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Consumer Interest in Plant-Based Meats Fades Amid High Prices and Product Shortcomings

Key Points:

- Sales of plant-based meats are struggling as consumers turn to lower-cost and familiar proteins amid higher prices.
- Competition is growing for plant-based meats, both within its own category as well as from cell-cultivated and traditionally raised animal proteins. This competition is leading to below-target results for brands such as Beyond Meat, as well as some attrition among category participants.
- Category messaging has shifted from a “better for you” promise to more of an environmentally friendly assurance, both at retail and foodservice outlets.
- Negative consumer perceptions of plant-based meats persist, particularly in terms of affordability, flavor/mouthfeel and versatility.
- Interest in more flexitarian eating styles should benefit plant-based foods in general.



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Introduction

The market for plant-based meats – plant-based alternatives to red meat, poultry and seafood animal proteins – faces something of a tipping point. After peaking in 2020, sales are slipping.

Volume sales for meat alternatives dropped 20.9% for the 52 weeks ending July 2, 2023 (*Exhibit 1*), according to consumer behavior research firm Circana (formerly IRI and NPD). Dollar sales are showing the same kind of drop: Circana’s CPG Demand Index shows meat alternative sales in 2023 have sunk to just 80% of what they were in 2022 (*Exhibit 2*).

Even data that includes regional natural/organic grocers from last year indicates plant-based meat sales were softening. Data provided by the wellness-focused data technology company SPINS to the Plant Based Foods Association (PBFA) shows a plateau of dollar sales in multi-outlet retail supermarkets and natural food stores of plant-based meat. In 2022, sales settled at \$1.37 billion for these two channels combined following 2020’s heights (*Exhibit 3*). (SPINS data includes natural/organic grocers while the Circana data does not; according to SPINS, plant-based meat’s market share is considerable in the natural channel, where it stands at 15%, compared with its 2.5% share of total marketplace packaged plant-based meat dollar sales).

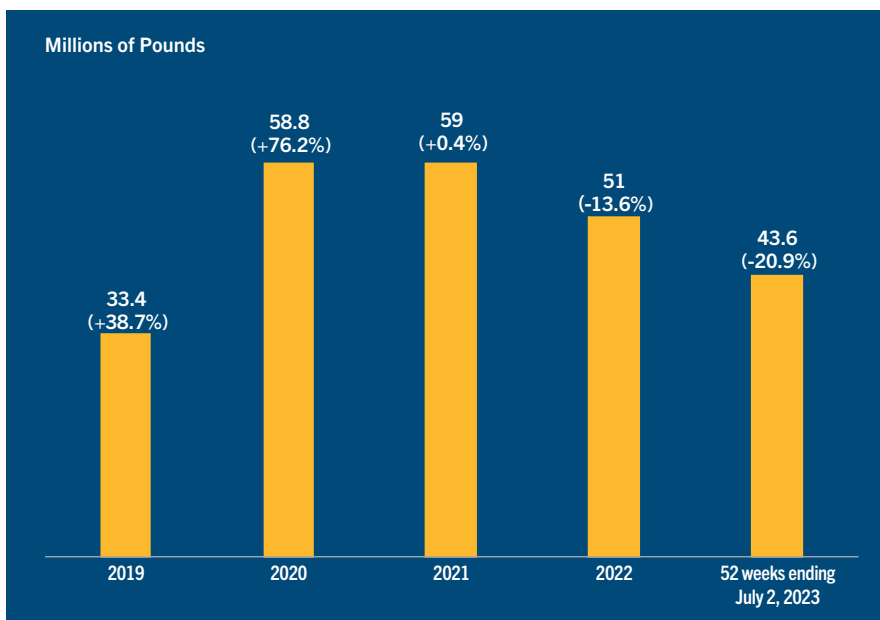


EXHIBIT 1: Year-over-year change in sales volume of refrigerated alternative meat

Consumers remain interested in the concept of plant-based meats, but concerns about highly processed products and higher prices have put off many prospective regular consumers, particularly as the price of plant-based meats is often several dollars a pound higher than for equivalent animal protein meat and poultry products. Through June 2023, Circana notes the average price per pound of refrigerated plant-based meats was \$8.40, up 2.7% from the year-earlier period. For animal proteins, USDA expects for all of 2023 prices of beef and veal to increase 0.7%, poultry to grow 3.1%, and pork actually to drop 2.5%.

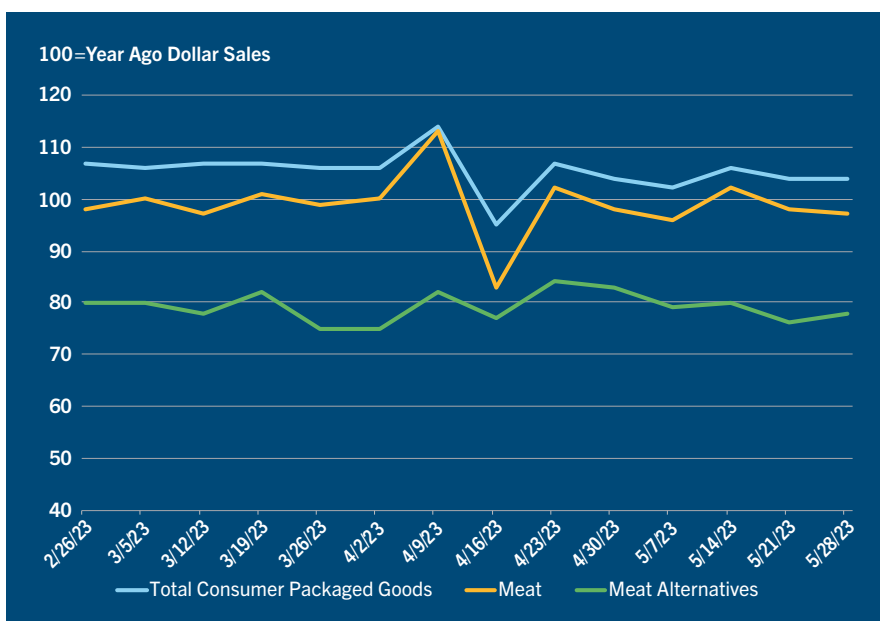
Inflation plays a pronounced role in declining sales of plant-based meats, for a pair of reasons. Consumers generally gravitate toward familiar foods during times of economic uncertainty, presenting a sizable hurdle to trial. Compounding matters for this category, consumers have long perceived plant-based meats as a poor value relative to other proteins. Even though more-affluent consumers tend to be the core purchasers of these products, it is not enough to maintain sales growth. To regain their footing, plant-based brands need to expand and diversify and, indeed, solidify their consumer base.

With cell-cultivated meats gaining USDA approval, the market for alternatives to traditionally raised meat grows more crowded. Sales of plant-based meats has reached a degree of maturity, particularly as its era of initial consumer trial appears to



Source: Circana, Integrated Fresh, Total US, MULO

EXHIBIT 2: CPG Demand Index™ for total consumer packaged goods, meat and meat alternatives



Source: Circana Total Store View (TSV)

Note: Circana's CPG Demand Index™ provides a standard metric for tracking changes in spending on consumer packaged goods. It measures weekly changes in consumer purchases, by dollar sales, against the year-ago period (indexed as 100). Dollar sales of meat are roughly on par (100) with their performance week-to-week in 2022, aside from a notable drop in mid-April. However, dollar sales of meat alternatives are only about 80% of their 2022 weekly totals.

EXHIBIT 3: Plant-based meat sales, 2019-2022



Source: SPINS Conventional Multi Outlet Channel, SPINS Natural Enhanced Channel (powered by Circana, formerly IRI and NPD)/52 weeks ending January 1, 2023

have come and gone. Plant-based foods, overall, should benefit from more flexitarian eating behaviors among consumers, but plant-based meats specifically will likely be a small component of those efforts. Barring significant innovation that attracts those flexitarian consumers, sales growth in plant-based meats has plateaued.

Opportunity in flexitarianism

Put simply, aside from category devotees, plant-based alternatives to meat are occasional purchases rather than household staples, according to a recent study from market research firm Numerator.

Numerator finds one in two U.S. households buy plant-based foods of one form or another, with 98% of those who buy plant-based protein alternatives also buying animal meat. Furthermore, per Food Institute research, many consumers no longer strictly follow a specific diet, such as paleo or vegetarian. Instead, they are opting to pick and choose what suits them as “flexitarians.” This suggests opportunity for brands to position plant-based products to non-vegetarian demographics, which widens

the potential audience considerably.

Negative perceptions linger

Broadening the appeal of plant-based options, however, will require brands to overcome lingering negative perceptions, particularly of taste, value and versatility. According to SPINS data, the peak in plant-based meat sales in 2020 stemmed from a combination of factors: consumer interest in trying the products coupled with greater discretionary income, as well as curiosity about broadening their food spend in the wake of food product shortages. Yet, fewer than half of Americans who tried the products at the time repeated their

purchase, according to global market and research agency Mintel. Whatever the reason for purchase, plant-based offerings appear to have fallen short in terms of either cost or performance.

Companies can address cost issues by building greater economies of scale and minimizing supply chain and freight expenses. Innovation around taste and mouthfeel, on the other hand, appears essential for capturing more mass-market consumers. A recent study published in *Food Quality and Preference* found that even loyal consumers of plant-based beef and chicken aren't entirely satisfied with mouthfeel and flavor.

Drivers behind plant-based meat purchasing

Consumers consistently cite health as a top reason for purchasing plant-based offerings, per 84.51%, a research and insights firm (and unit of The Kroger Co.). Nevertheless, shoppers who initially sought plant-based meats thinking these were healthier options would later voice doubts relative to the actual healthfulness of the products, specifically pointing to the typically complex



refrigerated options (combining for 97% market share), category participants have thrown considerable investment into shelf-stable varieties (plant-based versions of tuna, chicken, ham, etc.). Sales of shelf-stable meat alternatives grew by 82.6% in calendar year 2022 alone to become a \$40 million segment, double the sales of 2021. This growth helped to offset some of the declines in refrigerated plant-based foods, per PBFA. Shelf-stable products still comprise a tiny portion of the market, but can be pitched as quick meal and snack solutions that are easy to prepare/clean-up and have an extended shelf life.

ingredient legend. Consumers tend to equate natural with healthy, yet plant-based concoctions feature an extensive list of ingredients, certainly relative to animal-based proteins.

In addition, plant-based versions still fall somewhat shy of the goal of replicating animal proteins. Indeed, this rapid growth of options has resulted in a crowded plant-based marketplace. The PBFA reports the total number of plant-based meat products grew by 5.1% over calendar year 2022, even as overall category sales faltered.

Some of that change may simply be the market settling into a period of a more normal growth pattern/trend. Many interested consumers have experienced plant-based products, and the novelty is likely gone. Early exponential growth seen in the category may have led some brands to unrealistic expectations about how many consumers would permanently convert even a portion of their diet to plant-based items.

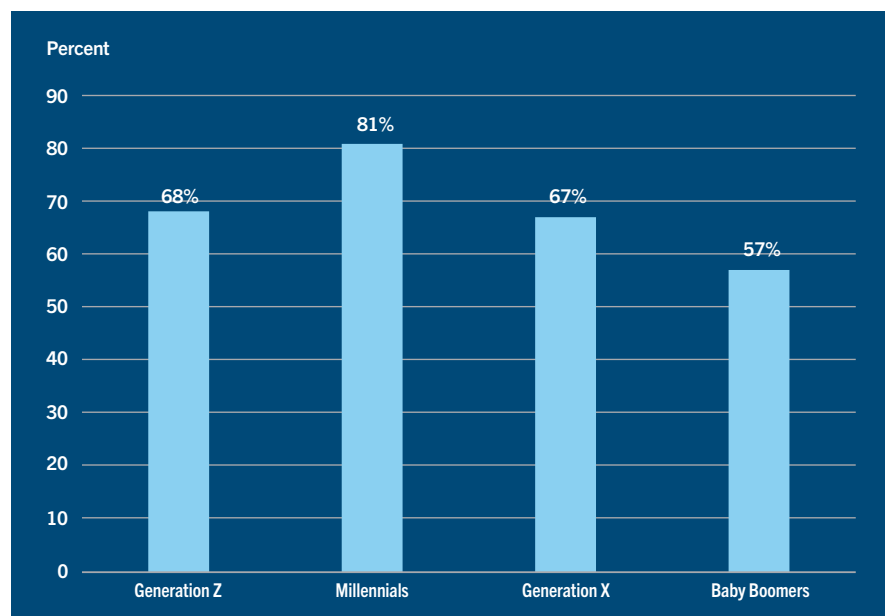
Key to a higher consumer conversion rate will clearly be a greater diversity of formats for plant-based meats, an area where the category has made some progress over the past year. Though still dominated by frozen and

The pivot to sustainable messaging

Companies are positioning plant-based products not only for consumers interested in occasionally reducing their meat consumption, but as a solution for consumers who want to reduce their carbon footprints. Indeed, brand messaging of late and particularly on display at recent industry events has focused on the sustainable, planet-friendly promise of plant-based meats, much more so than on better-for-you (BFY) benefits. Indeed, the 2023 National Restaurant Association Show had dozens of plant-based meat solutions on display, yet overwhelmingly, the message around the products was much more of a climate-friendly sustainable promise than one of health.

The United Nations Environment Programme report notes animal products require more resources and cause higher emissions than plant-based options, a finding also borne out by a recent University of Illinois study on estimated farmland use associated with beef, pork, poultry, and soy food production. That study found that pound-for-pound, beef takes 14.2 times more farmland to produce than plant-based meat and pork takes 1.7 times more, while chicken takes slightly less than plant-based meat (96% to produce a pound).

EXHIBIT 4: Have tried plant-based foods



Source: Saputo Dairy USA's Vitalite Veganuary Survey, January 2023

The plant-based consumer profile

Due in no small part to the typical price point, consumers of plant-based meats tend to be from higher-income households. Cost likely also keeps the category's household penetration in the range of roughly 10%. Growing the category will demand new products and technologies that can both diversify category offerings and scale-up existing product lines to reduce cost and appeal to consumers across income demographics.

That said, the plant-based consumer tends to skew younger (*Exhibit 4*). Foodservice provider Sodexo finds 81% of college students choose a plant-based offering when it is the default option. Sodexo reasons that using plant-based as the default can help foster a further positive attitude toward a vegan meal and, furthermore, that normalizing plant-based foods could make these options even more popular among GenZ-aged consumers. However, while the environmental and BFY benefits of plant-based solutions play a role, the key to plant-based success will be speed, convenience, cost and familiarity. The options presented during the Sodexo trials came at no additional cost and required no special

time for preparation. In fact, quite the opposite: The animal-based selection would have required more time to order and prepare.

The wider dedicated plant-based consumer base has a general satisfaction with most plant-based products, per the *Food Quality and Preference* study, but there remains a sensory gap between plant- and animal-based foods. Even plant-based beef and chicken consumers indicate a desire for a meatier, more umami flavor, possible through seasonings such as nutritional yeast. Issues related to texture and tenderness are likely to be addressed through different types and combinations of plant-based proteins

and fat. Nevertheless, there remain definite gaps between consumers' experience with currently available plant-based options (whether it's alternatives to chicken, beef, cheese, etc.) and their ideal plant-based version.

The plant-based field is crowded

Brands strongly associated with the rapid rise of plant-based meat have faced the challenge of the category's downturn. Profitability, particularly for brands solely focused on plant-based meat, remains more of a goal than a reality for many. Beyond Meat, for example, saw its gross margins improve in the first quarter of 2023, but the company still faces challenges due to weak demand and lack of pricing power. Beyond Meat's distribution has largely maxed out in the U.S., and volume sales have slipped considerably.

In addition, a number of animal protein companies are interested, if not already invested, in the plant-based space. JBS introduced a plant-based version of a burger in 2019 and followed that up a year later with the launch of plant protein brand Ozo under its subsidiary Planterra Foods, an entity that has since folded as the company

“focused its plant-based operations in Brazil and Europe.” Tyson Foods has plant-based breakfast patties under its Jimmy Dean brand (launched in 2021), while Kraft Heinz, ConAgra and Kellogg already have a notable plant-based presence. This is formidable competition for new entrants, particularly as growth has slowed and resulted in a crowded category that simultaneously needs innovation to meet consumer expectations regarding taste and mouthfeel but that is also so crowded that consolidation is all but a certainty. Even cell-cultivated animal proteins have taken some of the limelight – and investment from the likes of Tyson – away from plant-based meats.

Conclusion and outlook

Innovation in plant-based proteins will focus on replacing highly processed varieties with healthier alternatives; better aligning the assortment of plant-based meats in supermarkets; and distributing with a focus on core locations of interest: more in urban, younger-focused stores, less in areas where demand lags. Competition and scaling up will reduce prices for plant-based meats, though not enough to achieve parity with animal-based proteins. Nevertheless, lower price points and quality improvements in the category will resonate with the considerable portion of consumers interested in a more flexitarian approach to eating, whether due to climate concerns or an interest in health. These consumers will not abandon animal-based meats entirely but augment their diets with plant-based options as occasions warrant and the products can meet their needs. ■

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