



[CLICK TO VIEW](#)

[Table of Contents 2](#)

[List of Tables & Charts 3](#)

[Study Overview 4](#)

[Sample Text, Table & Chart 5](#)

[Sample Profile, Table & Forecast 6](#)

[Order Form & Corporate Use License 7](#)

[About Freedonia, Custom Research, Related Studies, 8](#)

Alternative Sweeteners

US Industry Study with Forecasts for **2015 & 2020**

Study #2819 | December 2011 | \$4900 | 231 pages

www.freedoniagroup.com



The Freedonia Group

767 Beta Drive

Cleveland, OH • 44143-2326 • USA

Toll Free US Tel: 800.927.5900 or +1 440.684.9600

Fax: +1 440.646.0484

E-mail: info@freedoniagroup.com

Table of Contents

EXECUTIVE SUMMARY

MARKET ENVIRONMENT

General	4
Demographic Trends	6
Macroeconomic Overview.....	9
Consumer Spending	13
Dietetic Food Overview	16
Health Overview.....	18
Diabetes	19
Weight-Related Conditions.....	20
Pricing & Product Mix	23
Regulatory Overview	26
International Activity	29
Foreign Trade	31

SWEETENER OVERVIEW

General	33
Conventional Sweetener Overview	37
Sucrose	40
Corn Sweeteners	43
High Fructose Corn Syrup (HFCS) ...	44
Other Corn Sweeteners	47
Other Conventional Sweeteners	48
Sugar Equivalency	50

PRODUCTS

General	53
High Intensity Sweeteners.....	58
Aspartame	62
Markets	65
Suppliers	67
Sucralose	67
Markets	69
Suppliers	71
Saccharin.....	72
Markets	75
Suppliers	76
Acesulfame Potassium (Ace-K)	77
Markets	78
Suppliers	80
Neotame.....	80
Polyols	82

Sorbitol.....	85
Mannitol.....	87
Xylitol	89
Maltitol	91
Erythritol.....	93
Other Polyols.....	95
Other Alternative Sweeteners.....	97
Stevia	98
Other	100
Agave Nectar	102
All Other.....	103

MARKETS

General	104
Food	106
Food Industry Overview.....	107
Alternative Sweetener Demand	109
Candy & Confections.....	112
Candy & Confections Outlook	113
Alternative Sweetener Demand ...	115
Chewing Gum.....	117
Chocolate Candy.....	119
Other Candy & Confections.....	120
Tabletop Sweeteners.....	122
Tabletop Sweetener Overview	123
Alternative Sweetener Demand ...	124
Dairy Products	127
Dairy Product Overview	128
Alternative Sweetener Demand ...	130
Other Food Products	134
Beverages	138
Beverage Industry Overview	138
Alternative Sweetener Demand	141
Carbonated Soft Drinks	144
Carbonated Soft Drink Overview...	144
Alternative Sweetener Demand ...	146
Other Beverages.....	149
Other Beverage Overview	150
Alternative Sweetener Demand ...	153
Personal Care Products.....	155
Personal Care Product Overview	156
Alternative Sweetener Demand	158
Pharmaceuticals.....	160
Pharmaceutical Industry Overview...	161
Alternative Sweetener Demand	164

INDUSTRY STRUCTURE

General	166
Market Share	167
Formulators.....	172
Competitive Strategies.....	172
Cooperative Agreements.....	174
Research & Development.....	176
Marketing	178
Distribution	181

COMPANY PROFILES

Ajinomoto Company	184
Archer-Daniels-Midland	186
Arnhem Group	187
Cargill Incorporated	188
Celanese Corporation	190
Corn Products International.....	192
Cumberland Packing	194
DuPont (EI) de Nemours.....	196
JMC Corporation	198
Johnson & Johnson	199
Makhteshim Agan Industries.....	202
Merisant Company.....	204
Mitsubishi Corporation.....	206
NOW Health Group.....	208
NutraSweet Company	209
Pharmed Medicare	211
PMC Global.....	212
PureCircle Limited	213
Rio Tinto Group	216
Roquette Frères	217
San Fu Chemical.....	219
Südzucker AG	220
Sugar Foods	222
Tate & Lyle	224
Unilever Group	226
United American Industries	227
Other Companies Mentioned in Study .	229

List of Tables

EXECUTIVE SUMMARY

1 Summary Table.....3

MARKET ENVIRONMENT

1 Population & Households.....9
 2 Macroeconomic Indicators 13
 3 Personal Consumption Expenditures 15
 4 Diabetes & Obesity Conditions..... 19
 5 Selected Alternative Sweetener Prices 26

SWEETENER OVERVIEW

1 Sweetener Demand by Type & Market..... 36
 2 Conventional Sweetener Demand by Type..... 39
 3 Sucrose Demand by Market..... 42
 4 Corn Sweetener Demand by Type & Market 44
 5 High Fructose Corn Syrup (HFCS) Demand by Type & Market..... 46
 6 Other Corn Sweetener Demand by Type & Market 48
 7 Other Conventional Sweetener Demand by Type..... 50
 8 Sugar Equivalency 52

PRODUCTS

1 Alternative Sweetener Demand by Type..... 56
 2 High Intensity Sweetener Demand by Type..... 61
 3 Aspartame Demand by Market..... 65
 4 Sucralose Demand by Market 69
 5 Saccharin Demand by Market..... 75
 6 Acesulfame Potassium (Ace-K) Demand by Market..... 78
 7 Neotame Demand by Market 82
 8 Polyol Demand by Type 84
 9 Sorbitol Demand by Market 87
 10 Mannitol Demand by Market..... 89
 11 Xylitol Demand by Market 91

12 Maltitol Demand by Market 93
 13 Erythritol Demand by Market..... 95
 14 Other Polyol Demand by Market 97
 15 Stevia Demand by Type & Market . 100
 16 Other Alternative Sweeteners Demand by Type & Market..... 101

MARKETS

1 Alternative Sweetener Demand by Market..... 105
 2 Food Shipments 109
 3 Food Markets for Alternative Sweeteners..... 111
 4 Candy & Confection Shipments 114
 5 Candy & Confection Market for Alternative Sweeteners..... 116
 6 Chewing Gum Market for Alternative Sweeteners..... 118
 7 Chocolate Candy Market for Alternative Sweeteners..... 120
 8 Other Candy & Confection Market for Alternative Sweeteners..... 122
 9 Tabletop Market for Alternative Sweeteners..... 127
 10 Dairy Shipments..... 130
 11 Dairy Market for Alternative Sweeteners..... 131
 12 Other Food Markets for Alternative Sweeteners..... 137
 13 Beverage Production 141
 14 Beverage Markets for Alternative Sweeteners..... 143
 15 Carbonated Soft Drink Production 146
 16 Carbonated Soft Drink Market for Alternative Sweeteners..... 149
 17 Other Beverage Production 153
 18 Other Beverage Markets for Alternative Sweeteners..... 155
 19 Cosmetic & Toiletry Shipments 158
 20 Personal Care Product Market for Alternative Sweeteners..... 160
 21 Pharmaceutical Supply & Demand 163
 22 Pharmaceutical Market for Alternative Sweeteners..... 165

INDUSTRY STRUCTURE

1 US Alternative Sweetener Sales by Company, 2010 167
 2 Selected Cooperative Agreements. 175

List of Charts

SWEETENER OVERVIEW

1 Sweetener Demand by Market, 2010 37
 2 Conventional Sweetener Demand by Type, 2010 39

PRODUCTS

1 Alternative Sweetener Demand by Type: Volume & Value, 2010... 57
 2 High Intensity Sweetener Demand by Type, 2010 62

MARKETS

1 Alternative Sweetener Demand by Market, 2010..... 106
 2 Food Markets for Alternative Sweeteners, 2010..... 112

INDUSTRY STRUCTURE

1 Alternative Sweetener Market Share, 2010..... 168

Gains will be led by continuing market penetration of relatively new entrants to the industry -- including the stevia extract reb-A -- and by those that can be marketed as being "natural".

US demand to rise 3.3% annually through 2015

US demand for alternative sweeteners is expected to advance 3.3 percent annually through 2015 to \$1.4 billion. Gains will be led by continuing market penetration of relatively new entrants to the industry, including the stevia extract rebaudioside-A (reb-A). The more mature segments of the market -- high intensity sweeteners (such as aspartame) and polyols (including sorbitol) -- will see more restrained, though still healthy, increases in demand. Market trends favoring less processed ingredients will drive well-publicized usage of sweeteners that can be marketed as being "natural." However, continuing consumer preference for reduced-calorie foods and beverages will ensure the ongoing use of ubiquitous sweeteners such as aspartame.

High intensity sweeteners to remain largest segment

Despite the drag of a declining soft drink market, high intensity sweeteners will remain the largest product category among alternative sweeteners, a leadership position rooted in their continuing domination of the large diet soft drink and tabletop sweetener markets. Aspartame will remain the leader in diet soft drinks, while the tabletop market will continue to be dominated by sucralose. Growth in other markets will be healthy, although high intensity sweeteners are used in much lower quantities outside of their two mainstay applications.

US Alternative Sweetener Demand (\$1.4 billion, 2015)



High Intensity
53%

Polyols
40%

Other Types 7%

Newer alternative sweeteners to grow the fastest

Though expected to remain a fairly small share of the overall market, newer alternative sweeteners will register by far the fastest growth and generate the most interest among food and beverage processors, as well as among consumers. The Food and Drug Administration (FDA) approval of reb-A in late 2008 led to high-profile introductions of stevia-based products, such as tabletop sweeteners (e.g., Cargill's TRUVIA), juice beverages, fruit drinks, flavored waters and soft drinks, many of which have met with consumer favor. In 2010, the FDA approved luohanguo (monk fruit) for use as a sweetener in the US;

while this product's potential remains to be seen, its natural profile is on trend with current consumer purchasing decisions. Furthermore, full-calorie agave nectar is gaining traction due to its natural positioning as an alternative to high fructose corn syrup.

Polyols, a mainstay of the alternative sweetener market, will register solid growth in demand. Xylitol will see gains above the polyols segment average as it expands its presence in such applications as chewing gum, where it benefits from a unique profile in adding sweetness, enhancing minty flavors and improving dental health.

Copyright 2011 The Freedonia Group, Inc.

[Click here to purchase online](#)

**Sample Text,
 Table & Chart**

PRODUCTS

High Intensity Sweeteners

Demand for high intensity sweeteners is projected to advance at a rate of 2.5 percent annually to \$1.2 billion by 2020, up from \$1.1 billion in 2010. The performance in volume will be lower, averaging 1.5 percent per year as the market moves toward high intensity products. In value terms, sucralose and ace-K demand will increase, while aspartame, aspartame potassium, and neotame. High intensity sweeteners will remain the dominant in both volume and value terms, mainly due to their use in diet soft drinks, which account for almost half of the overall market for high intensity sweeteners.

**SAMPLE
 TEXT**

Aspartame will remain the leading high intensity sweetener in 2015, supported by competitive advantages as the dominant sweetener used in diet soft drinks. Declines in the consumption of soft drinks, coupled with the rising shares of second-generation high intensity sweeteners such as ace-K and sucralose, will negatively impact demand for aspartame, and in the longer term aspartame will be overtaken as the leading high intensity sweetener. Sucralose, which will usurp aspartame's leading position by 2020, has come to dominate the important tabletop sweetener market, led by Tate & Lyle's SPLENDA.

Sucralose will also see healthy gains in beverage markets, although beverage processors are cautious about altering formulations where consumers' diet beverage taste expectations have been founded almost exclusively on aspartame alone, and where a sweetener substitution alter flavor profiles such that the consumer perceives the product as deficient. As a result, products such as DIET COKE SWEETENED WITH SPLENDA have not cut into aspartame's market share as much as anticipated, though marginally, despite SPLENDA's immense successes in other applications. Furthermore, MADE WITH SPLENDA labeling has not shown to have a significant positive impact on product sales.

58

Copyright 2011

TABLE IV-6

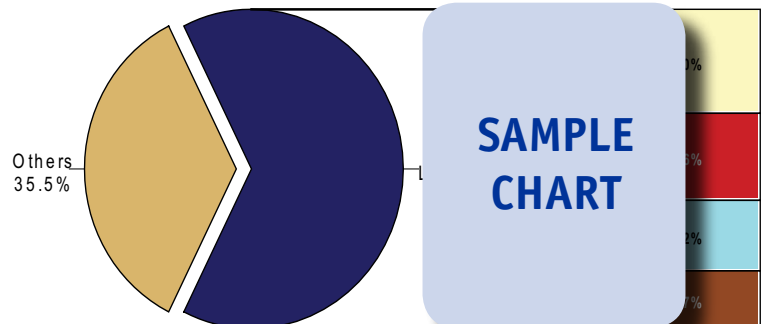
**ACESULFAME POTASSIUM (ACE-K) DEMAND BY MARKET
 (million dollars)**

Item	2000	2005	2010	2015	2020
Resident Population (mil)	260	280	300	320	340
lb ace-K/000 persons	1.5	1.8	2.1	2.4	2.7
Ace-K Demand (mil lb)	390	504	630	768	918
\$/lb	2.5	2.8	3.1	3.4	3.7
Ace-K Demand	975	1411	1965	2635	3400
Beverages:					
Carbonated Soft Drinks	500	650	800	950	1100
Other Beverages	475	761	1165	1685	2300
Food	100	100	100	100	100
Pharmaceuticals	100	100	100	100	100
% ace-K	2.5	2.8	3.1	3.4	3.7
High Intensity Sweetener Demand	1000	1300	1700	2200	2800

**SAMPLE
 TABLE**

CHART VI-1

**ALTERNATIVE SWEETENER MARKET SHARE
 (\$1.2 billion, 2010)**



**SAMPLE
 CHART**

Sample Profile, Table & Forecast

TABLE V-3
FOOD MARKETS FOR ALTERNATIVE SWEETENERS
 (million dollars)

Item	2000	2005	2010	2015	2020
Food Shipments (bil \$)	47	52	58	64	70
\$ sweetener/000\$ food	0.1	0.1	0.1	0.1	0.1
Total Sweetener Demand	5	6	7	8	9
% alternative	20	20	20	20	20
Alternative Sweetener Demand	1	1	1	1	1
Candy & Confection	0.5	0.5	0.5	0.5	0.5
Tabletop	0.5	0.5	0.5	0.5	0.5
Dairy Products	0.5	0.5	0.5	0.5	0.5
Other	0.5	0.5	0.5	0.5	0.5
% food	0.02	0.02	0.02	0.02	0.02
Total Alternative Sweetener Demand	192	220	255	295	330



COMPANY PROFILES

Cumberland Packing Corporation
 2 Cumberland Street
 Brooklyn, NY 11205
 718-858-4200
<http://www.cpa.com>

Annual Sales:
 Employment:

Key Products:
 SWEET ONE, substitutes

SAMPLE PROFILE

IN THE RAW
 D sugar

Cumberland Packing is a manufacturer, marketer and distributor of artificial sugar, salt and butter substitutes. The privately held company's products include SWEET'N LOW sugar substitute, NU-SALT salt substitute, BUTTER BUDS butter substitute, STEVIA EXTRACT IN THE RAW stevia sugar substitute and SUGAR IN THE RAW turbinado sugar. These products are sold for foodservice, food manufacturing and consumer use. The Company operates a production facility in Brooklyn, New York.

The Company participates in the US alternative sweeteners industry primarily through the manufacture of SWEET'N LOW and STEVIA EXTRACT IN THE RAW sugar substitutes. SWEET'N LOW is a zero-calorie, granular sugar substitute that contains saccharin, a high-intensity sweetener that is approximately 300 times sweeter than sugar. SWEET'N LOW sweeteners are available from the Company in individual packets, as well as in a bulk bag format that allows the product to be measured and poured for use as a substitute for sugar in baking applications. Additional products in the SWEET'N LOW line include SWEET'N LOW liquid sweetener, which can be used as a

194 Copyright 2011 The Freedonia Group, Inc.

"... Gains will be fastest in those applications where the use of alternative sweeteners is relatively less mature, including in dairy products and in such smaller uses as baked goods and breakfast cereals. In many instances, these sweeteners are finding use in products which contain sugar or HFCS, in order to boost sweetness slightly or to reduce calorie counts without impacting flavor characteristics. However, tabletop and candy applications will continue to account for over 70 percent of overall demand. ..."
 --Section V, pg. 109

OTHER STUDIES

World Enzymes

World enzyme demand will rise 6.8 percent annually to \$8.0 billion in 2015. Growth will be led by enzymes used in the diagnostic, research and biotechnology, animal feed, and food and beverage markets. The fastest regional growth will be in the smaller markets of Central and South America and the Africa/Mideast region. This study analyzes the \$5.8 billion world enzyme industry, with forecasts for 2015 and 2020 by product, market, world region and for 16 major countries. The study also evaluates company market share and profiles industry players.

#2824December 2011 \$6100

Flavors & Fragrances

The US market for flavors and fragrances is forecast to rise three percent annually through 2014. Advances will be fueled by consumer interest in more complex, exotic and authentic flavors and fragrances, as well as the increasing use of these products as marketing tools and product differentiators. This study analyzes the \$4.8 billion US flavor and fragrance industry. It presents historical demand data and forecasts for 2014 and 2019 by market and product. The study also evaluates company market share and profiles industry players.

#2732 February 2011 \$4900

Enzymes

US demand for enzymes will rise 4.8 percent annually through 2014. Gains will be driven by continued expansion of higher-value specialty enzymes in pharmaceuticals, diagnostics, research and biotechnology, and biocatalysts. In the biofuels segment, growth will moderate as the industry transitions to cellulases for producing biomass ethanol. This study analyzes the \$2.2 billion US enzymes industry, with forecasts for 2014 and 2019 by market and product. It also evaluates company market share and profiles industry competitors.

#2670September 2010..... \$4900

World Flavors & Fragrances

Global demand for flavors and fragrances is projected to increase 4.3 percent annually through 2014. Overall advances will be stimulated by gains in food and beverage processing, the largest market. The best opportunities will be found in developing areas, particularly the Asia/Pacific region. This study analyzes the \$19 billion world flavor and fragrance industry, with forecasts for 2014 and 2019 by product, market, world region and for 19 countries. It also evaluates company market share and profiles industry players.

#2673 August 2010 \$5800

World Salt

Global salt demand will rise 2.6 percent yearly through 2013. Growth in developing countries will more than offset an expected contraction of salt demand in developed economies. The large chemical manufacturing market will generate most new demand, due to rapid growth in Chinese chemical production. This study analyzes the \$9.7 billion world salt industry, with forecasts for 2013 and 2018 by salt market, production method, world region and for 20 countries. It also evaluates company market share and profiles industry participants.

#2597 March 2010 \$5700

About The Freedonia Group

The Freedonia Group, Inc., is a leading international industry market research company that provides its clients with information and analysis needed to make informed strategic decisions for their businesses. Studies help clients identify business opportunities, develop strategies, make investment decisions and evaluate opportunities and threats. Freedonia research is designed to deliver unbiased views and reliable outlooks to assist clients in making the right decisions. Freedonia capitalizes on the resources of its proprietary in-house research team of experienced economists, professional analysts, industry researchers and editorial groups. Freedonia covers a diverse group of industries throughout the United States, the emerging China market, and other world markets. Industries analyzed by Freedonia include:

- Chemicals • Plastics • Life Sciences • Packaging • Building Materials • Security & Electronics • Industrial Components & Equipment • Automotive & Transportation Equipment • Household Goods • Energy/Power Equipment

[Click here to learn more about Freedonia](#)

Freedonia Custom Research

Freedonia Custom Research delivers the same high quality, thorough and unbiased assessment of an industry or market as an industry study. Since the research initiative is based upon a company's specific needs, companies harness Freedonia's research capabilities and resources to answer unique questions. When you leverage the results of a Freedonia Custom Research engagement, you are able to obtain important answers to specific questions and issues associated with: mergers and acquisitions, new product launches/development, geographic expansion, entry into new markets, strategic business planning, and investment and funding decisions.

Freedonia Custom Research is ideal for companies seeking to make a strategic difference in the status quo and focus on future business growth. Working side by side with clients, Freedonia's team is able to define a research project that is custom-tailored to answer specific questions and provide the basis from which a company can make informed business decisions.

[Click here to learn more about Custom Research](#)



[Click here for complete title list](#)



[Click here to visit freedoniagroup.com](http://www.freedoniagroup.com)