

## **Functional Flour - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2026 - 2031)**

Market Report | 2026-01-16 | 130 pages | Mordor Intelligence

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### **Report description:**

Functional Flour Market Analysis

Functional flour market size in 2026 is estimated at USD 81.59 billion, growing from 2025 value of USD 76.12 billion with 2031 projections showing USD 115.43 billion, growing at 7.18% CAGR over 2026-2031. Growing consumer preference for nutrient-dense, clean-label foods and supportive global regulations are accelerating demand. Bakery manufacturers are swiftly replacing conventional wheat with protein-rich blends, while processors leverage advanced milling to create ultra-fine particles that integrate seamlessly into existing lines. Tightening enrichment standards in the United States and streamlined novel-food approvals in the European Union further stimulate reformulation, allowing brands to position products around folic-acid fortification and allergen management. Cereals continue to dominate ingredient sourcing, but the competitive landscape is shifting as legume-based flours attract investors targeting plant-based proteins. Parallel advances in high-moisture extrusion widen application scope in meat alternatives, expanding the functional flour market's reach into fast-growing flexitarian and vegan segments.

Global Functional Flour Market Trends and Insights

Rapid Uptake of Multifunctional Flours in Clean-Label Bakery Reformulations

As consumer demand for transparency and improved nutritional profiles grows, bakery manufacturers are increasingly turning to multifunctional alternatives to replace conventional wheat flour. This movement, known as "clean-label reformulation," highlights

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the industry's focus on ingredient clarity and functional advantages. Studies show that alternative flours like lupin and ancient grains can enhance protein content by 15-25% while preserving texture and flavor. According to industry surveys, 68% of consumers prioritize indulgence in their dietary habits, creating opportunities for premium functional flour applications that combine indulgence with nutrition. Since 2024, bakery manufacturers have identified the economic advantages of clean-label positioning, which can achieve price premiums of 10-20% over traditional products, helping to balance the higher costs of premium ingredients. Additionally, advancements in milling technologies now facilitate the production of ultra-fine functional flour blends that integrate smoothly into existing production systems without requiring significant equipment changes.

#### Demand for Gluten-Free, Protein-Enriched, and Specialty Flours

Specialty functional flours are capitalizing on a significant opportunity by addressing the combined demands for gluten-free options and protein fortification. In India, an estimated 6-8 million individuals are affected by celiac disease, while gluten sensitivity concerns are driving the increased adoption of gluten-free products in developed markets. Protein-enriched formulations are gaining popularity among active lifestyle consumers, with legume-based flours offering complete amino acid profiles that enhance cereal-based products. In Japan, the Ministry of Agriculture, Forestry, and Fisheries has introduced "Non-Gluten" certification standards, requiring gluten content to remain below 1 ppm, thereby creating premium market segments for ultra-pure functional flours. Research highlights that incorporating legume flours can raise protein content by 40-60% while also providing essential micronutrients often missing in gluten-free diets. As food manufacturers strive for global standardization, suppliers who deliver consistent quality and comply with regulations across jurisdictions are increasingly favored in the market.

#### High Cost of Raw Materials and Production

Functional flour manufacturers face significant near-term challenges, primarily due to raw material cost pressures. Prices for specialty grains and legumes have been more volatile compared to traditional wheat markets. Although the US Producer Price Index for flour milling decreased from 262.19 in January 2023 to 218.74 in April 2025, specialty functional ingredients continue to command premiums of 50-100% over conventional alternatives. Producing functional flours involves processing costs that are 25-40% higher than conventional flour, driven by the need for specialized equipment, smaller batch sizes, and complex quality control procedures. Additionally, supply-demand imbalances for certain functional ingredients cause periodic cost spikes, complicating manufacturers' planning and pricing strategies. In China, wheat prices demonstrated volatility, with procurement prices in major production areas declining by 2-4% despite drought impacts. To address these challenges, manufacturers are implementing strategies such as vertical integration, establishing long-term supplier contracts, and improving processing efficiencies to reduce cost pressures while maintaining product quality and availability.

Other drivers and restraints analyzed in the detailed report include:

Technological Advancements in Processing and Milling  
Regulatory Support and Food Safety Standards  
Supply Chain Volatility and Limited Scalability

For complete list of drivers and restraints, kindly check the Table Of Contents.

#### Segment Analysis

Cereals retained a 62.98% functional flour market share in 2025 thanks to ingrained consumer familiarity, broad agronomic availability, and well-capitalized milling networks. Wheat-based functional flour market size leadership benefits from folic-acid fortification mandates that elevate nutrient profiles without altering sensory cues. Oats and barley continue to gain traction as processors capitalize on soluble fiber to address heart-health concerns. Quinoa, buckwheat, and amaranth lines fetch premium

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margins in gluten-free bread, though supply tightness caps volume expansion. Rice flour's growth in Japan aligns with the 1 ppm "Non-Gluten" threshold, unlocking institutional demand for school lunches and clinical nutrition products, according to the Ministry of Agriculture, Forestry and Fisheries.

Legumes represent the fastest-growing source, advancing at a 8.74% CAGR through 2031 on the back of escalating protein fortification. Pea flour anchors many plant-based meat and dairy analogues, while chickpea's emulsifying capacity solves spreadability constraints in gluten-free dough. Research programs such as Fraunhofer's LeguFoam demonstrate pea proteins' ability to replicate egg aeration, unlocking cakes and muffins previously dependent on animal inputs. However, beany off-notes and allergen labeling requirements remain hurdles that R&D teams address through enzymatic treatment and flavor-masking strategies.

The Functional Flour Market Report is Segmented by Source (Cereals Including Rye, Buckwheat, Oats, Barley, Quinoa, and Others; Legumes Including Pea, Lentil, Soybean, and Others), Application (Bakery and Confectionery, Savory Snacks, Soups and Sauces, Ready To Eat Products, Baby Food, Meat Alternatives, and Other Applications), and Geography. The Market Forecasts are Provided in Terms of Value (USD Billion).

### Geography Analysis

North America commanded 33.22% of the functional flour market share in 2025, underpinned by world-class milling assets, proactive FDA policies, and consumer appetite for better-for-you foods. Ardent Mills has expanded innovation centers to accelerate alt-grain prototyping, while Grain Craft's acquisition of Bunge's dry-corn assets adds critical masa and tortilla capabilities. Canadian output, forecast at 34.3 million tonnes in 2025, secures wheat inputs for regional functional flour supply chains.

Asia Pacific delivers the fastest expansion, set to log a 8.79% CAGR as rising incomes intersect with nutrition-security initiatives. China's decade-long plan to raise whole-grain intake aligns with a burgeoning middle class eager for gut-health and protein benefits. Japanese "Non-Gluten" certification distinguishes premium rice and sorghum flours, while India's sizable celiac cohort underpins escalating demand for certified gluten-free staples. In Southeast Asia, Indonesia's Bogasari mega-mill integrates chickpea and mung-bean lines to serve fortified instant-noodle markets, underscoring how large-scale processors can pivot toward functional flour products.

Europe remains a sophisticated, regulation-driven arena where novel-food authorizations and contaminant thresholds dictate product formulation. German bakeries pioneer spelt-based high-protein pretzels, leveraging consumer nostalgia alongside functional credentials. Spain's startup-led approach to enzymatically detoxified wheat flour offers celiac-safe options without forsaking wheat's baking performance. Ongoing sustainability mandates encourage regenerative farming, dovetailing with ADM and Ooni Pizza Ovens' collaboration on low-input wheats for artisanal doughs.

### List of Companies Covered in this Report:

Cargill, Inc. Archer Daniels Midland Company Associated British Foods plc Ingredion Incorporated Bunge Limited Parrish & Heimbecker Limited Sudzucker AG (AGRANA) The Scoular Company GEMEF Industries The Caremoli Group Ulrick & Short General Mills, Inc. Ardent Mills Bay State Milling Company Limagrains Ingredients GrainCorp Limited Wilmar International Limited SunOpta Inc. Bob's Red Mill Natural Foods Muhlenchemie GmbH MGP Ingredients Inc.

### Additional Benefits:

<ul> The market estimate (ME) sheet in Excel format

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Information, Market Rank/Share, Products & Services, Recent Developments)

7.4.1 Cargill, Inc.

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