

Welcome to *The Kernel*TM, our new industry resource, spotlighting trends, consumer preferences and market opportunities across the dynamic world of grains, flour and pulses. Our goal? Providing your team with the knowledge and insights required to help you elevate your organization's potential, maximize revenue opportunities and gain (or maintain) a competitive advantage.

In this edition, we're returning to ancient and alternative grains to explore how they can work in your applications – and for the environment. Read on to discover how incorporating these products can complement your innovation strategy and drive success today, tomorrow and for years to come.

Applications and Formulations

Alternative grains are incredibly versatile.

The applications for them are vast: baked goods, breads, cereals, mixes, crackers, pastas, bars, pet food and more. Ardent Mills is committed to providing you with the best quality ancient grains that maximize the flavor, texture and nutritional benefits of your products – from whole seeds to flours and blends. One way that brands are leveraging ancient grains is by leaning into gluten-free products, where preserving good taste has proved challenging.

The Rise in Gluten-Free Consumption

Nearly one-quarter of consumers now eat gluten-free by choice rather than necessity.¹

Ancient grains like millet, sorghum, quinoa and amaranth are inherently gluten free², so their inclusion can help you win at shelf by meeting consumer preferences/demands.

However, CPG manufacturers often face challenges when working with gluten-free flours: namely, achieving the same versatility and flavor as traditional flours. Versatility is crucial because it allows manufacturers to maintain existing formulations and processes when substituting gluten-free flour for traditional flour. And good taste is obviously paramount when it comes to capturing consumer appeal.

Alternative grains, thankfully, can be very versatile and a great way to improve the taste of gluten-free products. For example, sorghum is a mild grain that blends well with other flours.

Product Spotlight

Chickpeas & Chickpea Flour

Though technically not grains, these delicious pulses are packed with nutrients that appeal to a variety of diets, including vegan and gluten-free.⁴ As a whole bean, they are used in side dishes, bowls, salads and more. When milled into flour, chickpeas can be incorporated into gluten-free products or stand on their own in products like chickpea pasta. Their versatility and nutrition profile make them a great resource for creating innovative CPG products that appeal to today's health-conscious consumer.

65% of U.S. consumers agree chickpeas should play a bigger role in the daily diet of Americans.⁵



Our research shows that over 50% of U.S. consumers agree that ancient grains like quinoa, teff, sorghum and buckwheat have a positive impact on finished product taste.³

The Sustainability Story

With sustainability becoming increasingly important to consumers, adding more sustainable crops – like chickpeas⁶ or sorghum⁷ – to your product mix can help you take steps to potentially better the planet and further brand loyalty.



of consumers are willing to pay more for brands with a sustainable story⁸

Ancient grains can benefit the planet and your bottom line:



Low Carbon Footprint¹



Higher Yield Per Acre²



More Disease Resistant³

To learn more about the sustainability stories for specific ancient grains, visit <https://www.ardentmills.com/how-we-can-help/sustainability/>

Relevant Certifications

Food certifications continue to evolve, as do consumer expectations. Adding the appropriate certifications to your products gives buyers greater visibility into the origin, traceability and sustainability of what they eat. This added level of transparency can also help build trust and brand loyalty.

Here are a few of the certifications that may be available for your future alternative grain products:

- ✓ USDA Organic
- ✓ Regenerative Organic Certified[®]
- ✓ Non-GMO Project Verified
- ✓ GFCO Gluten-Free Certified
- ✓ WFCF Gluten-Free Certified
- ✓ KOF-K Kosher Certification (Parve)



Conclusion

The versatility of alternative grains means that there are many ways to potentially fit them into your innovation strategy. You need a supplier-partner that can help evaluate where the best opportunities for your business are, whether that means elevating gluten-free offerings or catering to conscious consumers with sustainability stories.

CPG manufacturers are under constant pressure to innovate quickly and stay one step ahead of consumer trends. Ardent Mills Emerging Nutrition, our alternative grain center of expertise, was created to assist your innovations with ancient grains.

Whether you're navigating market opportunities, creating unique formulations or looking to manage costs, our team will help you become a leader in this ever-growing category.

Let's move food forward – together.

Continue the Conversation

¹ Ardent Mills Proprietary Analysis/Research; ² Byzzer/Nielsen (Total FMCG, L52 weeks through March 2, 2024); ³ Technomic (Total Foodservice; Q4 2023)

⁴ "Gluten-Free Ancient Grains," Ardent Mills, accessed June 21, 2024, <https://www.ardentmills.com/products/gluten-free-ancient-grains/>

⁵ Trend to Table™, Ardent Mills Proprietary Research, U.S. Consumers 18; ⁶ 1- includes: Very familiar / know specifics + Somewhat familiar / know some basics of the respective grain

⁷ Whole chickpeas are high in dietary fiber, protein, iron and thiamine (per 90g RACC).

⁸ Ardent Mills Proprietary Research, U.S. Consumers 18+

⁹ "Pulses: Sustainable Foods for a Plant-Forward Future," Ardent Mills, 2023, <https://www.ardentmills.com/media/sslh240/pulse-sustainability-brochure-1.pdf>

¹⁰ "Sorghum: Versatile and Cost-Efficient Ancient Grain," Ardent Mills, 2023, <https://www.ardentmills.com/media/3287/sorghum-information-sheet.pdf>

¹¹ Ardent Mills Proprietary Analysis/Research

¹² "By the Numbers: Growth for Ancient Grains," Ardent Mills, October 24, 2023, <https://www.ardentmills.com/news/by-the-numbers-growth-for-ancient-grains/>

¹³ "By the Numbers: Growth for Ancient Grains," Ardent Mills, October 24, 2023, <https://www.ardentmills.com/news/by-the-numbers-growth-for-ancient-grains/>

¹⁴ S., "The Role of Ancient Grains in Alleviating Hunger and Malnutrition," 2023, Foods, 12(11), 2213. <https://doi.org/10.3390/foods12112213>