10 WAYS TO IMPROVE QUALITY OF SUGAR REDUCTION PRODUCTS BY ADDING SOLUBLE CORN FIBER!

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MAKE IT TASTIER BRING IT HEALTHIER KEEP IT LONGER

Resistant dextrin, a soluble fiber produced through an enzymatic process using roasted corn starch, is a game-changer for sugar reduction products. With no color, flavor, or taste, it boasts over 90% fiber and less than 5% sugar.

Resistant dextrin can be used in various sugar-reduced products with its excellent bulking properties and low sugar content while rarely affecting the desired taste. Resistant dextrin enhances dietary fiber content, making the final product appealing to consumers with its nature-friendly name - soluble corn fiber.

Samyang offers Resistant dextrin in powder and syrup forms under the name Fiberest®, catering to customers' needs with customized products and comprehensive solutions. Today, Samyang aims to introduce this versatile ingredient with three aspects in which food and beverage manufacturers can create tastier, healthier, and more stable sugar reduction products.

Make it tastier

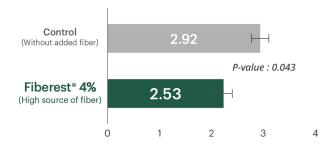
Fiberest® Resistant dextrin maximizes the advantages and complements the disadvantages of the unique taste characteristics of the final product.



Masks the off-taste and off-flavor

After-bitterness

(Sensory evaluation, high score represents higher after-bitterness)

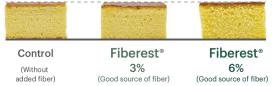


In protein drinks, Fiberest® masks the undesirable taste and flavor of the protein, forming a thin coating film on the tongue to prevent signaling the bitter receptor.

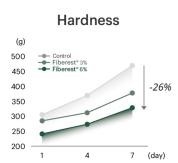


Enhances softness

Appearance

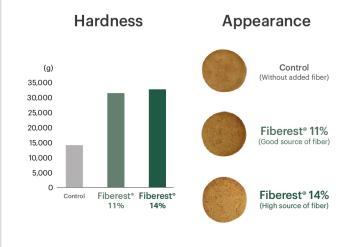


Fiberest® works wonders in sponge cake, elevating its softness and overall presentation. With a remarkable ability to retain water, Fiberest® not only prevents gluten formation but also adds a delightful moistness to the cake.



Cookies

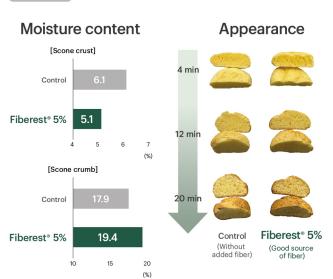
Enhances crispiness



Fiberest® enhances crispiness and achieves a desirable appearance, enhancing both spread and height. Its high degree of polymerization contributes to a firm structure while minimizing gluten formation.

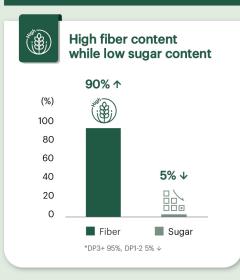


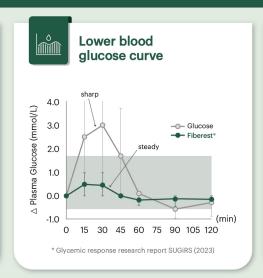
Reinforces crust

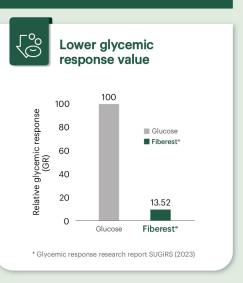


Fiberest® imparts a crispy texture to the scone's outer surface (crust) by influencing a delicate gluten network and enhances moisture within the inside (crumb) with its outstanding water-holding capacity.

Bring it healthier Fiberest® Resistant dextrin enhances the nutritional profile and labeling of the final product.







Keep it longer

Fiberest® Resistant dextrin preserves the integrity of the final product, enabling consumers to enjoy it as intended by manufacturers.



Prevents caking during storage

Appearance

*Storage test - constant temperature & humidity chamber (45°C, 85%)



(Without

added fiber)





6%



12%



Fiberest® 21% (Good source of fiber)

In powdered concentrate, Fiberest® hinders caking by restricting the movement of water molecules to the powder surface, promoting intermolecular forces among them.



Demonstrates exceptional stability

Appearance (9 months of storage)



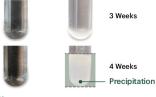
Control



Fiberest®

Cold storage stability

(10 Bx, Storage Temp. 5)



Fiberest® Other soluble fiber in the market

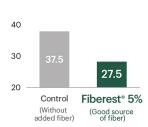
In carbonated drinks, Fiberest® maintains stable physicochemical properties in aqueous solutions, showing no signs of color change or precipitation.



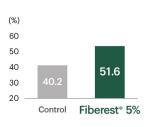
Enhances emulsion stability

Rate of change in TSI values

*Measured by Turbiscan (5°C, 7 days)



Overrun



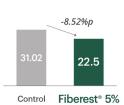
In ice cream, Fiberest® improves emulsion stability by binding with water molecules, forming a water-based network that prevents faglobules' coalescence and provides stability to encapsulate air bubbles.



Prevents water separation

Serum separation

(%, 3 weeks)



(Good source of fiber)

(Without added fiber)



Appearance

In condiments, Fiberest® water-holding capacity effectively inhibits water separation in condiments such as ketchup by retaining the water.

Regulatory status

Fiberest® Resistant dextrin is classified as a source of dietary fiber in compliance with US FDA regulation 21 CFR 101.9(c)(6)(i) and is Generally Recognized as Safe 21CFR184.1444. Fiberest® Resistant dextrin is classified as dietary fiber under COMMISSION DIRECTIVE 2008/100/EC ANNEX II in the EU. With a certain amount of Fiberest® Resistant dextrin added, 'High source of fiber' or 'Good source of fiber' can be claimed on the front-of-package of final products.











