



Enzymatic Sugar Reduction for Drinks

Tired of the same old sugar reduction solutions? acib offers a game-changing approach using enzymes to **naturally reduce sugar** while **preserving flavor** and providing **potential health benefits**. Join us in creating healthier, tastier beverages!

BACKGROUND

The beverage industry is under pressure to reduce sugar due to health concerns. Current solutions, like artificial sweeteners (e.g., aspartame) or natural alternatives (e.g., stevia), often result in altered taste, undesirable aftertastes, and consumer skepticism. Enzymatic methods that convert sugars into acids can disrupt flavor, requiring buffering agents, complicating production, and impacting the sensory experience. Additionally, strict labeling regulations pose challenges for sugar substitutes, limiting marketing opportunities for “sugar-free” claims and affecting consumer perception.

TECHNOLOGY

acib, together with its scientific partners, has a repertoire of enzymatic approaches that can enable reduction of sugar content while taste and texture should be preserved. These methods do not convert sugars into acids, thus avoiding the need for buffering agents:

- **Cellobiose/Cellotriose** (from Sucrose and Glucose, small amount of phosphate needed): Low-calorie sweeteners with health benefits, and cellotriose avoids sugar labeling, offering a marketing advantage.
- **Oligo-fructose** (from Sucrose): A prebiotic sugar alternative that improves gut health and is exempt from sugar labeling.
- **Allulose** (from Fructose): A low-calorie sugar that doesn't spike blood sugar or cause tooth decay, FDA approved with pending EU approval.

These technologies allow beverage manufacturers to reduce sugar content without compromising flavor, ensuring compliance with health trends and regulatory standards.

OFFER

acib, together with its scientific partners, offers innovative enzymatic technology approaches to reduce sugar in beverages while preserving taste and mouthfeel. This is a clear advantage over current solutions and our industrial partners will experience a competitive edge and positive consumer perception. Collaborate with acib's expert team to enable the best enzymatic sugar reduction technologies for your drinks!

acib-EXPERTS:

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DEVELOPMENT STATUS:

Technology Readiness Level 2-3
(technology concept formulated - experimental proof-of-concept)

KEYWORDS:

Sucrose Reduction
Fructose Reduction
Glucose Reduction
Cellobiose
Cellotriose
Oligo-Fructose
Allulose
Low-Calorie Drinks
Healthier Beverages
Sustainability

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