Recent innovations related to next-gen stevia, new low-calorie sweeteners and taste modulators may elevate the taste profile of low- or no-sugar products.
WHAT CONSUMERS WANT AND WHY

• Consumers are willing to cut down on their sugar intake
• US consumers monitor their sugar intake to help avoid associated health issues
  - Graph 1: reasons why consumers track their sugar consumption, 2022
• Many consumers believe sweetening solutions with an artificial image are bad for health
  - Graph 2: consumer perceptions of specific sugars and sweeteners, July 2022

PRODUCT INNOVATION TRENDS

• Claims linked to sugar reduction are common in categories like sports and energy drinks, juice drinks, baby food and water
  - Graph 3: % of launches with a claim linked to sugar reduction, selected categories where sugar reduction is relevant, 2018-23
• Consider sugars and additive sweeteners with a natural image when reducing sugar in food and drink

THE PATENT LANDSCAPE

• There has been a slight decrease in patent activity related to sugar reduction in the last three years
  - Graph 4: sugar reduction in food and drink related patent families, published each year, 2013-23
• China and the US are leading countries for patent grants related to sugar reduction
• Ingredion Inc is the leading company for patents in the sugar reduction sector
  - Graph 5: top 10 organisations having granted patent families related to sugar reduction, 2023

Look for next-generation stevia

• Tech solutions support the production of commercially viable steviol glycosides
• Consumers show interest in food and drink sweetened with plant-based sweeteners
• Stevia is often used in combination with other sweeteners to avoid aftertaste issues
  - Graph 6: % of stevia-containing food and drink launches that also contain other sweeteners, by super category, 2018-23
• Enzymatically produced steviol glycosides are emerging in launches
• Researchers are innovating recombinant microorganisms that produce stevia with an improved taste profile
• Innovators are using bioconversion techniques to improve the sweetness and aftertaste of stevia
• Patents reveal methods for the production of cost-effective stevia ingredients
Explore sweeteners other than stevia

• There is a need to educate consumers about lesser-known additive sweeteners like allulose
• Low glycemic sweetener launches may help consumers to reduce their sugar consumption
• Replace added sugar with sugar substitutes to reduce health issues
• Researchers are innovating a variety of low-calorie alternatives to refined sugar

Use taste modulators for sugar reduction

• Taste modulators help to address formulation challenges associated with sugar reduction
• Brands and ingredient companies have launched sweet taste modulators
• Innovators are exploring a variety of taste-modulating ingredients to support sugar reduction
• Sweet taste modulators are gaining traction in the food and drink category

THE IMPLICATION

• New production technologies and sweet taste modulators look set to solve the taste challenges of sweeteners such as stevia

APPENDIX

• Research methodology
• Key sweetener-related patent examples
• Key sweetener-related patent examples
• Shape your future with Mintel bespoke patent analysis