

ARRABINA® CHOCOLATE CASE STUDIES



Bringing Sweet Relief to the Confectionery Category

Reigning in their sweet tooth is a top priority for consumers when it comes to nutrition, but it can be challenging to say no to one's favorite indulgences and comfort foods.

Prebiotic fibers offer a solution to help the candy industry develop great-tasting chocolate with reduced sugar, fewer calories and a functional ingredient boost. By incorporating prebiotic fiber into their products, confectioners can tap into consumers' interest in reducing their sugar intake while also address interest in gut health.

44%

of consumers in 2021 want to try low or sugar-free candy & chocolate.*

which is up from 31% of consumers two years ago.*

50%

of consumers who snack do so to treat themselves, and

35%

of consumers are replacing treat-worthy indulgent snacks with healthy ones.** Arrabina® improves nutrition fact labels by replacing sugar

Nearly

75%

digestive health high on their list of health priorities, with

25%

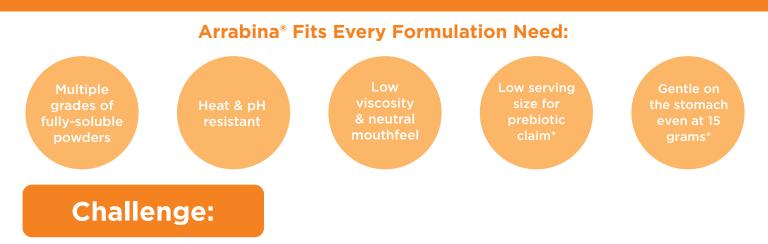
ranking it their number 1 priority.**

*National Confectioner's Association Report, 2022 **Mintel 2022 ***IFIC Survey: Consumer Insights on Gut Health and Probiotics



Arrabina[®] Is Raising The Bar In Chocolate Innovation

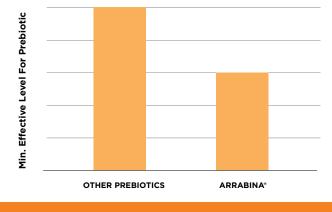
Increasingly, confectioners are turning to prebiotic fibers to reduce added sugar in their products. When combined with bulking agents and high-intensity sweeteners, prebiotic fibers can be used to produce tasty reduced-sugar, and even sugar-free products. Before crossing over into the functional ingredient category, there are important formulation considerations for confectioners to address when choosing a prebiotic fiber.



Prebiotic fibers offer a way to help the candy industry develop great-tasting chocolate with reduced sugar, fewer calories and a functional ingredient boost. Unfortunately, many popular prebiotic fiber options require high inclusion levels to be effective. For example, 5 grams or more is needed of inulin, a commonly used prebiotic fiber sourced derived from chicory root. These higher inclusion rates render many confectionery applications impractical.

Solution:

Arrabina® is easily incorporated into the chocolate process even at a 20% inclusion level. It is highly functional with its low effective level needed for prebiotic claims, complementary color, high solubility, and no grit or gelling effects.



ARRABINA®'S LOW EFFECTIVE LEVEL

Arrabina[®] promotes prebiotic bifidogenesis at:



*Oliver Chen, Traci Blonquist, Kristen Sanoshy, Kathleen Kelley, Eunice Mah, The Effect of Arabinoxylan on Gastrointestinal Tolerance in Generally Healthy Adults: A Randomized, Placebo-Controlled, Crossover Study, >, Volume 5, Issue Supplement_2, June 2021, Page 304.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any diseases.



Sugar Reduction Benefits

The time is now for confectioners to take advantage of the prebiotic fiber opportunity in reducing sugar and expand into the functional foods category.

CONTROL

NutritionFacts2 servings per containerServing size1 Chocolate (14g)	
Amount Per Serving Calories	80
Total Fat 5g	Daily Value* 6%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 5mg	2%
Sodium 10mg	0%
Total Carbohydrate 8g	3%
Dietary Fiber 0g	0%
Total Sugars 7g	
Includes 7g Added Sugars	14%
	2%

•The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.



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Good Source of Fiber



20% Sugar Reduction

12.5% Calorie Reduction 38% Net Carb Reduction

