



ROOM TO GROW:

Reigniting success
in the plant-based space

For most of the past decade, the plant-based market enjoyed a steady rise. Fueled by the emergence of flexitarian eaters, plant-based meat and dairy alternatives found a consumer base eager to give the new products a try.

The COVID pandemic – and its corresponding uptick in at-home eating – provided plant-based products with another boost. But when shoppers returned to pre-pandemic eating habits in 2023, both the plant-based meat and dairy-alternative segments encountered headwinds as inflationary pressures and weakening consumer engagement slowed category sales.

“Over the last 18 months, there’s been a pull-back as consumers regroup, but don’t write off the plant-based segment yet,” says Mark Fahlin, Category Marketing Manager for Health & Nutrition/Dairy, Cargill. “These products have a lot to offer; the challenge we face as an industry is how to fill in the gaps around taste and texture, nutrition and value. Solve that trifecta of needs, and we’ll have products that consumers come back to again and again.”

Meeting consumer expectations

It’s a puzzle worth solving. Despite the recent slowdown, the plant-based market remains a sizeable prize. Data from the Good Food Institute and SPINS pegged the plant-based meat and seafood segment at \$1.2 billion in 2023; the more-established, plant-based milk category was even larger, at \$2.9 billion. Still, current sales numbers suggest that the plant-based meat and dairy segments aren’t always earning repeat purchase.¹

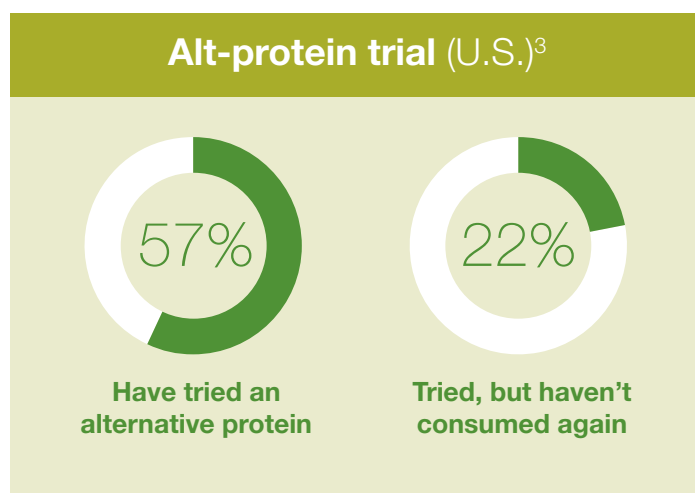
“That doesn’t mean consumers are turned off forever,” Fahlin says. “All this tells us is that we have work to do. For this category to reach its potential, we must improve the eating and drinking experience and create products that consumers truly crave.”

This is especially true in the less-established, plant-based meat segment. While plant-based milks enjoy a 44% household penetration and account for 10% of all fluid milk sold, a much-smaller portion – just 15% – purchased meat alternatives in 2023.²

Fortunately, rapid technological advances appear poised to reignite consumer engagement in plant-based eating. On the ingredients side, improvements in protein extraction and processing, along with next-generation specialty fats and oils, are bringing new functionality and improved sensory performance to the marketplace.

For example, Cargill, through its partnership with PURIS,[®] offers textured pea proteins that boast neutral flavor profiles and create a greater range of textures. Included in the product lineup are options with 85% less sodium, helping to address what was historically a key nutritional concern with early plant-based meat-alternative options. Other advances, from improved extrusion equipment to fermented mycoproteins and 3D printing, will enable further gains.

“There may be many meat-alternative products on store shelves, but they’re not all best-in-class,” Fahlin notes. “That’s where Cargill can help – bringing all these technologies together and offering comprehensive solutions so our customers can improve the taste, texture, eating experience and nutritional value of the products they bring to market.”



Powering sales with protein

While the plant-based, meat-alternative segment remains a sliver of the multi-billion-dollar protein category, over the last decade, plant-based dairy alts have achieved true mainstream appeal. “Consumers aren’t just trialing these products,” Fahlin says, “they are part of many people’s lives.”

Yet despite their history and household penetration, plant-based milk alternatives are weathering their first dip in sales in a quarter century. Fahlin says inflation provides a partial explanation, but he believes a key to unlocking the category may lie in improved nutritional profiles.

“On the traditional dairy side, some of the biggest growth is happening with lactose-free and high-protein, ultra-filtered milks,” he explains. “Consumers are paying a premium for those products, so it’s not just pricing that’s holding the plant-based segment back.”

Cargill research affirms that high protein is the on-pack claim with the greatest impact on purchase intent.⁴ Yet, the nutrient is often in short supply in many dairy-alternative formulations. A typical plant-based milk has just 1 to 2 grams of protein, while conventional milk offers 8 grams and designer milks have 20 grams or

more. The protein differential stems from the solubility and flavor limitations traditionally associated with plant proteins, but improved options like PURIS 2.0 pea protein have removed those barriers.

Developed specifically for beverages, PURIS 2.0 offers enhanced solubility compared to most other pea protein options. As a result, it can be used at higher concentrations without diminishing product quality, paving the way for protein-fortified beverages with significantly higher protein levels.

“We’ve had customers aim for as much as 30 grams of protein per serving in a plant-based, sports nutrition beverage,” Fahlin explains. “Most plant proteins will struggle to hit those levels, but PURIS 2.0 lets us go much higher, thanks to its improved solubility and flavor profile.”

Up next, Fahlin is anxious to see how whey and casein proteins produced through precision fermentation could open even more doors to innovation. “We’re on the cusp of ‘next-world’ dairy alternative products, as precision fermentation brings functionality that current plant-based ingredients just can’t achieve,” he says. “Imagine cheese – made without cows – that can deliver the melt, stretch and bite we all love. That’s the promise and potential of precision fermentation.”

Most impactful claims for plant-based dairy alternatives

- 1 Good source of protein
- 2 Heart-healthy
- 3 Supports immune health
- 4 Good source of fiber
- 5 No artificial ingredients



Imagining the future

Today's plant-based burgers and oat-based beverages are just a hint at what's to come, as new technologies and innovations bring tastier plant-based products to more people. Uniquely reimagined ingredients, from plant-based and fermented proteins to specialty fats, will help create the flavors, textures and tastes that people love.

What they won't do, says Fahlin, is replace traditional animal-based options. "This isn't an either/or proposition – consumers love choices, and there's room for all kinds of proteins," he explains. "But to earn repeat purchase – whatever the protein source – products need to taste great, provide an appealing eating experience and deliver value. Get those pieces right and everything else will fall into place."



Cultivate plant-based opportunities
with Cargill innovation.



PURIS® Pea Protein is a trademark of PURIS Foods, a Cargill strategic partner.

SOURCES:

¹ Good Food Institute/SPINS. "State of the Industry Report. Plant-Based: Meat, Seafood, Eggs and Dairy." 2023. Available at <https://gfi.org/marketresearch/>

² Ibid.

³ International Food Information Council (IFIC). "Innovations in Alternative Proteins: Understanding the Viewpoints and Purchasing Behaviors of U.S. Meat Eaters." June 2023.

⁴ Cargill proprietary research, 2023.