



## **SWEETENERS IN THE SPOTLIGHT:**

Which sugar substitutes  
resonate with consumers?

It's pretty clear that reducing sugar intake is now a global trend among consumers, both young and old. As a result, sugar and alternative sweeteners are some of the most-scrutinized ingredients used in products.

As consumers seek more low-sugar, low-calorie foods and beverages, companies are looking to meet this demand. But with so many alternative sweeteners now available, it's hard to know which new ingredients are appealing to today's consumers.

It is a valid and ongoing question. Consumers are actually pretty confused about sweeteners and sugar alternatives. But they do have some topline impressions, according to recent data from Mintel Research on U.S. consumer perceptions about sweetened products.

First, artificial sweeteners have a poor perception, while natural sweeteners are viewed more favorably, with 26 percent of respondents indicating they would like to see more food and drinks that use naturally sourced sugar substitutes, and 19 percent saying they are buying more food/drink containing natural sugar substitutes.<sup>1</sup>

On the flip side, consumers are still relatively confused about natural sugar alternatives, with more than 65% noting that it is hard for them to tell which sugar substitutes are natural and which aren't, and 60% saying they wished they knew more about how sugar substitutes are made.<sup>2</sup> According to Lynn Dornblaser, director of innovation and insight for Mintel, consumers do want to understand the differences between these ingredients, and they are increasingly likely to do research before making a product purchase, which underscores the growing importance of transparency in a sweetener ingredient's supply chain.<sup>3</sup>

To further muddy the waters for brand formulators, consumers don't always let these opinions influence their purchasing behavior. When it comes down to decision-making in the store, many consumers still say taste and price are more important than health or ingredient considerations.<sup>4</sup>

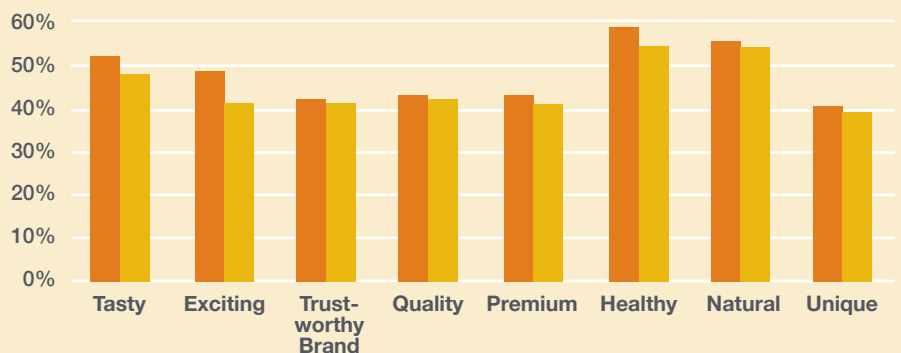
### So what is resonating with consumers?

Stevia sweeteners are a clear winner in product formulations, with product launches containing stevia reaching more than 4,300 new products globally in 2017, and seeing use in a wide variety of product categories, according to 2017 Innova Market Insights data. And little wonder. Stevia has a lot going for it from a product development standpoint, as well as with consumers. According to Cargill proprietary online research of 13,000 consumers, when compared to 12 of the leading low/no calorie sweeteners, the consumers surveyed ranked stevia leaf extract as the most healthful, as well as having the most positive perception on a label.<sup>5</sup>

The beverage segment has pioneered the use of stevia, where it has seen the most pronounced success, particularly with juice beverages. According to data from Mintel, stevia has a strong positive perception in these products, with consumers rating them more positively across the board than all other juice drinks (see chart).

### Consumer perception scores for juice drinks with stevia, compared to all juice drinks

■ Juice drinks with stevia  
■ All juice drinks



Source: Mintel Purchase Intelligence, December 2016

In addition, purchase intent is higher for juice drinks with stevia (36%) compared to all juice drinks (32%). These products are also gaining ground with all consumer age groups, but particularly with younger shoppers. Nearly half of those aged 18-34 (49%) now say they are likely to buy juice drinks with stevia, compared to 37% for those aged 35-54, and 28% for those aged 55 and over.

At the same time, stevia suppliers are also making great enhancements to the capabilities of these ingredients by improving the taste of stevia sweeteners and addressing some of the issues with its bitter aftertaste. Cargill's ViaTech® stevia sweeteners, for example, can determine the optimal ratio of the 40 different steviol glycosides in the stevia leaf in various product applications, while reaching a calorie reduction of between 30% and 70%.

Suppliers are also moving to the next level with the development of a new generation of ingredients featuring the best-tasting components of the stevia leaf, the steviol glycosides Reb M and Reb D, which can reduce calories by up to 100% in certain applications.

Cargill's new EverSweet™ sweetener, which is made up of Reb M and Reb D, is produced using the age-old technique of fermentation. Because Reb M and Reb D make up less than 1% of the stevia leaf, huge quantities of stevia leaf would be required to create commercial levels of these compounds using leaf-based production methods. Instead, to make EverSweet™ sweetener, baker's yeast and simple sugars are transformed through fermentation into the same steviol glycosides that are found in the plant.

Erythritol is another ingredient that is gaining in popularity, with launches using the ingredient having doubled since 2012.<sup>6</sup> It is a sugar alcohol that is naturally present in certain fruits and vegetables, and is made commercially through fermentation. Erythritol is often paired with high-intensity sweeteners because it has a sugar-like aftertaste and helps mask off-notes.

Consumers will very likely continue to seek sugar reduction into the foreseeable future. The key for brand formulators is to work with a supplier that has the ability to innovate in the sweetener category and brings a variety of solutions to help balance the need for both no- and low-calorie products with great taste.

*For more information about Cargill's Sugar Reduction ingredients, visit [www.cargill.com/sugarreduction](http://www.cargill.com/sugarreduction)*

Sources:

<sup>1</sup> Mintel. Sugar and Sweeteners—U.S., December 2016

<sup>2</sup> Dornblaser, L. "Understanding Consumer Perceptions to Sweetened New Products," Mintel Research. <https://www.globalfoodforums.com/wp-content/uploads/2016/11/1-Understanding-Consumer-L.Dornblaser-1.pdf>

<sup>3</sup> Ibid.

<sup>4</sup> "Simplifying Sweetness: Identifying the Factors that Influence Consumer Attitudes Toward Sweeteners and Testing their Impact on Your Brand," CornNaturally.com. <http://www.cornnaturally.com/CornNaturally/media/Interior/Gated%20PDF/mintel-brand-simplifying-sweetness-white-paper.pdf?ext=.pdf>

<sup>5</sup> Cargill's IngredienTracker®

<sup>6</sup> Dornblaser, L. "Trends in Sugar, Sugar Reduction, and Sweeteners." Prepared for the 34th Annual Sugar Symposium. <https://sugaralliance.org/wp-content/uploads/2017/08/lynn-dornblaser.pdf>

*Claims: The labeling, substantiation and decision making of all claims for your products is your responsibility. We recommend you consult regulatory and legal advisors familiar with all applicable laws, rules and regulations prior to making labeling and claims decisions.*