



THE INGREDIENT HOLDING IT TOGETHER

Bringing structure, balance, and stability to reduced-sugar formulations



PREBIOTICA™ ORGANIC AGAVE INULIN THE KEYSTONE

Most fiber strategies fall short because they treat fiber like a checkbox instead of a system. In reality, fiber plays multiple roles inside a formulation, influencing texture, sweetness, stability, and digestive tolerance. When it's approached as a single ingredient solution, products often end up thin, unstable, or out of balance.

PreBiotica™ Organic Agave Inulin changes that dynamic.

Unlike many common fibers that serve one primary function, agave inulin works across several critical areas at once. It helps rebuild the structure that sugar normally provides, contributing body, softness, and a more complete mouthfeel without creating gumminess or unwanted thickness. This makes it especially valuable in reduced-sugar formulations where texture and solids are often compromised.

It also plays an important supporting role in sweetness systems. When used alongside high-intensity sweeteners like stevia or monk fruit, agave inulin helps smooth out the sweetness curve, reducing sharpness and filling in the mid-palate. The result is a more natural, rounded taste profile without adding significant sweetness on its own.

From a nutritional standpoint, agave inulin offers additional advantages. As a long-chain prebiotic fiber, it ferments more slowly than shorter-chain alternatives, improving digestive tolerance and supporting more consistent gut health benefits. This makes it a strong fit for products positioned around wellness, metabolic health, or GLP-1 lifestyle support.

Functionally, it performs well across a range of real-world applications, including beverages, baked goods, dairy, and nutrition bars. While it does require thoughtful formulation, particularly in high-acid or high-shear environments, it delivers predictable, reliable results when used correctly.

The real advantage comes when agave inulin is used as part of a broader fiber system. Combined with other functional fibers, it helps create formulations that truly replace sugar's role, not just its sweetness, resulting in better products that perform, taste, and scale more effectively.



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FAST FACTS

1. Rebuilds What Sugar

Used to Do Adds body, softness, and structure—helping replace sugar’s functional role, not just its sweetness.

2. Smooths High-Intensity Sweeteners

Reduces sharpness, fills in the mid-palate, and improves onset and decay in stevia and monk fruit systems.

3. Better Tolerance at Higher Use Levels

Long-chain structure ferments more slowly, supporting gut comfort compared to shorter-chain fibers.

4. Performs Across Real Applications

Works in beverages, baked goods, dairy, and bars with predictable, repeatable results.

5. Stronger Together in Fiber Systems

Acts as a keystone ingredient—enhancing performance when combined with other functional fibers.



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FAQ

1. How does agave inulin’s degree of polymerization (DP) influence functionality and tolerance?

Agave inulin is predominantly long-chain (high DP), which directly impacts both its functional and physiological behavior. Higher DP fractions contribute to improved mouthfeel, water-binding, and solids, without excessive sweetness or rapid breakdown. From a digestive standpoint, longer chains ferment more slowly in the colon, resulting in more controlled SCFA production and improved tolerance compared to shorter-chain FOS, which can ferment rapidly and cause GI distress at lower inclusion levels.

2. What role does agave inulin play in modulating high-intensity sweetener temporal profiles?

Agave inulin functions as a temporal buffer rather than a sweetener. It increases mid-palate density and subtly modifies viscosity, helping bridge the onset and decay gaps commonly associated with stevia and monk fruit. This reduces perceived sharpness, bitterness, and lingering off-notes by altering how sweetness is experienced over time, not by masking in the traditional sense, but by improving the system’s overall sensory continuity.

3. How stable is agave inulin under thermal, shear, and acidic processing conditions?

Agave inulin demonstrates good thermal stability under typical baking conditions but is susceptible to hydrolysis at low pH, particularly with prolonged heat exposure. Shear can reduce molecular weight, thereby affecting viscosity and structural contributions. These are not limitations so much as design parameters. Effective formulation accounts for pH, residence time, and processing intensity to preserve functional performance.

4. How does agave inulin contribute to water activity and shelf-life in baked and bar systems?

Agave inulin binds water and contributes to solids, which can help reduce water activity (a_w) while maintaining softness and preventing excessive hardening over time. In baked goods, it supports moisture retention and crumb tenderness. In bar systems, it contributes to cohesive binding without excessive stickiness, particularly when balanced with polyols or glycerin.

5. Why is agave inulin most effective when used as part of a fiber system rather than a standalone ingredient?

No single fiber replicates the full functional spectrum of sugar. Agave inulin provides structure, mid-palate support, and tolerance, but optimal performance is achieved when combined with complementary fibers. Low-viscosity fibers can provide bulk, hydrocolloids can enhance texture, and specialty fibers can support digestive positioning. Together, these components form a system that replaces sugar’s multiple roles—mechanical, sensory, and metabolic—more completely than any individual ingredient.



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