

Pressing the switch from sugar to **sweeteners**



Holistic health and wellness, plant-based ingredients and upcycling spur shift away from sugar and towards sweeteners, writes Natasha Spencer-Jolliffe

Appealing to consumers' love of sweet treats and sugary drinks along with their health and wellness goals and ingredient preferences is dominating new product development in the sweetener space.

HEALTH-BASED SHIFT FROM SUGAR TO SWEETENERS

Commenting on how the current landscape is expected to impact consumer choices, Prakash Dogra, senior vice president of research consultancy, FutureBridge, adds this demand is "set to intensify post-Covid-19".

"As the effects of Covid-19 have unravelled, health has become increasingly important to consumers and many emerging health and wellness trends have quickly gained traction," explains Sam Minardi, global carbohydrates & oilseeds marketing vice president, ADM.

Recent research findings by FMCG Gurus, Evaluating the Uncertainty & Future Outlook of

Covid-19, reveal that 73 per cent of European consumers say they will make greater attempts to stay healthier in the future as a result of the pandemic.

Consumers view sugar reduction as a necessary step towards better health outcomes. ADM's Sam Minardi reveals this is "particularly true in the wake of Covid-19, with FMCG Gurus research predicting that consumers will be looking to reduce their sugar intake in order to improve their health because of the outbreak".

NEW SWEETENER INNOVATIONS

Today, manufacturers have a range of tools at their disposal to reduce sugar with minimal impact on taste. Food manufacturers can access various options, from individual products to kits and concepts to help them produce and package new sweetener offerings. We explore some of the most innovative developments in the sweetener segment in 2020.

• Ingredient Upcycling

A sought-after process for new and healthy sources, ingredient upcycling is using innovative technologies to produce resource-conscious and sustainable sweeteners.

Multiple companies are prioritising ingredient circularity. Comet Biorefining, for example, uses a proprietary conversion technology to transform corn stover, an agricultural residue, into high-purity dextrose sugar. Emphasising how its technology enables sugars to be produced cost competitively with corn or sugar-cane-derived dextrose, it provides an alternative to the conventional raw materials typically used in biochemical production.

• Prioritising Health and Wellness

Current opportunities are focusing on how best to further enhance the health and wellness credentials of products.

“As consumers try to balance mental and emotional health with physical health and weight management, many brands are introducing food and beverages with reduced sugar positionings – allowing for permissible and purposeful indulgence,” reveals Sam Minardi.

Zero-calorie and high-intensity sweeteners are also gaining traction. “The market is flooded with both high-intensity and low-intensity sweeteners such as stevia, monk fruit, sweet proteins such as Miraculin, allulose, xylitol, and various polyols,” outlines Prakash Dogra.

For every new European food or beverage product launched in 2019, 10 per cent carried a sugar- or calorie- reduction claim. In bever-

ages, this number was even higher with 16 per cent of these new products featuring sugar-related claims, Innova Market Insights revealed.

Increased implementation of front of pack labelling schemes, such as Nutri-score or the traffic light system in the UK, is expected to help consumer understanding of product composition, energy and nutrients.

• Pairing Natural with Low-calorie Sweeteners

Sharing insights on the healthiest way consumers can enjoy sugar and sweeteners, Prakash Dogra explains: “Low-calorie natural sweeteners currently are the best available option for consumers.”

However, consumers may have to “shell out a premium price for it”. For example, “stevia is a very effective low-calorie sweetener, but due to its high processing costs, the consumer has to pay a higher price”, adds Dogra.

Safety concerns also exist around low and no calories sweeteners. “Artificial sweeteners have certainly had their reputation tarnished in the past decade with major health concerns surrounding them,” says Dogra. “They have been cited on multiple accounts to act as a carcinogen,” continues Dogra.

Polyols have been a popular choice for manufacturers due to their low cost and reliability in food and beverage products, but have also been “cited to have negative effects”, says Prakash. “Natural sweeteners, such as stevia and monk fruit, are being recommended by nutritionists and dieticians for their healthy and safe use,” confirms Dogra.





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In FutureBridge's recent Sugar Reduction 2020-H1 report, analysts found monk fruit and stevia witnessed a rise in new product launches from 2015 to 2019, at +24 per cent and +14 per cent respectively. “Sweeteners gaining traction are those that food marketers are positioning as natural,” emphasises Prakash Dogra.

“No- or low-calorie sweeteners that are authorised for use are safe and can be an effective tool for adding sweetness to foods without calories,” notes Denise McCarthy, sweetness segment director for Europe, Cargill.

FutureBridge analysts are shining the spotlight on the low carbohydrate functional sweetener, Tagatose. It has a physical bulk similar to sucrose or table sugar and is almost as sweet. However, it is metabolised differently, has a minimal effect on blood glucose and insulin levels, and provides a prebiotic effect, Dogra reveals.

• **Plant-based sweetener demand**

“In the urgency of replacing sugar to avoid sugar taxes, using artificial sweeteners can be

a first step in a longer-term sugar reduction strategy,” says Denise McCarthy. Proprietary research from Cargill suggests 64 per cent of European consumers say they're “extremely” or “very likely” to avoid foods with artificial ingredients. Aspartame, ace-K and sucralose all received negative purchase impact scores.

Cargill's proprietary study found fructose is familiar to most consumers and scores positively in both health perceptions and purchase impact. Stevia is another well-received choice, especially among younger shoppers between 13 to 34 years old). “Stevia is therefore fast becoming a go-to solution as it provides manufacturers a label-friendly zero-calorie option,” says McCarthy.

Plant-based sweeteners continue to rise, especially allulose and next-generation stevia extract are among the sweeteners that hold particularly strong future potential,” enthuses Prakash Dogra.

“Allulose has come under increased demand in recent months as it just passed FDA clearance as a food additive last April,” says Dogra. Even though it's a form of sugar, which naturally occurs in plants like figs or raisins, “it contributes virtually no calories, and the FDA ruled allulose can be excluded from the total and added sugars declarations on the Nutrition Facts panel”, confirms Dogra.

“Consumers want more variety in clean-label, plant-based options across all food and beverage categories, and sweeteners are no exception,” says Sam Minardi.

Based on ADM's OutsideVoiceresearch,

findings show that when seeking reduced sugar options, a preference towards more natural sweeteners is the biggest driver for consumers, followed by 'no added sugar' and 'no artificial sweeteners'.

• Regulation and Reformulation

Consumers are accessing information and relying on health insights to steer their purchasing and consumption decisions.

Information sources range from World Health Organisation (WHO) guidelines and medical advice to social media and news outlets, "with not all of these sources and news scientifically supported", states McCarthy. "Nonetheless, these all impact consumer perception of various sweeteners," adds McCarthy.

"Levies and taxes being imposed in various markets are also having a big impact in creating more awareness with consumers on ingredients and/ or the final food and drink product," says Denise McCarthy.

As Denise reveals how regulatory aspects are "speeding up the trend to reduce sugars", reformulation efforts are gathering pace. "However, reformulation of foods and beverages to reduce levels of calories and/or sugars without sacrificing taste, appearance, textural attributes, nutritional properties and cost while maintaining a label-friendly status is challenging," continues McCarthy.

According to ADM's OutsideVoice consumer

study, nearly 70 per cent of US consumers are concerned about the sugars and sweeteners used in the products they consume.

In a bid to overcome health concerns, labelling regulations are increasingly focused on sugar content.

"This improved transparency results in heightened awareness of alternative sweetening choices, which have become an important point of product differentiation," notes Sam Minardi.

WHAT'S NEXT IN THE SUGAR-TO-SWEETENER STORY?

Looking ahead, "permissible indulgence is a growing trend", Minardi details. "Treats are seen as important for a balanced approach to health and wellness, particularly as consumers face the emotional challenges associated with Covid-19 lockdowns," Sam Minardi relays.

Development is underway for low-calorie sweeteners, particularly in the area of natural sweeteners, which are in high demand. Companies are looking to mimic their production by using microorganisms, which will allow a "reduction in dependency on the natural sources to improve overall sustainability and drive down costs", Prakash shares.

As the sweetener segment evolves, products are anticipated to have the potential to co-exist with a heightened awareness of health, as consumers seek sweet treats that do not necessarily include sugar. 



Sources: Interviews with ADM, Cargill and FutureBridge FMCG Gurus, 'Evaluating the Uncertainty & Future Outlook of COVID-19', April 2020 (from ADM) FMCG Gurus, 'Three Key Food & Beverage Trends Post COVID-19', 1st July 2020 (from ADM)