

CASE STUDY: A New Stevia Extract for Beverages and Tabletop Sweeteners

Optimizer Stevia™ optimizes the taste and saves up to 30% of cost as compared to RA97 stevia



Healthy, tasty and affordable! These are the standout choice motivators among the plethora of food and beverages available to consumers today. Though their purchase decisions may be made within a few seconds, these desires are undeniable, whether consciously made or not.

Manufacturers must always keep in mind that, “the customer is always right”. So, ultimately the test is to formulate a product that is good for **customer’s wellbeing, teases their taste buds, and makes great value-for-money sense.**

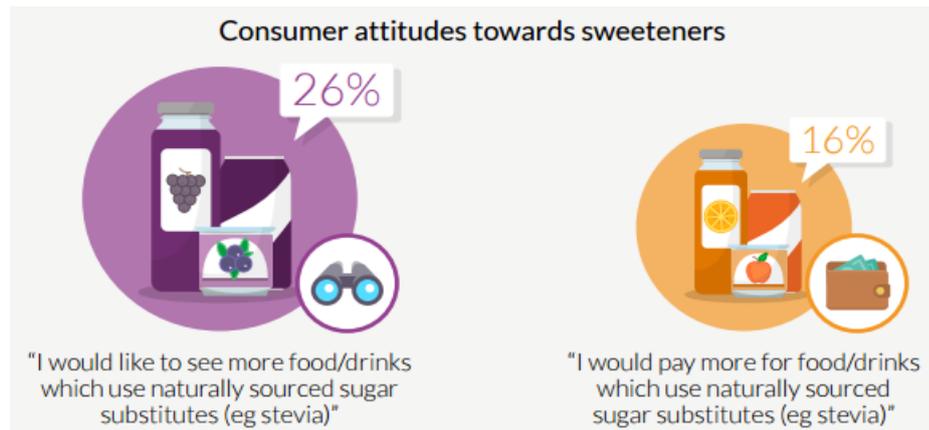
Drinks and tabletop sweeteners are two categories that most reflect consumer demand for an affordable better-for-you product. Sugar and other sweeteners that play a centric role in the formulation directly determine the taste, as well as the price of the product. Is there a natural sweetener that tastes better but costs less than its conventional equivalent?

It’s time to end the dilemma. Optimizer Stevia™ is a naturally sourced, good tasting sweetener solution that enables 20%-30% savings over the conventional RA97 stevia, helping food and beverage formulators to achieve the 3-in-1 values of **natural provenance, agreeable taste, and competitive cost.**



A quarter of consumers desire natural sugar substitutes¹. It represents an opportunity where manufacturers can focus efforts to differentiate their formulation and brand value. The pain point that manufacturers may be experiencing is how to land on acceptable product price points.

A Mintel survey of 2,000 internet users in the US shows that 26% of consumers would like to see more food and beverages using naturally sourced sugar-substitutes, but a much smaller percentage are willing to pay more for these.¹



Source: Mintel Reports Sugar and Sweeteners –US, December 2016

In terms of awareness, stevia is currently the unequalled sugar alternative among all other natural sweeteners. Even two years ago, Mintel had already found that more than half of US survey respondents claimed they had used products containing stevia.²

Stevia extract is widely known as a high-potency sweetener. In fact, 0.15-0.2 g of high purity stevia extract is equal in sweetness to 40-50 g of sugar, and thus can significantly reduce cost while cutting down sugar content, and calories!



Stevia has also become more of an advantageous sweetener as taxes on sugar-sweetened beverages continue to gain foothold in more countries.

High purity Reb A products remain the predominant stevia extract used most widely across all food and beverage categories, as Reb A was the first commercialized steviol glycoside, owing to its pure taste and high concentration in the stevia leaf. In the US, where the rate of product launches using stevia has always been highest in recent years, Reb A products with a purity from 80% to 98% have become the prevalent stevia extracts incorporated in drinks and tabletop sweeteners.

Though the price of stevia extracts are decreasing today as the industry continues to improve technologies and upgrade the supply chain, manufacturers are not facing less cost pressure in the FMCG market than in the early years, when stevia had first gained regulatory approval as a food ingredient. In the five years from 2009 to 2014, global food and beverage launches with stevia increased by 712% (Global Stevia Institute)³. The premium that consumers used to be willing to pay for a few products using stevia is now being shared by thousands of products labeled with the little sweet stevia leaf on the package.



Stevia is still attractive to consumers as it taps into consumer demand for natural ingredients and reduced calories. It means a lot for manufacturers to win the game, on an ever-crowded playing field, by looking for a stevia extract that equals or exceeds the taste of RA80-RA97 - at reduced cost.

Optimizer Stevia™ is a series of GRAS registered optimal combinations of steviol glycosides. Products in the Optimizer Stevia™ family have almost the same sweetness potency as RA95-RA97. Results of sensory tests across a wide range of cold and hot beverages showed that Optimizer Stevia™ always rated a higher score than its counterpart. However, Optimizer Stevia™ is priced at 20% to 30% less than RA97, helping manufacturers achieve substantial savings.

Optimizer Stevia™ is an ideal sweetening solution for beverages and tabletop sweeteners. If manufacturers are using either a stevia extract from RA80 – RA97, they can simply replace it with a product in the Optimizer Stevia™ portfolio which delivers better taste at a lower cost.

- Optimizer 1.10 wins out in beverages over RA80 – RA97.
- Optimizer 2.10 substitutes RA80- RA97 with purer taste in tabletop sweeteners.
- Optimizer 3.10 shows slight taste advantages over RA80 – RA97 in all applications but it has the most modest price.

Let's take a glance at how Optimizer Stevia™ performs in beverages and tabletop sweeteners.

Beverages

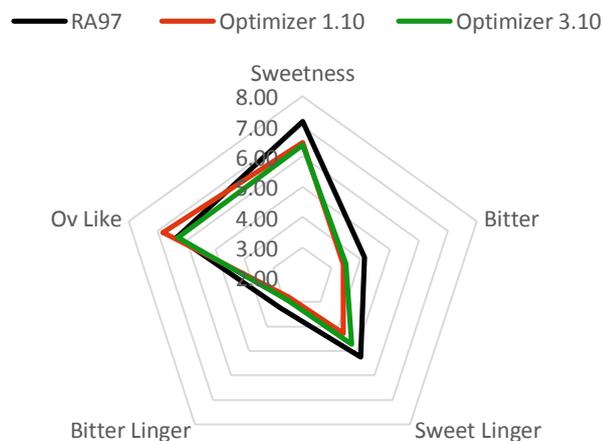
In its Food & Drink Trends 2017 report, Mintel observed that consumers have prioritized botanicals as more of them aspire to healthier and cleaner lifestyles. Manufacturers have been quick to promote the concept and formulated products with plants and the flavors to echo the drift.⁴ Stevia with its plant-based origin has a bright future.



Furthermore, in Innova's latest study of consumer attitudes toward carbonated beverages, about 39% of US respondents find cost is an important factor they look at when purchasing carbonated beverages. Reduced sugar and naturalness are the top attributes of a carbonated drink they are most likely to buy.⁵ The new opportunity for the CSD industry is how to find a cost effective natural sweetener to reduce sugar without compromising on the taste. Optimizer Stevia™ is the answer.

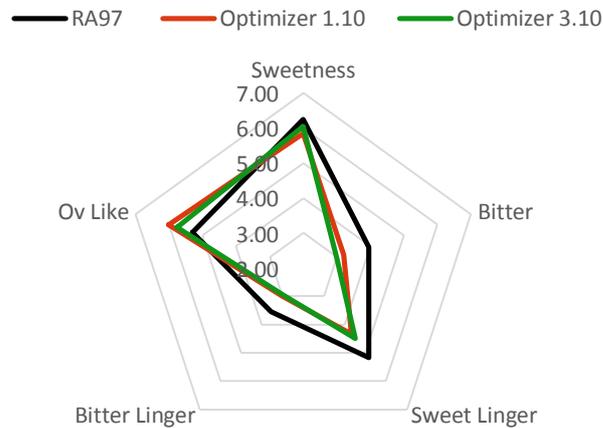
In 40% sugar-reduced strawberry kiwi juice, Optimizer 1.10 and Optimizer 3.10 won out for its remarkable shortened linger and reduced bitterness.⁶

Sensory Comparison of SGF Product Portfolio
300ppm in Strawberry Kiwi Juice



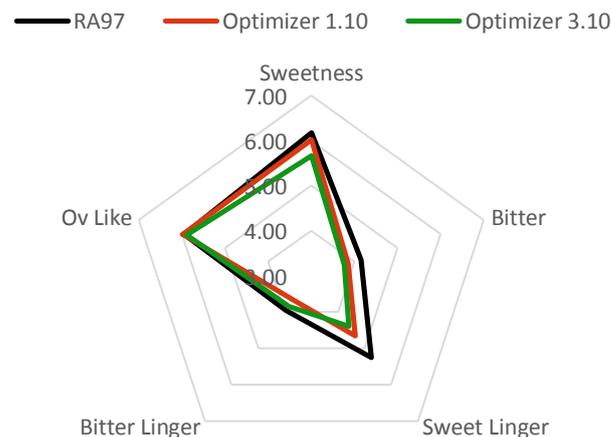
In 50% sugar-reduced carbonated cola, Optimizer 1.10 and Optimizer 3.10 delivered a much purer taste with negligible bitterness and a significantly moderated bitter note than RA97. ⁷

Sensory Comparison of SGF Product Portfolio 240ppm in 50% SR Cola



In 50% sugar-reduced lemon and lime, the overall evaluation of the two variations of Optimizer Stevia™ is almost equal with RA97. However the Optimizer Stevia™ products showed much less bitterness and lingering. ⁸

Sensory Comparison of SGF Product Portfolio 240ppm in 50% SR Lemon and Lime Soda



Customer Voice

“We are evaluating the SGF Optimizer Stevia line to replace RA97 to achieve material cost savings. We got very positive results from the evaluation.”

Tabletop Sweeteners

Tracked sugar and sweeteners launches recorded a CAGR of 15.7% over the past 5 years.⁹

The top 7 companies of sugar and sweeteners launches tracked accounted for 11% of the total H1 2016 sub-category launches tracked, indicating a competitive market.⁹

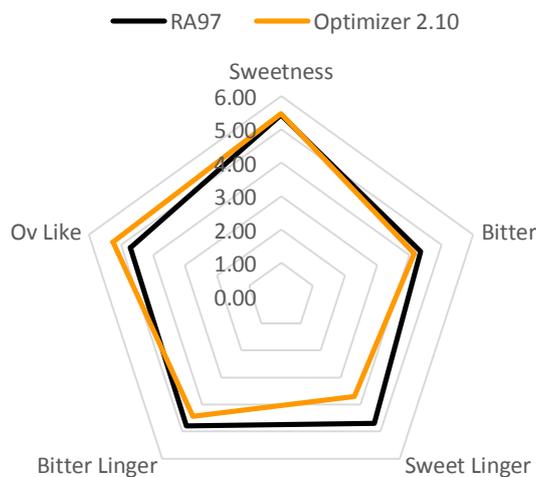
Ethical – packaging is the top positioning followed successively by low calorie, organic, allergy and natural in H1 2016.⁹

Stevia is the pre-eminent natural sweetener observed in the new product activity and will keep its status for years, as it perfectly reflects the top added-values sweetener manufacturers' claim for their products.

Optimizer 2.10 was the winner as compared to RA97 in hot coffee with shortened sweet and bitter linger.¹⁰

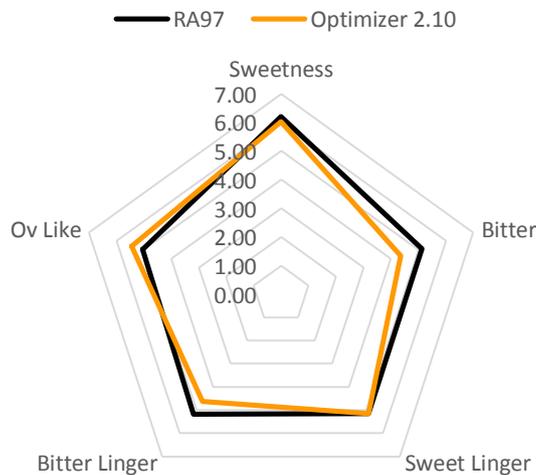


Sensory Comparison of 300ppm Optimizer Stevia Tabletop in Coffee



The hot black tea sweetened with Optimizer 2.10 tasted less bitter than the one using RA97.¹¹

Sensory Comparison of Optimizer Stevia 300ppm Tabletop in Diet Hot Black Tea



Customer Voice

"We are now in commercial production with our new Optimizer tabletop stevia formula and we have received overwhelming positive customer feedback."

Sources:

1. Mintel Reports Sugar and Sweeteners – US, December 2016, Base: 2,000 internet users aged 18+
2. Rachel Arthur , Stevia's star keeps rising: Mintel, Foodnavigator, 18 Mar 2016
3. Stevia Product Launches Are Increasing Dramatically, Global Stevia Institute
4. Global Food and Drink Trends 2017, Mintel
5. Study of US consumer attitudes about carbonated beverages 2017, Innova
6. SGF in-house blind sensory test, 080316_40% RS Strawberry Kiwi
7. SGF in-house blind sensory test, 080316_50% RS Cola
8. SGF in-house blind sensory test, 070616_50% RS Lemon Lime Soda
9. Sugar and sweeteners sub-category report H1 2016, Innova Market Insight
10. SGF in-house blind sensory test, 091216_100% RS Tabletop in Coffee
11. SGF in-house blind sensory test ,092216_100% RS Tabletop in Tea

Tate & Lyle and Sweet Green Fields have partnered together to expand their offerings and their reach, opening the door to possibility for manufacturers around the world.

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