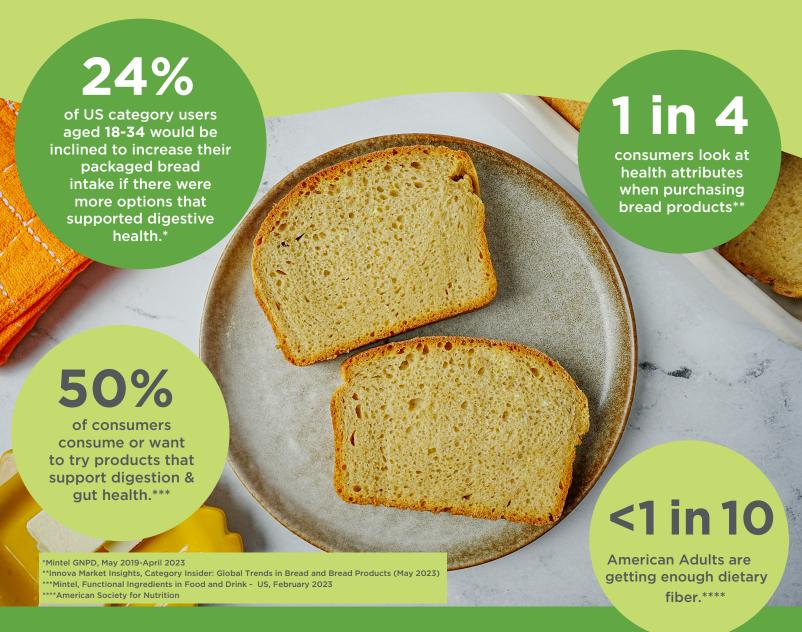


ARRABINA® BREAD CASE STUDY



Consumers Want a Slice of Better-For-You Bread

Today's consumers seek bread that delivers not only great taste and texture but also is nutrient-dense with natural ingredients. Incorporating prebiotic fiber offers an easy way for bread makers to enhance the nutritional value of their products while tapping into the growing functional foods market.







Arrabina Fits Every Formulation Need:

Effective at low inclusion levels*

Fully soluble, light-colored powder

Heat & acid stable

Low viscosity & neutral mouthfeel

Challenge:

Bread is a staple in many diets, enjoyed daily by millions. However, much of the bread available today is heavily processed and contains little to no dietary fiber, leaving consumers searching for healthier options that support their nutritional needs.

Solution:

Arrabina L makes it easy to enhance bread products with prebiotic benefits, delivering better-for-you options without sacrificing flavor, texture or quality. It empowers bakers to create breads that provide digestive health support while maintaining the comforting experience consumers love.

Why Arrabina is The Best Thing Since Sliced Bread:

- ✓ Inclusion rates of 12% or more for bread applications
- ✓ No change in browning, bake time or rise
- Labeled as "wheat fiber extract"
- ✓ Gluten-free
- Good Source of Prebiotic Fiber
- ✓ Gentle on the stomach even at 5 or more servings**

*Damen, et.al., 2012; Chen, et.al., 2021; Walton et al. 2012; Windey et al., 2015, François et al., 2014, Maki et al., 2012, Collins et al., 2023
**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.





Better Nutrition Labels

Arrabina enables powerful claims

Bread with Arrabina L

	(43g) 150 ily Value* 0%
Calories % Dai Total Fat 0g Saturated Fat 0g Trans Fat 0g	ily Value* 0%
Total Fat 0g Saturated Fat 0g Trans Fat 0g	0%
Saturated Fat 0g Trans Fat 0g	
Trans Fat 0g	0%
Cholesterol 0mg	
_	0%
Sodium 180mg	8%
Total Carbohydrate 32g	12%
Dietary Fiber 4g	14%
Total Sugars 4g	
Includes 3g Added Sugars	6%
Protein 5g	
Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 0mg	0%
Potassium 20mg	0%

Potential On-Pack Claims at This Inclusion Level Include:

- ✓ Supports the growth of beneficial bacteria in the gut*
- √ Bifidogenic*
- ✓ NutraStrong™ Prebiotic Verified



- ✓ Supports digestion/digestive health*
- ✓ Supports healthy blood sugar levels**
- ✓ Supports glucose metabolism**
- ✓ Promotes metabolic health**
- √ Modulates metabolic homeostasis**

^{2014,} Maki et al., 2012, Collins et al., 2023
**Hartvigsen et al., 2074a&b, Garcia et al., 2006, Garcia et.al. 2007, Lu et.al., 2000, Lu et.al. 2004, Mbhlig et al., 2005





day is used for general nutrition advice.

^{*}Damen, et.al., 2012; Chen, et.al., 2021; Walton et al. 2012; Windey et al., 2015, François et al., 2014, Maki et al., 2012, Collins et al., 2023