

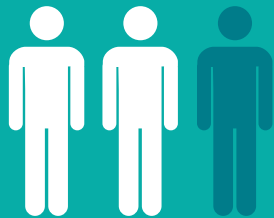


Soluble rice flour:

Cargill's label-friendly alternative to maltodextrin

When it comes to food ingredients, names matter. Today's consumers scrutinize ingredient lists before purchasing new packaged foods and beverages, avoiding products made with unfamiliar ingredients.

It's a marketplace reality that has prompted formulators to rethink tried-and-true ingredients and pushed suppliers to find new solutions. And the latest consumer research suggests that the "clean label" trend will remain entrenched in consumer purchase behavior for years to come.



Two-thirds of consumers say it's important to recognize the ingredients in food, up 5 percentage points in the last year alone.

Source: Cargill proprietary research.

The majority (52%) go a step further, reporting they avoid foods made with unfamiliar ingredients – a measure that's also up from the previous year.¹ But it's not just Cargill research tracking consumers' renewed focus on ingredients. Data from HealthFocus International finds that six in ten (61%) of U.S. shoppers rank recognizable ingredients as a key influence when trying a new food or beverage brand – up 9 points in the last two years.²

Consumers seem especially skeptical of ingredients that offer few clues to their origin, such as maltodextrin. In Cargill's most recent IngredientTracker™ survey, which monitors consumer attitudes toward hundreds of ingredients, maltodextrin has a negative net purchase impact. This isn't a one-year anomaly, which explains why brands have been asking for an easy-to-use, label-friendly alternative. Finding a solution proved difficult – until Cargill researchers perfected SimPure™ soluble rice flour.

"Its familiar name is a win with consumers, and its functional benefits make it a win for food and beverage formulators, too," explains Shannen Bornsen, Cargill commercialization strategy manager. The company's research backs up her sentiment, finding that consumers perceive soluble rice flour as a health-positive ingredient. Testing with U.S. grocery shoppers revealed soluble rice flour delivered a net purchase impact score that was 30 percentage points higher than maltodextrin.

The first-of-its-kind ingredient is also the only label-friendly texturizer to mirror the functionality of 10DE maltodextrin, with similar solubility, viscosity, sensory and bulking agent functionality. As a result, it enables one-to-one substitution in all kinds of applications, including flavor carriers, reduced-sugar cereals and snacks, as well as many reduced-sugar dairy and plant-based dairy alternative products. Cargill's Shiva Elayedath, principal technical account manager for starches, highlights some of the key considerations for each of these applications.

Carrying the flavor load

Maltodextrin has long been the workhorse of the flavor-carrier world, coveted for its high solubility, low viscosity and neutral flavor profile. Elayedath recalls countless conversations with customers who were looking for an alternative, but coming up short on solutions. Then Cargill's research team unveiled soluble rice flour... and Elayedath realized he finally had an answer.

"Soluble rice flour addresses all three needs of a successful flavor carrier," he explains. "It's highly soluble, doesn't develop significant viscosity and can carry flavors in both spray-dried and extruded applications. It's exactly what you need – but in a label-friendly package."

Soluble rice flour even offers an extra perk over the traditional 10DE maltodextrin it replaces, as it can enable some emulsification in the flavor-manufacturing process.

Bulking & binding

Excited by the possibilities, Cargill's application team quickly affirmed soluble rice flour's fit as a bulking agent in reduced-sugar applications. First up: reduced-sugar cereals, granola and bars.

"In these applications, we've traditionally relied on maltodextrin to replace some of sugar's bulk and provide adhesion to hold everything together," Elayedath explains. "We found soluble rice flour could do the same thing, but in a label-friendly way."

Testing with customers confirmed Cargill's internal application work, demonstrating in the real world that soluble rice flour seamlessly replaces 10DE maltodextrin on a one-to-one basis, without impacting formulas, processing or finished products.

Delivering in dairy

Similarly, Cargill identified opportunities in the dairy and plant-based dairy alternative spaces. Maltodextrin is widely used in powdered dairy beverages like hot chocolate and dry latte mixes, where formulators need a highly soluble bulking material that contributes to mouthfeel without impacting texture and flavor. Soluble rice flour is a great choice for these applications, bringing all the functionality of 10DE maltodextrin, with the added benefit of improving the formulation's creaminess.

"It's one of the big functional advantages soluble rice flour has over maltodextrin," Elayedath says. "For brands looking to deliver premium indulgence, soluble rice flour is a valuable addition, as it boosts a product's label and sensory appeal."

Soluble rice flour can also be used in dairy products like reduced-sugar ice cream, where there's a need to replace some of sugar's bulk. Similarly, it works well in reduced-sugar liquid dairy beverages, as well as low-fat dairy and plant-based dairy alternatives, building back missing bulk and bringing extra creaminess to applications known to struggle with mouthfeel.

Cargill's Elayedath acknowledges maltodextrin's long history as a bulking agent and flavor carrier, but says given consumer sentiment, the time has come for an alternative. "Our soluble rice flour encompasses everything brands need in a label-friendly solution," he explains. "It's familiar, functional and easy to use, satisfying consumers' label preferences and food manufacturers' formulation needs."

Learn more about the label-friendly possibilities of Cargill soluble rice flour at [cargill.com](https://www.cargill.com).

References

¹ Cargill IngredientTracker™ proprietary consumer research, 2022.

² HealthFocus International. "Global Trend Study – USA Report," 2022.