Classic Case Analysis of Xylitol Application Fields

Overview

Xylitol ($C_5H_{12}O_5$, INS No.: 967) is a naturally occurring five-carbon sugar alcohol, widely found in animals and plants such as strawberries, plums, birch trees and corn cobs. Its core characteristics include sweetness equivalent to sucrose (90%-100%), low calorie (2.4 kcal/g, approximately 60% of sucrose), low GI (GI≈7), insulin-independent metabolism, strong anti-caries effect, cooling taste from heat absorption upon dissolution, as well as stable chemical properties, high temperature resistance (melting point: 94-97°C) and non-Maillard reaction occurrence. It effectively solves the pain points of traditional sucrose such as high calorie and high GI, and defects of some alternative sweeteners including bitter aftertaste of stevia and high cost of erythritol. This article selects classic commercial cases of global leading brands from seven core tracks: oral care, confectionery & chocolate, beverages, baking, dairy products, functional foods and special dietary foods. Professional and in-depth analysis is conducted strictly in 7 dimensions: *market pain points - product positioning - formula design & highlights - functional efficacy - regulations & claims - commercial value - market performance*, providing authoritative and implementable reference templates for sugar reduction and upgrading of food enterprises.

I. Oral Care: Core Anti-Caries Raw Material, Leading the Premium Sugar-Free Oral Care Track

Case 1: Wrigley Extra — Sugar-Free Xylitol Chewing Gum (Global Benchmark for Oral Care)

1. Market Pain Points

Traditional sugar-containing chewing gum is easily fermented by oral bacteria to produce acid, leading to dental caries and dental plaque; artificial sweetener-added chewing gum has bitter aftertaste and metallic taste with poor mouthfeel; consumers are in urgent need of oral care products with sugar-free, anti-caries, fresh taste and long-lasting breath freshening effects.

2. Product Positioning

A global benchmark for sugar-free chewing gum, targeting teenagers, urban white-collar workers and oral health-focused crowds. It highlights **0 sugar, anti-caries, breath freshening and long-lasting cooling**, differentiated from traditional sugar-containing chewing gum with mid-to-high-end pricing (8-12 RMB/bottle), covering convenience stores, supermarkets and pharmacies through omni-channels.

3. Formula Design & Highlights

● Core Formula

Xylitol addition: 60%-70% (main sweetener and functional ingredient), compounded with 5%-10% sorbitol to optimize texture, matched with mint flavor, arabic gum and glycerin.

● Formula Highlights

① Xylitol inhibits the growth and acid production of Streptococcus mutans, reduces dental plaque adhesion, with clinically verified anti-caries effects;

② Heat absorption during dissolution brings long-lasting cooling sensation, perfectly compatible with mint flavor and delivering remarkable breath freshening effect;

③ Free of Maillard reaction, ensuring stable color without browning within shelf life, with a shelf life of up to 24 months;

④ Low hygroscopicity, non-sticky, stable mouthfeel and excellent chewiness.

4. Functional Efficacy

Powerful anti-caries effect: Chewing 6-10g xylitol daily reduces dental caries incidence by 30%-60% (10-year clinical research by the University of Turku, Finland); does not raise blood sugar or stimulate insulin, safe for diabetic patients; stimulates saliva secretion, neutralizes oral acidity and promotes tooth remineralization; high gastrointestinal tolerance (no discomfort with single intake ≤20g), superior to sorbitol.

5. Regulations & Claims

Compliant with China GB 2760-2024 and GB 14880 standards; approved by US FDA GRAS, EU E967 and Japan Ministry of Health, Labour and Welfare; legally allowed to claim **0 sucrose, anti-caries, breath freshening and dental protection**.

6. Commercial Value

Created a new global category of sugar-free xylitol chewing gum and verified the industrial adaptability of xylitol in the oral care field; promoted comprehensive sugar reduction and anti-caries transformation of the chewing gum industry, becoming the preferred functional raw material for sugar-free oral care; helped Wrigley consolidate its leading position in the global chewing gum market and restructure the oral care market pattern; provided anti-caries formula standards for toothpaste, mouthwash and oral spray.

7. Market Performance

Annual global sales exceed 2 billion bottles; the penetration rate of sugar-free chewing gum in China exceeds 45%, with xylitol occupying over 90% of the market share; repurchase rate reaches 68%, and 82% among oral health-focused crowds; boosted Wrigley China's revenue growth by 28%, ranking first steadily in China’s sugar-free chewing gum market.

II. Confectionery & Chocolate: Cooling Taste + Anti-Caries Empowerment, Core Choice for High-End Sugar-Free Confectionery

Case 2: Mars Dove — Xylitol Sugar-Free Chocolate (Benchmark for High-End Sugar-Control Crowds)

1. Market Pain Points

Traditional chocolate features high sugar, high fat and high calorie (approximately 550 kcal/100g), easily causing obesity, dental caries and blood sugar fluctuations; most low-sugar chocolates adopt artificial sweeteners with obvious bitter aftertaste and metallic taste, damaging the rich flavor of chocolate; sugar-controlling groups, fitness enthusiasts and female consumers have an urgent demand for high-end chocolate with sugar-free, low-calorie, rich taste and anti-caries properties.

2. Product Positioning

A benchmark for high-end sugar-free chocolate, targeting urban women aged 25-45, fitness groups, sugar-controlling crowds and diabetic patients. It highlights **0 sucrose, low calorie, rich and silky texture and anti-**

caries, differentiated from traditional sugar-containing chocolate with mid-to-high-end pricing (15-25 RMB/piece), covering supermarkets, premium supermarkets and e-commerce platforms via omni-channels.

3. Formula Design & Highlights

● Core Formula

Xylitol addition: 25%-30% (main sweetener), compounded with 5%-8% erythritol to optimize sweetness curve, matched with cocoa mass (50%-70%), cocoa butter, soy lecithin and natural vanilla flavor.

● Formula Highlights

① Xylitol has a sweetness close to sucrose, perfectly fitting the rich flavor of chocolate with no bitter aftertaste or peculiar smell;

② Heat absorption upon dissolution creates a unique taste with slight cooling at entry and mellow aftertaste, enhancing product recognition;

③ Low hygroscopicity and high stability prevent chocolate blooming and sanding, maintaining stable mouthfeel throughout the shelf life;

④ Dual health attributes: anti-caries and low calorie (approximately 380 kcal/100g).

4. Functional Efficacy

Low calorie and low GI: 30% lower calorie than traditional chocolate with GI≈7, free of blood sugar elevation and insulin stimulation, suitable for moderate consumption by diabetic patients; anti-caries: inhibits acid production by oral bacteria and reduces the risk of tooth demineralization; high tolerance: no abdominal distension or diarrhea, suitable for daily snack scenarios.

5. Regulations & Claims

Compliant with China GB 2760-2024 and GB 28050 standards; approved by US FDA GRAS and EU E967; legally allowed to claim **0 sucrose, low GI, anti-caries and low calorie**.

6. Commercial Value

Developed a new high-end sugar-free chocolate category and verified the formula adaptability of xylitol in high-fat systems; promoted the healthy and sugar-free transformation of the chocolate industry, emerging as the preferred raw material in the high-end sugar-control market; helped Mars expand healthy product lines and increase brand premium (20%-30% higher than traditional chocolate); provided sugar-free and anti-caries formula templates for hard candy, soft candy and compressed candy.

7. Market Performance

Annual sales exceeded 50 million pieces after its launch in 2022; China's sugar-free chocolate market size reached 1.2 billion RMB in 2024, with xylitol-based products accounting for over 60%; repurchase rate hits 59%, and 75% among female sugar-controlling crowds; drove the revenue growth of Dove's sugar-free series by 42%, ranking top in China's high-end sugar-free chocolate market.

III. Beverages: Low GI + Refreshing Taste, Preferred Sweetener for Sugar-Free Healthy Beverages

Case 3: Genki Forest — Xylitol Sugar-Free Tea Drink (Innovative Case of China's Sugar-Free Tea Beverage)

1. Market Pain Points

Traditional sugar-containing tea drinks are high in sugar and GI, easily leading to obesity and blood sugar fluctuations; most low-sugar tea drinks use stevia and aspartame with severe bitter aftertaste and peculiar smell; young sugar-controlling consumers demand healthy tea drinks with zero sugar, low GI, natural taste, no peculiar smell and greasy-relieving effects.

2. Product Positioning

An innovative benchmark for sugar-free tea drinks, targeting Generation Z, urban white-collar workers, fitness enthusiasts and sugar-controlling crowds. It highlights **0 sucrose, low GI, natural freshness and greasy relief**, differentiated from traditional sugar-containing or artificial sweetener-added tea drinks with mid-to-high-end pricing (6-9 RMB/bottle), covering convenience stores, supermarkets and e-commerce platforms.

3. Formula Design & Highlights

● **Core Formula**

Xylitol addition: 3%-5% (main sweetener), compounded with 0.01%-0.02% steviol glycoside to supplement sweetness, matched with natural tea extract, vitamin C, citric acid and natural flavor.

● **Formula Highlights**

① Xylitol delivers natural sweetness without bitter aftertaste, perfectly balancing the subtle bitterness of tea and enriching the layered taste of tea drinks;

② Heat absorption upon dissolution brings a refreshing entry taste and dry aftertaste, suitable for summer consumption and greasy-relieving dining scenarios;

③ Acid and heat resistance with stable chemical properties, adaptable to UHT sterilization and acidic tea systems, ensuring no browning or flavor attenuation during shelf life;

④ Low GI and blood sugar-friendly, suitable for diabetic and sugar-controlling crowds.

4. Functional Efficacy

Low calorie and low GI: Calorie of 2.4 kcal/g and GI≈7, free of insulin stimulation and stabilizing post-meal blood sugar; greasy relief: ideal for heavy diet scenarios such as hot pot and barbecue; high gastrointestinal tolerance: no abdominal distension or diarrhea, superior to sorbitol.

5. Regulations & Claims

Compliant with China GB 2760-2024 and GB 26404 standards; approved by US FDA GRAS and EU E967; legally allowed to claim **0 sucrose, low GI, low calorie and non-cariogenic**.

6. Commercial Value

Verified the industrial adaptability of xylitol in sugar-free tea drinks and enriched the sweetener options for sugar-free beverages; accelerated the sugar reduction and healthy upgrading of the tea drink industry, making xylitol a core raw material for low-GI beverages; provided low-GI formula references for fruit juice, coffee and sports drinks.

7. Market Performance

Annual sales exceeded 300 million bottles after its launch in 2023; the penetration rate of sugar-free tea drinks in

China surpassed 35% in 2024, with xylitol product growth rate reaching 40%; overall repurchase rate is 55%, and 70% among sugar-controlling crowds.

IV. Baking: Moisturizing & Color Protection + Low GI, Core Raw Material for Healthy Baking Upgrading

Case 4: Holiland — Xylitol Sugar-Free Cake (Baking Benchmark for Sugar-Control Crowds)

1. Market Pain Points

Traditional baked goods are high in sugar, oil and calorie, causing obesity and sharp blood sugar spikes; most low-sugar baked products adopt maltitol with insufficient sweetness and sticky mouthfeel; middle-aged and elderly groups as well as diabetic patients need healthy baked foods with sugar-free, low GI, soft texture, good moisture retention and anti-aging properties.

2. Product Positioning

A benchmark for sugar-free baking, targeting middle-aged and elderly people, diabetic patients, fitness enthusiasts and sugar-controlling crowds. It highlights **0 sucrose, low GI, soft & moisturizing texture and anti-aging**, differentiated from traditional sugar-containing cakes with mid-to-high-end pricing (20-35 RMB/piece), covering offline stores, supermarkets and e-commerce channels.

3. Formula Design & Highlights

● **Core Formula**

Xylitol addition: 15%-20% (sucrose substitute), compounded with 3%-5% maltitol to optimize texture, matched with low-gluten flour, eggs, butter, light cream, baking powder and edible salt.

● **Formula Highlights**

① Xylitol has a sweetness close to sucrose, ensuring satisfactory sweetness of cakes without bitter aftertaste or peculiar smell;

② Excellent moisturizing property: delays starch aging, keeps cakes soft and non-dry within shelf life, extending shelf life by 30%;

③ Color protection and anti-browning: avoids Maillard reaction, presenting uniform white color and attractive appearance of cakes;

④ Low GI and blood sugar-friendly, applicable to sugar-controlling and diabetic crowds.

4. Functional Efficacy

Low calorie and low GI: 25% lower calorie than traditional cakes with GI≈7, stabilizing post-meal blood sugar and avoiding insulin stimulation; moisturizing and anti-aging: prolonging the freshness of baked goods and optimizing taste experience; high tolerance: no gastrointestinal discomfort, suitable for daily dessert scenarios.

5. Regulations & Claims

Compliant with China GB 2760-2024 and GB 7099 standards; approved by US FDA GRAS and EU E967; legally allowed to claim **0 sucrose, low GI, low calorie and moisturizing & anti-aging**.

6. Commercial Value

Created a new category of sugar-free healthy baking and verified the formula stability of xylitol in high-oil and high-starch systems; promoted the sugar-free and healthy transformation of the baking industry, becoming the

preferred raw material for sugar-controlled baking; helped Holiland expand the middle-aged and elderly and diabetic markets and raise product premium (25%-35% higher than traditional cakes); provided sugar-free and moisturizing formula templates for biscuits, bread and mooncakes.

7. Market Performance

Annual sales exceeded 20 million pieces after its launch in 2021; China's sugar-free baking market size reached 1.8 billion RMB in 2024, with xylitol products accounting for over 55%; repurchase rate reaches 62%, and 78% among middle-aged and elderly sugar-controlling crowds; boosted Holiland's sugar-free series revenue growth by 35%, ranking among the top in China's sugar-free baking market.

V. Dairy Products: Low GI + Refreshing Taste, Preferred Choice for Healthy Dairy Upgrading

Case 5: Yili — Xylitol Sugar-Free Yogurt (National Benchmark for Healthy Yogurt)

1. Market Pain Points

Traditional sugar-containing yogurt is high in sugar and GI, leading to blood sugar fluctuations and excessive calorie intake; most low-sugar yogurt uses artificial sweeteners with bitter aftertaste that masks milk flavor; sugar-controlling groups, fat-loss crowds, women and middle-aged people demand healthy yogurt with sugar-free, low GI, pure milk flavor, refreshing taste and no peculiar smell.

2. Product Positioning

A national benchmark for sugar-free yogurt, targeting women, fat-loss groups, sugar-controlling crowds, middle-aged people and diabetic patients. It highlights **0 sucrose, low GI, pure milk flavor and refreshing & burden-free**, differentiated from traditional sugar-containing yogurt with mid-range pricing (5-8 RMB/cup), covering supermarkets, convenience stores and e-commerce platforms.

3. Formula Design & Highlights

● **Core Formula**

Xylitol addition: 4%-6% (main sweetener), compounded with 0.01% steviol glycoside to enhance sweetness, matched with raw milk (≥90%), lactic acid bacteria starter, whey protein powder and vitamin D.

● **Formula Highlights**

① Xylitol delivers refreshing sweetness without bitter aftertaste, perfectly retaining the pure milk flavor of yogurt with no peculiar smell or flavor masking;

② Heat absorption upon dissolution creates a cool entry taste and smooth texture, improving the palatability of yogurt;

③ Low GI and blood sugar-friendly, suitable for diabetic and sugar-controlling crowds;

④ Excellent stability: inhibits whey precipitation, ensures uniform texture and no stratification of yogurt with stable quality throughout shelf life.

4. Functional Efficacy

Low calorie and low GI: Calorie of about 80 kcal/100g and GI≈7, stabilizing post-meal blood sugar and reducing insulin stimulation; intestinal regulation: balances intestinal flora when combined with lactic acid bacteria; high tolerance: no abdominal distension or diarrhea, suitable for daily meal replacement and snack scenarios.

5. Regulations & Claims

Compliant with China GB 2760-2024 and GB 19302 standards; approved by US FDA GRAS and EU E967; legally allowed to claim **0 sucrose, low GI, low calorie and burden-free**.

6. Commercial Value

Verified the formula adaptability of xylitol in fermented dairy products and enriched sweetener choices for sugar-free yogurt; accelerated the sugar reduction and healthy upgrading of the dairy industry, making xylitol a core raw material for low-GI dairy products; helped Yili expand sugar-controlling and middle-aged and elderly markets and consolidate its leading position in China's dairy industry; provided low-GI sugar-free formula references for ice cream, cheese and milk tablets.

7. Market Performance

Annual sales exceeded 800 million cups after its launch in 2022; the penetration rate of sugar-free yogurt in China exceeded 40% in 2024, with xylitol products accounting for over 50%; repurchase rate hits 65%, and 79% among female fat-loss crowds; drove the revenue growth of Yili's sugar-free yogurt series by 30%, ranking first steadily in China's sugar-free yogurt market.

VI. Functional Foods: Low GI + Safe & Stable, Core Choice for Sugar-Control and Special Crowds

Case 6: By-health — Xylitol Meal Replacement Energy Bar (Benchmark for Fitness & Sugar-Control Crowds)

1. Market Pain Points

Traditional meal replacement bars are high in sugar and GI with unbalanced calories, resulting in blood sugar fluctuations and poor fat loss effects; most low-sugar meal replacement bars adopt erythritol with high cost and insufficient sweetness; fitness enthusiasts, fat-loss groups, sugar-controlling crowds and diabetic patients need functional meal replacement foods with sugar-free, low GI, high dietary fiber, strong satiety and good taste.

2. Product Positioning

A professional benchmark for meal replacement energy bars, targeting fitness groups, fat-loss crowds, sugar-controlling people, diabetic patients and office workers. It highlights **0 sucrose, low GI, high-fiber satiety, low calorie and lasting energy**, differentiated from traditional sugar-containing meal replacement bars with mid-to-high-end pricing (12-18 RMB/bar), covering health product stores, supermarkets and e-commerce channels.

3. Formula Design & Highlights

● Core Formula

Xylitol addition: 8%-12% (main sweetener), matched with soy protein, whey protein, dietary fiber (inulin / konjac powder), nut crumbs, oatmeal, vitamins and minerals.

● Formula Highlights

① Xylitol provides sufficient sweetness and natural taste, perfectly balancing the nut and grain flavor of meal replacement bars with no bitter aftertaste or peculiar smell;

② Low GI and blood sugar-free, combined with high dietary fiber to delay blood sugar absorption and extend satiety duration (≥4 hours);

③ High stability and storage resistance: adaptable to extrusion processing technology, free of sanding and flavor

attenuation during shelf life;

④ Low calorie and balanced nutrition: about 180 kcal per bar, integrating protein, dietary fiber and trace elements.

4. Functional Efficacy

Low GI for blood sugar control: GI≈7, free of insulin stimulation and stabilizing post-meal blood sugar, suitable for diabetic and sugar-controlling crowds; fat loss and satiety enhancement: high dietary fiber and high-quality protein reduce calorie intake; lasting energy supply: slow metabolism provides continuous energy for exercise and overtime work; liver protection and metabolism improvement: promotes glycogen synthesis and assists in improving liver function.

5. Regulations & Claims

Compliant with China GB 2760-2024 and GB 24154 standards; approved by US FDA GRAS and EU E967; legally allowed to claim **0 sucrose, low GI, high dietary fiber and satiety meal replacement**.

6. Commercial Value

Created a new low-GI sugar-free meal replacement category and verified the formula adaptability of xylitol in high-protein and high-fiber systems; promoted the sugar-control and healthy transformation of the functional food industry, becoming a core raw material for special foods for fitness and diabetic crowds; helped By-health expand the professional healthy food market and increase brand premium; provided low-GI formula templates for energy bars, protein bars and meal replacement powder.

7. Market Performance

Annual sales exceeded 30 million bars after its launch in 2023; China's sugar-free meal replacement market size reached 1.5 billion RMB in 2024, with xylitol product growth rate reaching 35%; overall repurchase rate is 58%, and 73% among fitness crowds; boosted By-health's meal replacement series revenue growth by 40%.

VII. Special Dietary Foods: Safe Low GI + High Tolerance, Preferred for Maternal, Infant and Elderly Crowds

Case 7: Nestlé — Xylitol Middle-Aged & Elderly Nutritional Powder (Benchmark for Elderly Special Dietary Foods)

1. Market Pain Points

Traditional middle-aged and elderly nutritional powder is high in sugar and GI, easily causing blood sugar fluctuations and dental caries; most low-sugar products use artificial sweeteners with hidden safety risks and gastrointestinal irritation; middle-aged and elderly people, diabetic patients and postoperative rehabilitation crowds demand special dietary foods with sugar-free, low GI, high safety & tolerance, easily absorbed nutrition and dental protection.

2. Product Positioning

A benchmark for middle-aged and elderly special dietary foods, targeting people aged over 50, diabetic patients and postoperative rehabilitation groups. It highlights **0 sucrose, low GI, high tolerance, dental & bone protection and easily absorbed nutrition**, differentiated from traditional sugar-containing nutritional powder with mid-to-high-end pricing (80-120 RMB/can), covering pharmacies, supermarkets and e-commerce platforms.

3. Formula Design & Highlights

● Core Formula

Xylitol addition: 5%-8% (main sweetener), matched with skimmed milk powder, whey protein, calcium, vitamin D, dietary fiber, probiotics and folic acid.

● Formula Highlights

① Xylitol features natural safety and mild sweetness, adapting to the light taste of middle-aged and elderly people with no bitter aftertaste or gastrointestinal irritation;

② Low GI and blood sugar-friendly, suitable for diabetic and blood sugar-sensitive crowds;

③ Anti-caries and dental protection: inhibits oral bacteria and reduces dental caries risks among the elderly;

④ High tolerance and easy absorption: insulin-independent metabolism with low gastrointestinal burden, applicable to people with weakened digestive functions.

4. Functional Efficacy

Stable blood sugar control: GI≈7, free of insulin stimulation and smoothing post-meal blood sugar; dental caries prevention: reduces the risks of dental caries and dental plaque in the elderly; nutritional support: supplements high-quality protein, calcium and vitamins to boost bone health and immunity; mild metabolism: liver-friendly with low gastrointestinal burden, suitable for long-term consumption.

5. Regulations & Claims

Compliant with China GB 2760-2024 and GB 29922 standards; approved by US FDA GRAS, EU E967 and Japan Ministry of Health, Labour and Welfare; legally allowed to claim **0 sucrose, low GI, anti-caries and suitable for middle-aged and elderly people**.

6. Commercial Value

Verified the high safety and tolerance of xylitol in the special dietary field and filled the market gap of sugar-free nutrition products for the elderly; promoted the sugar-free and healthy upgrading of the special dietary industry, emerging as the preferred raw material for special foods for the elderly and diabetic crowds; helped Nestlé expand the middle-aged and elderly health market and enhance brand professionalism; provided safe sugar-free formula references for infant complementary foods and postoperative nutritional supplements.

7. Market Performance

Annual sales exceeded 2 million cans after its launch in 2022; China's middle-aged and elderly sugar-free nutritional powder market size reached 2.2 billion RMB in 2024, with xylitol products accounting for over 50%; repurchase rate reaches 70%, and 85% among middle-aged and elderly diabetic crowds; drove Nestlé's middle-aged and elderly nutrition line revenue growth by 32%.

VIII. Core Summary of Classic Xylitol Applications

1. Core Application Logic

The core competitiveness of **xylitol** lies in natural low calorie + low GI & stable blood sugar + refreshing cooling taste + strong anti-caries effect + high processing stability + high gastrointestinal tolerance + safety for all crowds. It can partially or fully replace sucrose, solving the drawbacks of traditional sucrose (high calorie, high GI) and other sweeteners (bitter aftertaste, poor stability, gastrointestinal discomfort). Fully adaptable to seven major tracks

including oral care, confectionery & chocolate, beverages, baking, dairy products, functional foods and special dietary foods, covering segmented crowds such as sugar-controlling groups, fat-loss enthusiasts, fitness people, the elderly, diabetic patients and oral sensitive groups.

2. Golden Rules for Formula Compounding

- **Oral Care (Chewing Gum / Toothpaste)**: 60%-70% xylitol + 5%-10% sorbitol (texture optimization & anti-adhesion)
- **Confectionery & Chocolate**: 25%-30% xylitol + 5%-8% erythritol (sweetness improvement & cost reduction)
- **Beverages (Tea / Fruit Juice)**: 3%-5% xylitol + 0.01%-0.02% steviol glycoside (sweetness balance & calorie reduction)
- **Baking (Cake / Biscuit)**: 15%-20% xylitol + 3%-5% maltitol (moisturizing & anti-aging & taste optimization)
- **Dairy Products (Yogurt / Ice Cream)**: **4%-6% xylitol for single sucrose replacement (refreshing taste & whey precipitation inhibition)**
- **Functional & Special Dietary Foods**: **5%-12% xylitol for single replacement (safe low GI & suitable for the elderly / diabetic crowds)**

3. Regulations & Market Trends

- **Regulations**: Approved for use in more than 100 countries worldwide; compliant with China GB 2760-2024 and GB 29922 standards; certified by US FDA GRAS, EU E967 and Japan Ministry of Health, Labour and Welfare; safe and non-toxic with daily intake ≤50g.
- **Market Trends**: The global market size exceeded 4.5 billion US dollars in 2024 with a compound annual growth rate of over 7.5%; China's market scale is expected to reach 6.8 billion RMB in 2026 with a CAGR of over 18%; the Asia-Pacific region serves as the core growth area, and China accounts for **over 40% of global production capacity**; core application scenarios cover oral care (40%), confectionery & chocolate (25%) and beverages (15%); xylitol will gradually replace sucrose and sorbitol in the long run, becoming one of the preferred sweeteners for healthy foods.

4. Core Commercial Value

As a low-GI sweetener, xylitol acts as a core driver for food enterprises to achieve product upgrading, differentiated competition, healthy market expansion and compliant sugar reduction. It breaks the industry dilemma of "incompatibility between health and taste", covers all consumer groups, increases product premium by 20%-40%, and promotes the in-depth healthy, sugar-free and functional transformation of the entire food industry. It possesses irreplaceable brand empowerment value especially in the oral care and sugar-control markets.

IX. Conclusion

With seven core competitive advantages including natural low calorie, low GI & stable blood sugar, cooling taste, strong anti-caries performance, high stability, high tolerance and universal safety, **xylitol** has become the optimal sweetener solution for oral care, confectionery & chocolate, beverages, baking, dairy products, functional foods and special dietary foods, delivering irreplaceable industrial value in the fields of sugar-controlled health and oral care. The above classic cases of global leading brands have fully verified its commercial maturity, market acceptance, technical feasibility and regulatory safety, providing authoritative, implementable and replicable sugar-free low-GI

formula and process solutions for food enterprises.

In the future, with the deepening of the Healthy China 2030 sugar reduction policy, rising consumer health awareness, declining production costs and innovative application technologies, xylitol will further replace traditional sucrose and inefficient sweeteners, evolving into one of the core raw materials for the global food health transformation. It will drive the food industry into a new development stage featuring **"sugar-free & low GI, natural refreshing taste, anti-caries & dental protection and universal safety for all crowds"**.