have been taking place in how research is funded and the locations where it is now mainly done. In former times scientific advancement was rated as a prized part of the output of academic research laboratories and institutions. Today, however, it is increasingly likely that major advances emanate chiefly from the research and development units of industrial and commercial enterprises and organisations. This means of course that the work becomes more focused on achieving specific marketing objectives, but because of the high level of commitment, cost and dedicated input required, publication of the findings tends to take a lower priority, and may actually be barred if there is any risk of loss of the commercial edge or advantage which has been one of the targets of the research. Thus one of the objects of preparing this book has been to collect together information that might otherwise remain unpublished on advances in the field of sweeteners. Of the fifteen contributions which form the chapters, only 13% originate from academic departments, whereas in earlier books of reviews on similar topics, contributions from academic sources accounted for as much as 50% (*Developments in Sweeteners*, vols 2 and 3, 1987 and 1989) and 64% (*Progress in Sweeteners*, 1989).

## The Stevia Deception

### The Hidden Dangers of Low-Calorie Sweeteners

Piccadilly Books, Ltd. Through the power of persuasive advertising and clever marketing, we've been sold on the idea that stevia is a natural herbal sweetener that is not only harmless but even health-promoting. As such, it is promoted as a better choice over sugar or other low-calorie sweeteners. Stevia has rapidly become a multimillion-dollar industry. Despite all of the marketing hype, stevia is not the innocent little herb it is made out to be—and it is not harmless. The stevia sweetener you purchase at the store is a highly refined, purified chemical that is little different from any other artificial sweetener, with many of the same drawbacks and dangers. The author's observation of troubling adverse

reactions associated with stevia led him on an investigation that uncovered disturbing facts hidden from the public, including studies that contradict the sweetener's safety and assumed benefits. In this book, you will learn why you should never use stevia if you want to lose excess weight or control diabetes. You will also learn why all low-calorie sweeteners are potentially dangerous, and what options you have available. The information in this book comes directly from published studies, historical facts, and the author's personal experiences. In this book you will learn that stevia is not an herb but a highly refined chemical acts like an artificial sweetener is addictive can cause digestive distress alters the gut microbiome is a gut excitotoxin promotes obesity, diabetes, and metabolic syndrome can cause allergic reactions

## Noncaloric Sweeteners

### Their Position in the Sweetener Industry

### Sweet Stuff

## An American History of Sweeteners from Sugar to Sucralose

Rowman & Littlefield A history of sugar consumption and the role of sugar in everyday American life chronicles the stories of major natural sweeteners from molasses and corn syrup to honey and maple as well as major artificial sweeteners, placing sugar in a context of diet, science and politics.

## Sweeteners

### Pharmacology, Biotechnology, and Applications

### Sweet Talk

## Media Coverage of Artificial Sweeteners

Media Inst Abstract: The media has been reporting on artificial sweeteners since cyclamate was banned nearly 20 years ago. This publication addresses the question of whether or not the media has influenced the debate over the safety of artificial sweeteners (especially aspartame). Media reviewed in this context are the New York Times, The Washington Post, Time, Newsweek, and the three major national television networks. The history of the artificial sweetener controversy including important scientific positions, the role that special interest groups play to manipulate the media, the assessment of accurate reporting, comparing various methods of media reporting the artificial sweetener debate, and the question of quality of media coverage of the artificial sweetener issue over the years, are topics discussed.

## Sweeteners

## Alternative

**American Association of Cereal Chemists** This handbook explains the basics of alternative sweeteners and provides practical advice relating to their uses in foods and beverages. The author gives special attention to the functionality of alternative sweeteners in product applications. **Sweeteners: Alternative** helps food industry professionals gain a common understanding of alternative sweeteners, their properties, and their applications.

## Baking with Less Sugar

## Recipes for Desserts Using Natural Sweeteners and Little-to-No White Sugar

**Chronicle Books Trust Joanne Chang**—beloved author of the bestselling *Flour* and a Harvard math major to boot—to come up with this winning formula: minus the sugar = plus the flavor. The 60-plus recipes here are an eye-opener for anyone who loves to bake and wants to cut back on the sugar. Joanne warmly shares her secrets for playing up delicious ingredients and using natural sweeteners, such as honey, maple syrup, and fruit juice. In addition to entirely new go-to recipes, she's also revisited classics from *Flour* and her lines-out-the-door bakeries to feature minimal refined sugar. More than 40 mouthwatering photographs beautifully illustrate these revolutionary recipes, making this a must-have book for bakers of all skill levels.

## Sweetness and Sweeteners

## Biology, Chemistry, and Psychophysics

**Amer Chemical Society** Sweetness is the major vehicle through which we accept or dislike many food products. Sugar has the disadvantage of being associated with a number of adverse health related issues and as a result, myriad hours are spent producing non-caloric sweeteners to mimic sugar. The discovery of the taste receptors and the recent breakthrough in the culturing of taste bud cells have heightened the field of Sweeteners and modified our perception of them. This book will examine this closely. The proposed book will also follow the symposium closely discussing some of the following: **Structural Studies of the Sweetener Receptor, Modeling of the Sweetener Receptor, Sweet Taste Transduction, and Advances in the Discovery and Commercial Development of Natural Non-Caloric Sweeteners.**

## Marketing Sugar and other Sweeteners

**Elsevier Marketing Sugar and Other Sweeteners** was written to fill a large void of literature on the marketing aspects of an important sector of the food market. In fact, there are no books available on this subject. The intent of this book is to provide a readable, non-technical publication which provides a comprehensive presentation of major issues, trends, data, and likely outcomes of sweetener marketing. The emphasis is upon presentation of the real world operation of sugar and other sweetener markets as opposed to a theoretical model of sweetener markets. This objective requires probing into private market institutions such as sugar brokerage, as well as publicly instituted sugar policies of the American federal government. All of the participants in sweetener production, marketing, and policy will find this book useful.

## Sugar and Other Sweeteners

## An Industry Assessment

The Minerva Group, Inc. This report describes the principal elements of the U. S. sugar industry, the corn sweetener industry, the sugar industries of major U. S. trading partners, and the International Sugar Agreement. It also discusses some of the issues involved in developing sugar legislation. The report was prepared in 1979 by the General Accounting Office of the United States Congress and has become the classic and only assessment of the sugar industry.

## sugar and sweeteners outlook

DIANE Publishing

## Sugars and Sweeteners

CRC Press Sugars and Sweeteners is a comprehensive volume examining the supposed role of sugar as a causative agent in hyperactivity, coronary artery disease, diabetes, dental caries, and other afflictions, as well as the chemistry of sugar and the metabolism of simple sugars, disaccharides, and sugar alcohols. It also explores the history of sugar in several areas worldwide, including Europe and southeast Asia. Regulations for sugar substitutes are presented, in addition to the metabolism of sugar substitutes in humans. Food scientists, dieticians, and diabetologists will find plenty of useful information in this book.

## Handbook of Sweeteners

Springer 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.

## Sugar Substitutes and Alternative Sweeteners, January 1983 - April 1989

## 251 Citations

## Carbohydrate Sweeteners in Foods and Nutrition

**Abstract:** Advances in food technology have brought about the increased use of carbohydrate sweeteners by food manufacturers and processors. The sweetness properties, nutritional aspects and industrial applications of sweeteners are examined in a collection of symposium papers. Both naturally sweet carbohydrates and added sucrose substitutes present in food and drink are considered. The role of carbohydrate sweeteners in metabolism and disease, thermal and fermentation processes, the food industry, nutrition policy, and dental caries is described. The theory and psychophysiology of sweetness, and consumer behavior and sensory responses to sweetness are discussed. Other topics include comparative evaluation of sweeteners, their modification by the food environment, and synergism between sweeteners. Such sweeteners as starch, lycasin and

lactose hydrolysates, lactitol, fructose and xylitol are investigated in detail.

## Sugar and Sweeteners

### Sugar Quota Extended, Some Product Imports Restricted

The Colorado State University Cooperative Extension presents the full text of an article entitled "Sugar and Sweeteners," by J. Anderson and D. Wenzel. The article discusses sugars, the metabolism and digestion of sugar, alternative sweeteners, how to reduce one's sugar intake, and sugar and health.

## Sugar and Other Sweeteners

### An Industry Assessment : Report to the Congress

### Health effects of the use of non-sugar sweeteners

### a systematic review and meta-analysis

World Health Organization

## Natural and Healthy Sweeteners

Woodland Pub Find out about age-old and newly discovered natural sweeteners. The author discusses agave syrup, honey, maple sugar, polyols, xylitol, stevia, and yacón root.

## Sugar and Sweeteners

Mason Crest Publishers Sugar had a huge impact on world history, and it continues to play a major role in our diets. But as tasty as it is, sugar can cause serious health problems. This book explains everything you need to know about the sweet stuff, from its chemistry and history to how it affects our bodies. Artificial sweeteners are also explored, to help you better understand whats in your food. The media is full of advice about what foods to eat and what to avoid. Unfortunately, the advice is constantly changing and often contradictory. Know Your Food explains the real story about whats on your plate.

## Sweeteners and Sugar Alternatives in Food Technology

John Wiley & Sons Sugar replacement in food and beverage manufacture no longer has just an economic benefit. The use of ingredients to improve the nutritional status of a food product is now one of the major driving forces in new product development. It is therefore important, as options for sugar replacement continue to increase, that expert knowledge and information in this area is readily available. Sweeteners and Sugar Alternatives in Food Technology provides the information required for sweetening and functional solutions, enabling manufacturers to produce processed foods that not only taste and perform as well as sugar-based products, but also offer consumer benefits such as calorie reduction, dental health benefits, digestive health benefits and improvements in long term disease risk through strategies such as dietary glycaemic control. Part I of this comprehensive book addresses these health and nutritional considerations. Part II covers non-nutritive, high-intensity sweeteners, providing insights into blending opportunities for qualitative and quantitative sweetness improvement as well as exhaustive application opportunities. Part III deals with reduced calorie bulk sweeteners, which offer bulk with fewer calories than

sugar, and includes both the commercially successful polyols as well as tagatose, an emerging functional bulk sweetener. Part IV looks at the less well-established sweeteners that do not conform in all respects to what may be considered to be standard sweetening properties. Finally, Part V examines bulking agents and multifunctional ingredients. Summary tables at the end of each section provide valuable, concentrated data on each of the sweeteners covered. The book is directed at food scientists and technologists as well as ingredients suppliers.

## Competitive Relationships Between Sugar and Corn Sweeteners

### Low-calorie Sweeteners

## Present and Future : World Conference on Low-Calorie Sweeteners, April 25-28, 1999, Barcelona, Spain

S. Karger AG (Switzerland) The field of artificial sweeteners is a complex one: each sweetener is unique in terms of its composition and taste, and those allowed by legislation vary according to country. Furthermore, they exist certain controversial issues, i.e. are sweeteners really useful in weight management or as an ingredient for people with diabetes, and do they not, through a subtle biological mechanism, trigger appetite rather than reduce it? This book provides a complete update on all aspects of science about sweeteners. One of the matters discussed is whether there is a difference between 'natural' and 'synthetic' substances from the point of view of safety. Attention is also paid to new developments and applications of sweeteners, as well as to the usefulness and relevance of low-calorie sweeteners in nutrition and as one aspect of weight control and calorie intake. Lastly, consumer preferences and the differing perceptions, according to geographical regions, of sweetener-containing products are evaluated. The book concludes with a section on world trade rules.

### Sweeteners

### Health Effects

Princeton Scientific Pub This book contains the reports presented at the international conference on the topic. It contains synopsis reports instead of verbatim reports. The text is divided into six parts: (1) sweetener use; (2) metabolism and effects of sweeteners; (3) health effects; (4) reproduction and neurobiology; (5) toxicology studies, and (6) epidemiology and regulatory aspects.

## An Empirical Analysis of the Demand for Honey and Other Sweeteners in the United States

This study exploits the recent advances in consumer demand literature to quantify the structure of demand for a large number of sweeteners in the United States. Specifically, an Exact Affine Stone Index is applied to the estimation of demand, Engel curves, as well as various economic effects for sucralose, aspartame, stevia, saccharine, agave, brown sugar, powdered sugar, granulated sugar, molasses, and honey. In contrast to the previous literature that analyzes consumer demand for a limited number of sweeteners while relying on aggregate wholesale-level time series data, the current study utilizes detailed item and UPC-level Nielsen store scanner data. In addition to the temporal variation stemming from the monthly data spanning 2012-2016, our use of 30 geographic markets throughout the contiguous United States provides spatial variation that is essential from the perspective of

the identification of economic effects. Our main results indicate that the estimated Engel curves are considerably complex to be represented by the Almost Ideal Demand System and other popular demand models. We further find that demand is price-elastic only for molasses, while those for the remaining nine sweeteners are price inelastic. By shedding light on the demand interrelationships between honey and other sweeteners, our results should be of interest to honey, sugar beet, sugar cane producers, processors, and retailers, and may prove vital in refining various policies regulating sweetener consumption and the impact thereof on obesity.

## Artificial Sweeteners

CRC Press

### Sweeteners

Wiley-Blackwell Sweeteners constitute a major additives and ingredients group for the food industry, with their application ranging across all product sectors. The large number of sweeteners available to the product developer enables the creation of sweet-tasting products without the calorie contribution of traditional sugars. The combination of bulk and intense sweeteners allows very specific tailoring of sweetener specifications to fit the technical restrictions of particular products and the sweetness profiles required. First published in 1996, *The Sweeteners Handbook* has been an essential reference tool for the food industry, providing detailed information on the properties and applications of the sweeteners currently permitted for use in foodstuffs. The third edition of this book contains new sections on neotame, isomaltulose and trehalose, and fully revised and updated sections on bulk and intense sweeteners by experts who manufacture or use these sweeteners in food development and production.

## Healthy Desserts

### with Natural Sweeteners

Blue Dome Press Digging into traditional recipes in the history of Turkish cuisine, chef Omur Akkor finds dozens of healthy dessert recipes that utilize fruits, honey, and natural sugars instead of the unhealthy refined sugars so prominently used today. Part of a series from the award-winning Chef Omur, this book includes healthy twists on old favorites, including rice pudding, carrot cake, and Turkey's world-famous baklava. Instead of skipping dessert altogether, *Healthy Desserts* will help you to find the perfect recipes for your taste buds and your health.

## Noncaloric Sweeteners

### Their Position in the Sweetener Industry

## The Effects of Non-nutritive Sweeteners in Florence's Homestyle Cha-Cha

Non-nutritive sweeteners are alternative sweeteners that provide the taste of sweetness without a caloric contribution. In this Florence's HomeStyle Cha-Cha study, aspartame, acesulfame K, sodium saccharin, and neotame were evaluated as a substitute for sucrose in the formulation. These sweeteners were used at their recommended equivalency levels to match the sweetness potency level to that of sucrose. Because they are more potent than sucrose, minimum amounts were needed to replace sucrose, and the remaining amounts were filled with maltodextrin. Using maltodextrin as bulk filler is common practice in the industry when replacing sucrose with a non-nutritive sweetener. This study evaluated the quality of the finished product in determining which non-nutritive sweetener had similar taste, aroma, and density qualities as the control, which was Cha-Cha sweetened with sucrose. The results of the evaluations indicated that Cha-Cha sweetened with acesulfame K was more similar to the control than the other non-nutritive

sweeteners. Of the three taste characteristics evaluated for their degree of intensity, sweetness, saltiness, and bitterness, the acesulfame K sweetened treatment was closer to the control. In the GC/MS analysis in characterizing the volatile aroma compounds, acesulfame K contained all the aroma compounds with smaller differences in concentration than the other experimental treatments. In the density evaluation, the experimental treatments were similar to the control treatment. In conclusion, Florence's HomeStyle Cha-Cha sweetened with acesulfame K is similar in quality to the sucrose-sweetened control.

## Sweetness and Sweeteners

An Industry-university Co-operation Symposium Organised Under the Auspices of the National College of Food Technology, University of Reading, on 20th and 21st April, 1971