NECTAR | March 2026

Taste of the Industry 2026

A Sensory Analysis of Dairy-Free Products

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Foreword

Dairy is everywhere. It's in your morning latte, your lunchtime sandwich, and the ice cream cone that makes a perfect summer day. From the cheese pull on a late-night slice of pizza to the butter that makes croissants flaky, **dairy products have shaped how we eat, how we celebrate, and how we comfort ourselves**. Projected to reach $1.2 trillion by 2030,[1] the dairy industry supplies products for every meal occasion and every stage of life. These aren't just foods; they're tradition, and for many of us, nostalgia.

Yet this ubiquity comes at a cost. Dairy products are some of the most carbon-intensive foods (a kilogram of cheese generates 21 kg of CO_2 equivalents, on average).[2] The dairy industry is among agriculture's largest contributors to greenhouse gas emissions, accounting for roughly 4% of all anthropogenic emissions.[3] Manure, pharmaceutical residues like antibiotics and hormones, fertilizers, and pesticides from dairy farms are major sources of water pollution.[4] Additionally, an estimated 68% of the global population experiences some degree of lactose malabsorption,[5] making dairy inaccessible to billions.

But here's the good news: dairy is being disrupted, and the alternatives are only getting better. The global dairy-free market, valued at approximately $32.8 billion in 2024, is forecasted to reach $66.9 billion by 2030,[6] projecting meaningful consumer adoption. Plant-based milk has achieved particularly significant market penetration already, capturing 14-15% of total milk sales in the United States.[7] We're witnessing this shift in real time. In May 2022, Blue Bottle Coffee made oat milk the default option across all U.S. locations,[8] and in November 2024, Starbucks eliminated surcharges for dairy-free milk options nationwide.[9] Ben & Jerry's reports that their non-dairy line now represents 25% of their global portfolio.[10]

Still, industry consensus is clear: not all dairy alternatives have the necessary sensory profile for mainstream adoption. Dairy-free cheeses in particular have substantial ground to cover; they don't melt properly, don't stretch, and often substitute starch for protein. Mozzarella, the largest category of cheese sold globally,[11] remains dairy-free's toughest challenge.

This is precisely why NECTAR turned its attention to dairy alternatives for 2026. We wanted to understand where the category is succeeding, where it's falling short, and what opportunities exist for meaningful sensory improvement.

Taste of the Industry 2026 represents the most comprehensive public sensory analysis of dairy alternatives to date. Through blind taste tests with thousands of omnivores and rigorous comparative methodology, **NECTAR objectively evaluated dairy-free product performance against conventional counterparts across ten categories**. In dairy categories that emphasize flavor and performance, like barista milk and creamers, our findings indicate that consumers increasingly choose dairy-free options because they prefer them—not because they settle for them.

However, while this report illuminates remarkable progress, it also highlights untapped potential. **The next generation of dairy-free products must deliver more:** more flavor, better texture and appearance, improved nutrition, and the environmental benefits consumers increasingly value. This report exists to catalyze the next wave of breakthrough products that excel where it matters most.

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Survey Overview

Our Approach

Taste of the Industry 2026: A Sensory Analysis of Dairy-Free Products is NECTAR's first evaluation of dairy alternatives and the **largest publicly-available sensory study of dairy-free products** conducted to-date.

NECTAR, a non-profit research initiative of the philanthropy Food System Innovations, leverages large-scale sensory data to improve the taste of sustainable protein products and accelerate their market adoption. Through rigorous, blind sensory testing with omnivore consumers, NECTAR provides the industry with transparent, actionable insights grounded in empirical sensory performance data.

For this study, we evaluated **98 commercialized dairy-free products** across **10 categories** with **2,183 omnivore and flexitarian consumers** in San Francisco and New York City. Our product selection spanned the U.S. market: from established brands with nationwide distribution to emerging companies pioneering novel ingredients and processing techniques. This approach captures both current market dynamics and the frontiers of category innovation.

A critical methodological distinction of this research is that products were tested in application-based contexts that mirror real-world consumption. Barista milk was evaluated in coffee, cream cheese on bagels, and mozzarella cheese on pizza. Using blind consumer panels and conventional dairy benchmarking, we assessed how dairy-free products perform in these familiar applications against their conventional counterparts.

Building on NECTAR's previous research evaluating plant-based meat alternatives, we were eager to understand how dairy alternatives compare. The **results reveal which categories are already competitive with conventional products, where formulation breakthroughs are needed, and which sensory attributes drive consumer acceptance.**

Whether you're developing products, making purchasing decisions, or allocating R&D resources, this report provides a clear roadmap for advancing the dairy-free category.

If you have any questions or would like to discuss potential research areas for collaboration, please reach out to explore partnership opportunities at contact@nectar.org.

Suggested Citation: NECTAR. *Taste of the Industry 2026: A Sensory Analysis of Dairy-Free Products*. Food System Innovations, 2026.

Executive Summary

Insights and Recommendations for Dairy-Free Products

Top Performers

Taste parity is achievable and many categories have competitive sensory performance

Many dairy-free products are already worth celebrating

- 27 products are recognized as TASTY Award winners, roughly 25% of the products tested

Taste parity is becoming a reality across multiple categories

- Califia Farms Oat Barista Blend attained taste parity with Horizon Whole Milk, defined as a >50% likelihood that Califia would be preferred on a future test
- There was no statistically significant difference in overall liking between the dairy benchmark and three additional dairy-free products

Dairy-free barista milk, creamer, and milk can compete with dairy on taste

- Dairy-free leaders in these categories were within 0.2pts of the benchmark on overall liking

Performance Gaps

Taste improvements are needed, worthwhile, and achievable

R&D is still needed for most dairy-free products

- The average dairy-free product was rated 'like very much' or 'like' by just 33% of participants, compared to 63% for the dairy benchmark

R&D breakthroughs needed in mozzarella, yogurt, butter, ice cream, and cheddar

- The gap in liking between the dairy-free leader and the dairy benchmark was at least 0.5pts

Taste improvements drive large financial returns

- Improving taste was strongly correlated to higher market penetration ($p<0.05$)
- Milk, the best-tasting category, has 15× higher market share than cheese, the worst-tasting category

Improvements in taste are clearly attainable

- Across all categories dairy-free leaders were rated 0.8pts higher than the dairy-free average

R&D Roadmap

Innovation should first focus on flavor, followed by texture and appearance

R&D efforts should prioritize flavor

- Compared to texture and appearance, flavor ratings were the lowest and mentioned 2-4× more frequently as a 'dislike' in free-form responses

Improvement opportunities vary by category with several consistent themes

- Enhancing richness and minimizing off-flavors / off-aftertastes will have the greatest impact on overall performance for most categories
- Textural opportunities were most relevant in cheese, particularly mozzarella

Ingredient and macronutrient levels had minimal impact on performance

- Aside from protein, most attributes showed weak/no correlation with purchase intent and liking

Marketing Strategy

Emphasizing health and tapping into key emotions can drive greater adoption

Health-centric marketing can drive the next wave of adoption

- 48% of consumers 'strongly agree' that health factors into their purchase decisions; they were also significantly more likely to purchase dairy-free products than the general population

Brands can boost appeal by evoking joy, comfort, satiation, and indulgence

- Participants currently experience these emotions more frequently with dairy products; these emotions were associated with a 0.6-0.9pt increase in purchase intent

Dashboard Access: Explore the full dataset here.

Study Design & Methodology

NECTAR partnered with Palate Insights to conduct **blind taste tests** at Palate's restaurant partners in San Francisco and New York City between September 2025–November 2025.

Testing Environment

Participants tested products at restaurants in San Francisco and New York City. Restaurant settings were chosen to give participants an authentic and natural tasting experience.

Preparation

All products were prepared according to manufacturer instructions. For more complex dishes, trial preparations were conducted in advance to confirm visual standards with the manufacturers.

Tasting Experience

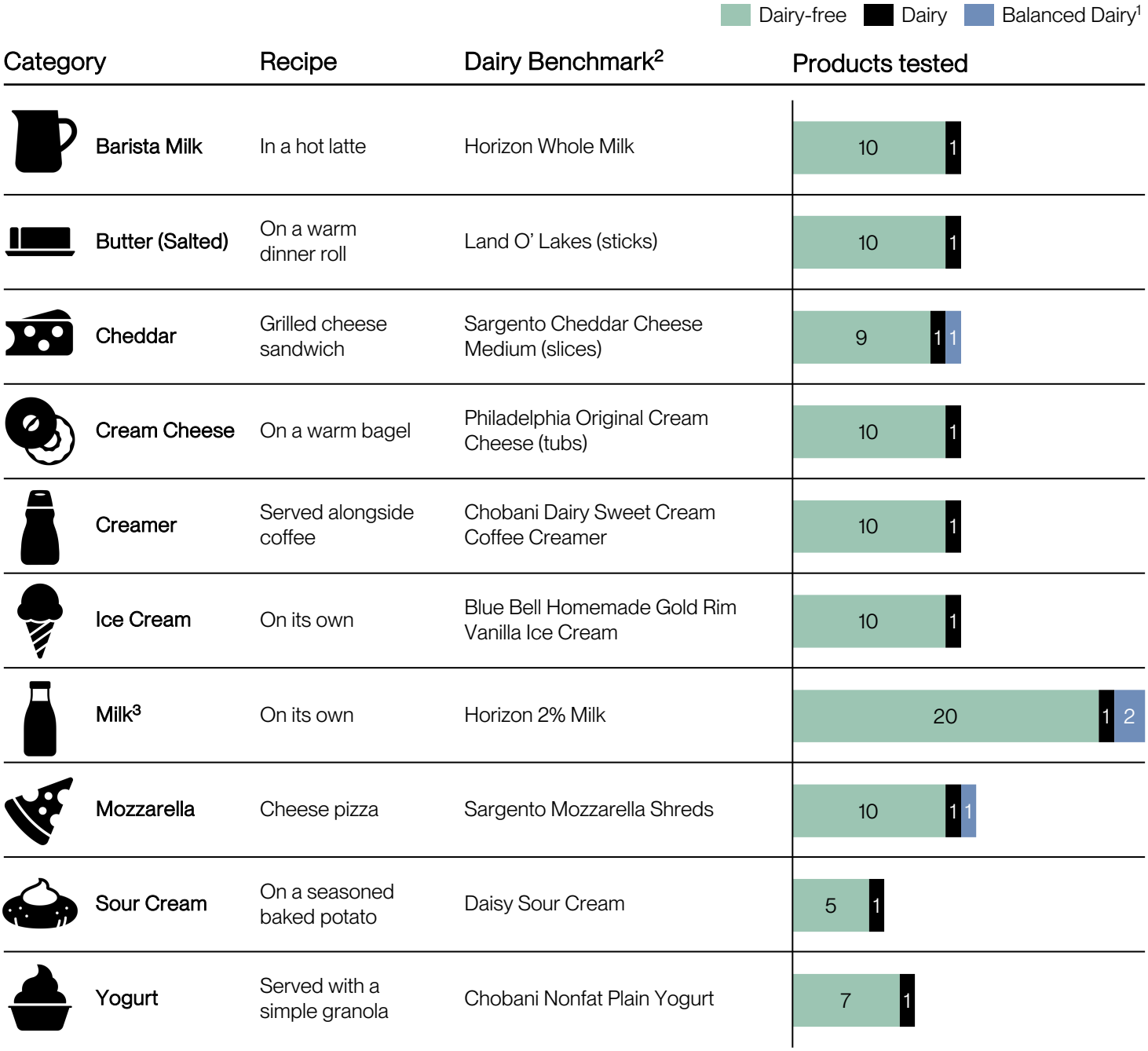
Participants tried each product one-at-a-time in a blinded, randomized order and recorded their sensory experience in a survey. Each product was presented as a complete, simplified recipe to facilitate clear yet realistic assessment conditions.

Products Tested

112 products were studied (98 dairy-free, 4 balanced dairy, and 10 dairy products).

Recipes were designed to ensure that participants could clearly experience the underlying product.

Dairy benchmarks were selected based on their retail sales volume in order to best represent the 'typical' dairy product.



Dashboard access: Explore the full dataset here.

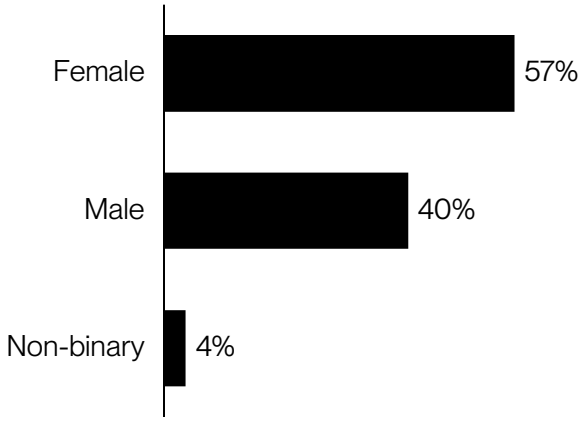
1. Dairy products that combine conventional animal dairy with a significant portion of plant-based dairy
2. Selections were based on the highest-volume product in the retail MULO channel
3. These were "original" milks, rather than unsweetened versions to better mimic the natural sugar from lactose in dairy milk

NECTAR

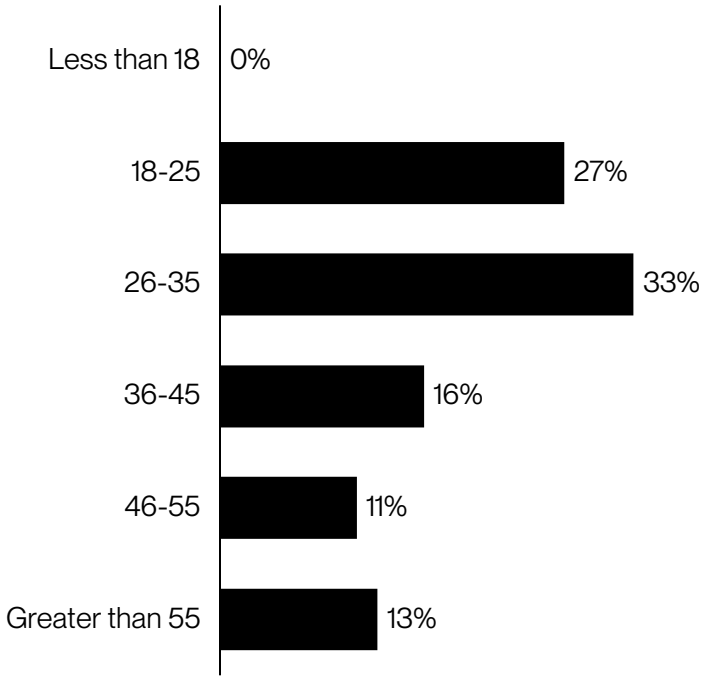
Study Population

This **demographic overview** reflects a sample of 2,183 omnivores and flexitarians, all of whom **regularly consume** the product category under evaluation.

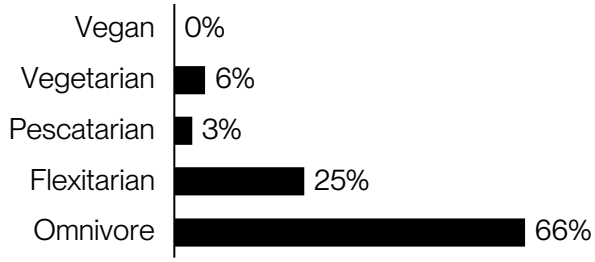
Gender, % of participants[1]



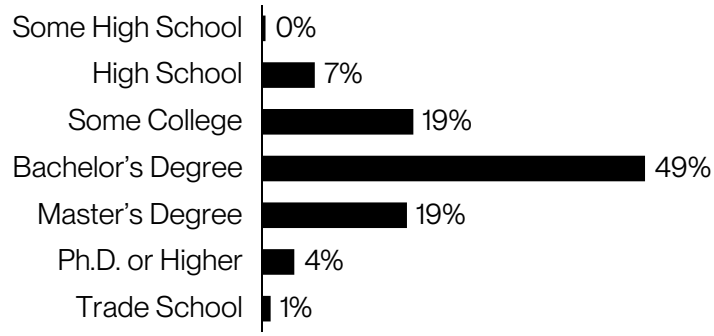
Age, % of participants



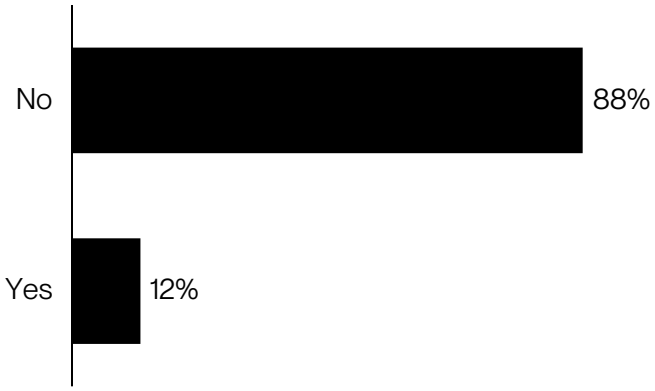
Dietary preference, % of participants



Education, % of participants



Kids in household, % of participants



Dashboard access: Explore the full dataset here.

1. Excludes participants who preferred not to specify their gender.

Analytical Approach

Questions

Liking	Rates products on a 7pt scale from 'dislike very much' to 'like very much' covering overall liking, flavor, texture, and appearance
Qualitative	Describes the 'likes', 'dislikes', and 'off-flavors/aftertastes' of each product using free response
CATA (Check-all-that-apply)	Describes products using lists of 10-15 attributes available for participants to select or leave unchecked covering flavor, texture, appearance, and nutrition panel / ingredient list evaluations
Purchase Intent	Rates products on a 7pt scale from 'definitely would buy' to 'definitely would NOT buy' after revealing the nutrition panel and ingredient list

Analyses

Mean	The average rating for each product on a 1-7pt scale
Histogram of the Differences	Compares each participant's rating for a product against a benchmark to calculate the difference in their ratings for the two products
Wilcoxon Signed-Rank Test	Calculates whether there is a statistically significant difference in two products using the Histogram of the Differences
AI Qualitative Analysis	Synthesizes key themes from qualitative responses using ChatGPT
Product CATA (Check-all-that-apply)	Maps the sensory profile of a product and measures which attributes are associated with higher or lower liking when identified
Comparative CATA (Check-all-that-apply)	Compares the sensory profile of a product against a benchmark to identify its strengths, weaknesses, and opportunities
Nutrition Analysis	Compares purchase intent for a product after revealing its nutrition facts panel and ingredient list and measures the impact of specific ingredients / nutrient levels on any difference in purchase intent

Nomenclature

Dairy-Free Average	Calculated by averaging the scores of every dairy-free product tested in that category
Dairy-Free Leader	The dairy-free product in each category that performed the highest on overall liking against the dairy benchmark
TASTY Award Winner	Any dairy-free product that was rated the same or better than the dairy benchmark on overall liking by at least 50% of participants
Dairy Benchmark	The 'typical' dairy product in each category with the highest retail sales volume
Promoter	Participants rating the product as 'like very much' or 'like'
Passive	Participants rating the product as 'like somewhat' or 'neither like nor dislike'
Detractors	Participants rating the product as 'dislike somewhat', 'dislike', or dislike very much'

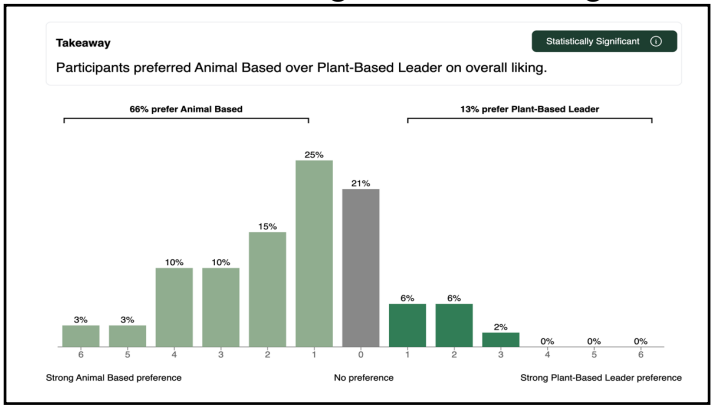
Dashboard Access

Access the live dashboard using the links below to explore the full dataset.

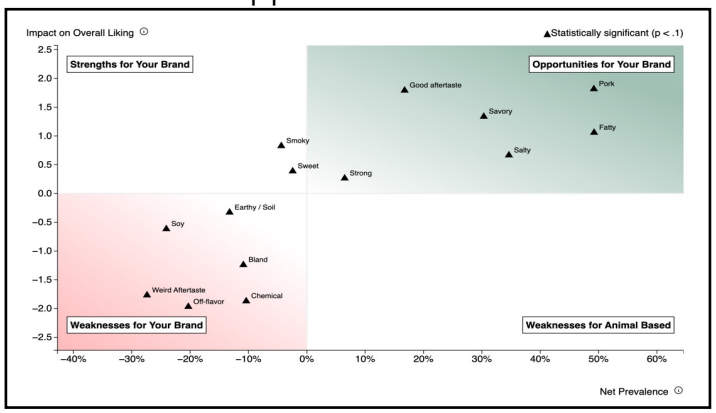
- Barista Milk
- Butter
- Cheddar
- Creamer
- Cream Cheese
- Ice Cream
- Milk
- Mozzarella
- Sour Cream
- Yogurt

Click here for a one-page dashboard guide to get as much as possible out of the dataset.

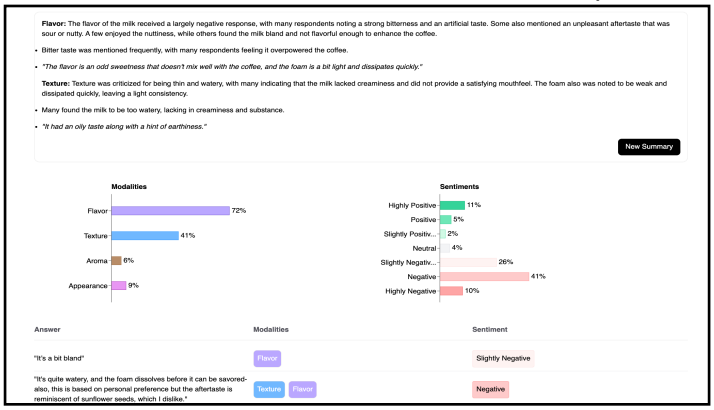
Preference Testing:
Conduct statistical significance testing



CATA Analysis / Penalty Analysis:
Prioritize R&D opportunities



Qualitative Analysis:
Read AI-summaries and individual responses



Raw Data:
Download and conduct your own analyses

Note: Use the **Audiences** feature to easily segment and analyze data for any consumer group

Dairy-free products can match dairy on taste

TASTY Award Winners

The TASTY Awards is a program celebrating top-performing dairy-free products based on NECTAR's annual *Taste of the Industry* sensory research.[1]

- **Qualification criterion:** At least 50% of tasters must rate the product the "same or better" than the dairy benchmark on overall liking.

Brands that pass this threshold are displayed in alphabetical order:

Barista Milk	Califia Farms, Dream, milkadamia, Minor Figures, Planet Oat, ripple
Butter (salted)	Country Crock, melt Organic, Violife
Cheddar	Daiya, Field Roast, Follow Your Heart, Miyoko's Creamery, Plant Ahead
Cream Cheese	Violife
Creamer	Coffee-mate[2], Oatly!, Planet Oat, Silk, Sown, Violife
Ice Cream	So Delicious Dairy Free
Milk	Almond Breeze, maïzly for all, Silk
Sour Cream	Violife
Yogurt	cocojune

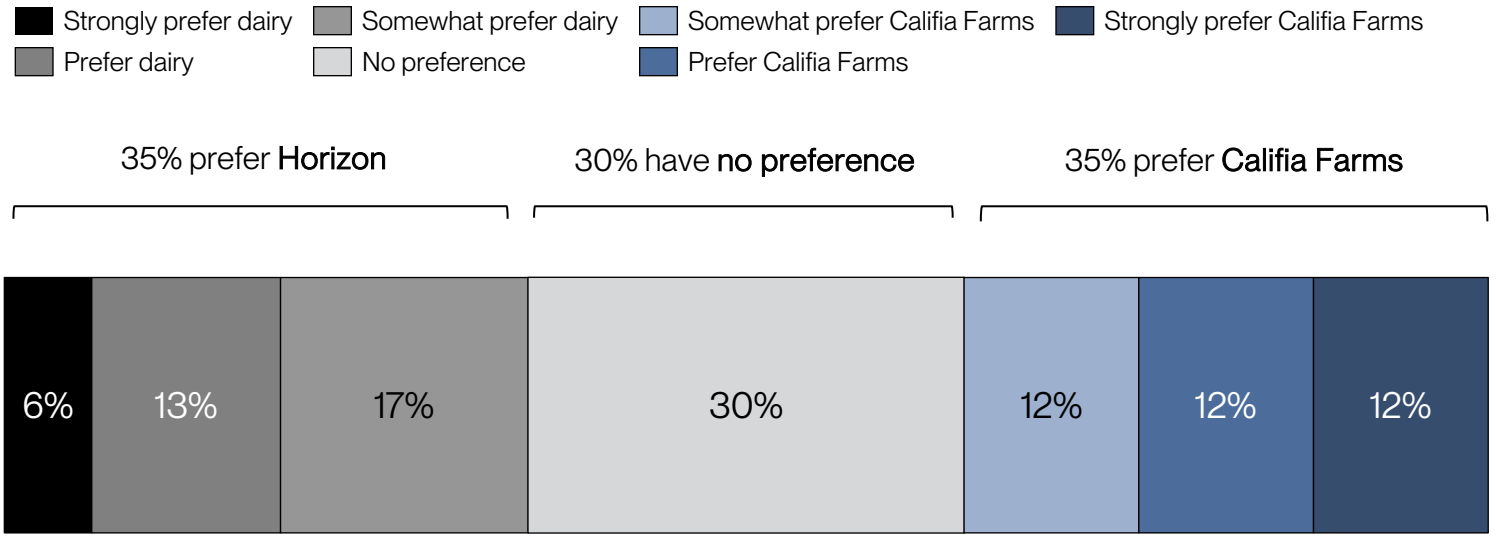
2026 The TASTY AWARDS powered by NECTAR WINNER

Dashboard access: Explore the full dataset here.

1. Mozzarella was the only category without any TASTY Award winners.
2. Product marketed as "non-dairy" according to FDA regulation. Contains less than 2% micellar casein (a milk derivative). Product data has been excluded from all creamer category averages included in this report.

Taste parity has been achieved by one product, with three other products nearing parity

Califia Farms Oat Barista Blend vs Horizon Whole Milk in Hot Latte,
Difference in Overall Liking (N=109)[1]



No statistically significant difference with dairy[2, 3]	Taste parity with dairy[2, 4]	Taste superiority over dairy[2, 5]
✓	✓	X

Takeaways

Taste parity has been achieved by Califia Farms Oat Barista Blend

- This was the only product to achieve taste parity, defined as an at least 50% likelihood that Califia would be preferred on a future test against the dairy benchmark

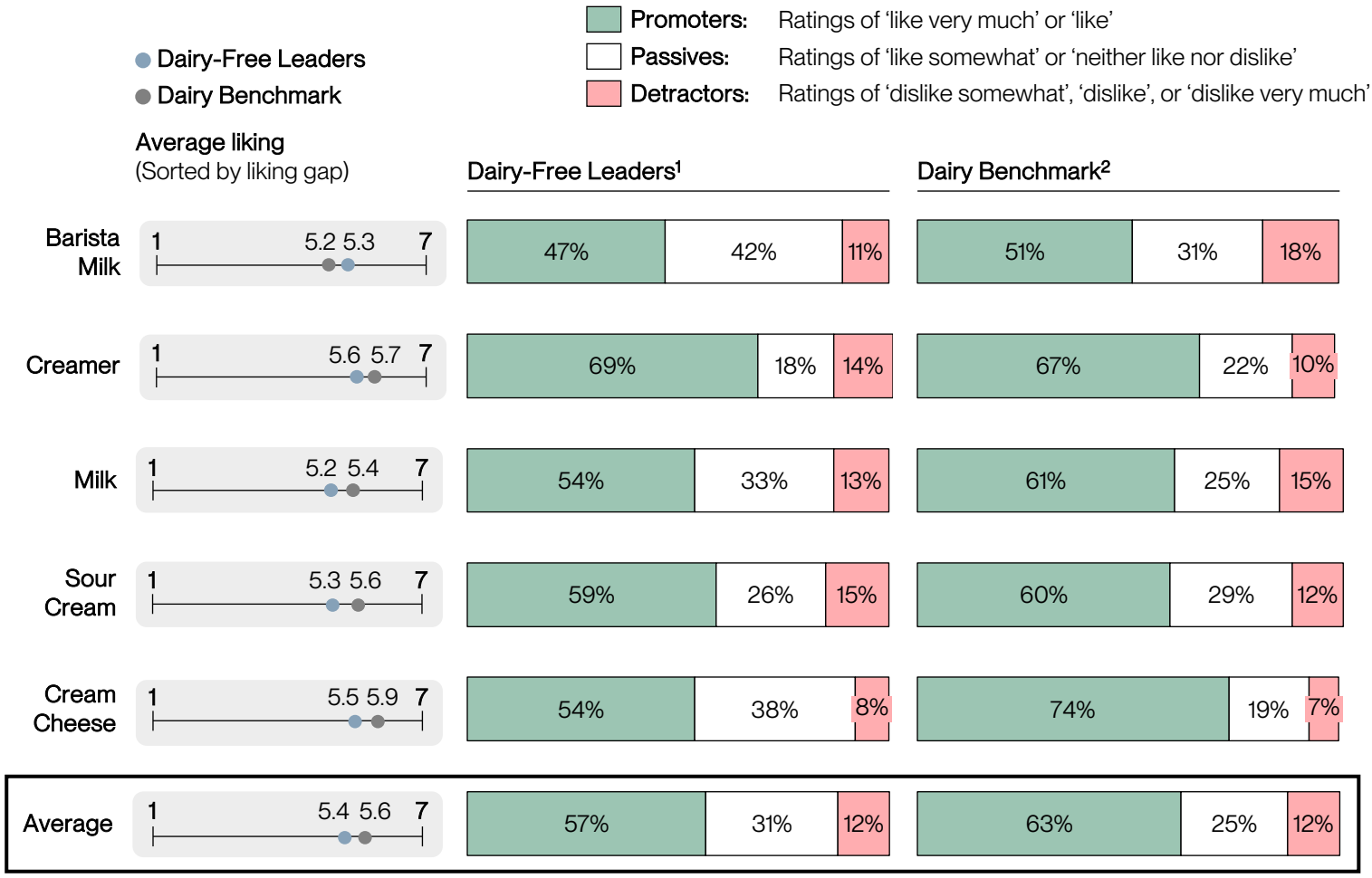
Several other products are also nearing taste parity

- The dairy benchmark failed to achieve statistically significant preference ($p > 0.1$) against 3 additional products ($p > 0.1$): Ripple Barista Blend, DREAM Oatmilk Barista, and Oatly Sweet & Creamy Oatmilk Creamer
- All products that achieved this performance level were tested in coffee applications

Dashboard access: Explore the full dataset here

1. Calculated by comparing liking scores for individual participants for Califia Farms Oat Barista Blend and Horizon Whole Milk (dairy benchmark). Liking scores with one point of difference defined as 'somewhat prefer', two points defined as 'prefer', and three points or greater defined as 'strongly prefer'
2. Statistical significance calculated using the Wilcoxon Signed-Rank Test
3. Defined as a 10-50% likelihood of outperforming the dairy benchmark in future tests
4. Defined as a 50-90% likelihood of outperforming the dairy benchmark in future tests
5. Defined as a 90-100% likelihood of outperforming the dairy benchmark in future tests

Strong leader products emerged in half of the categories tested



Takeaways

Top-performing dairy-free products can compete against dairy

- 5 out of 10 categories had a leader within 0.4pts of the dairy benchmark on overall liking

Barista milk and creamer leaders achieved the strongest performance

- These dairy-free leaders were rated within 0.1pts of the dairy benchmark on overall liking

Milk, sour cream, and cream cheese leaders are closing the gap to dairy products

- These dairy-free leaders had a small gap in overall liking of just 0.2-0.4pts compared to the dairy benchmark

Dashboard access: Explore the full dataset here

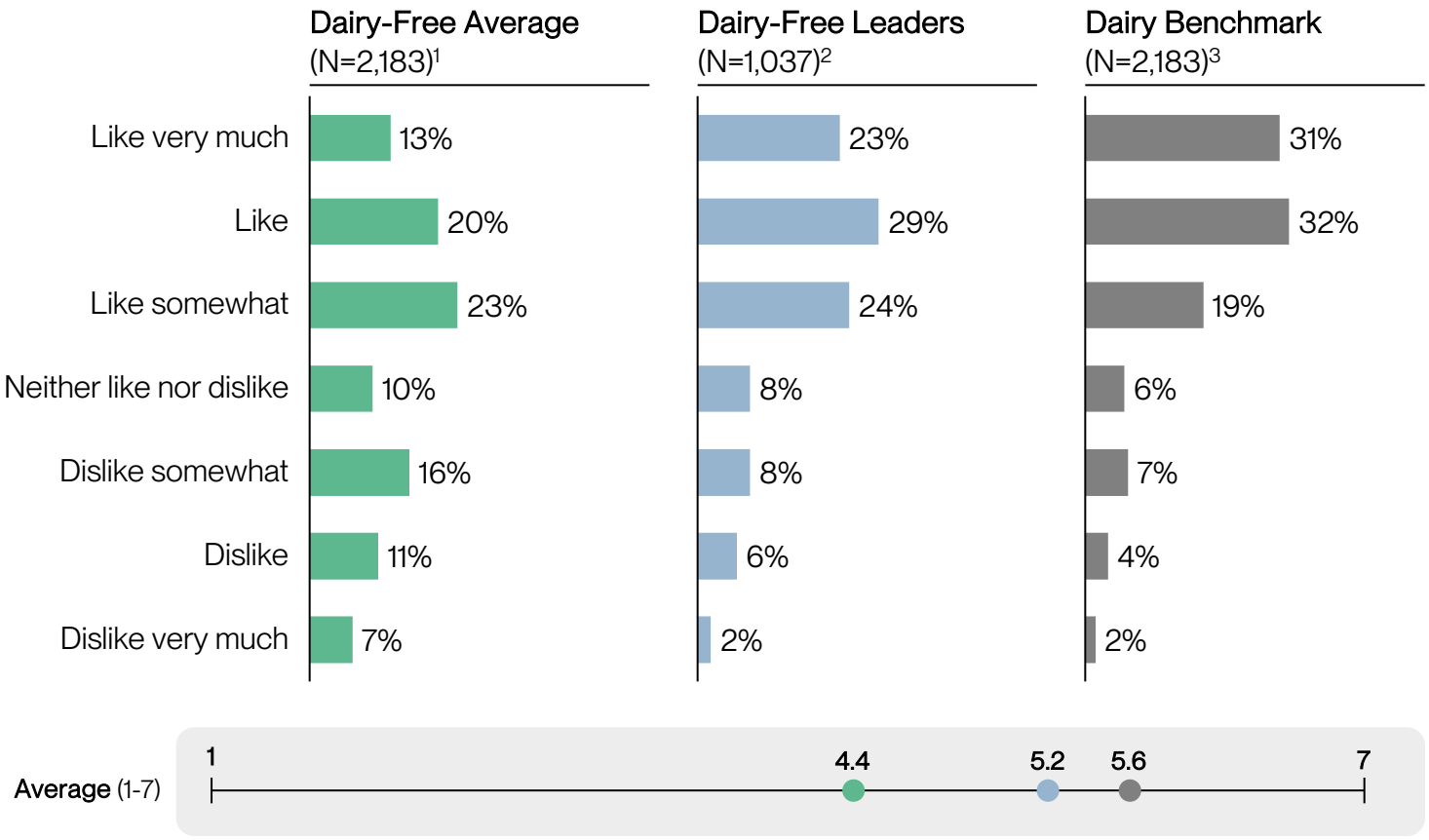
1. The dairy-free product with the highest share of consumers rating it the 'same or better' as the dairy benchmark on overall liking in each category.
2. The dairy product tested in each category, selected based on having the highest retail sales volume in order to effectively represent the 'typical' dairy product in that category.

Performance Gaps

Improvement is needed, valuable, and attainable

Most products need further R&D to drive increased adoption

How would you rate your OVERALL LIKING of XXX?, % of participants



Takeaways

Dairy-free products still trail meaningfully behind dairy benchmarks

- Dairy benchmarks were rated 'like' or 'like very much' 1.9× more often than dairy-free products

Leading products demonstrate that improvement is clearly attainable

- Gap in liking between dairy-free leaders and dairy is just 0.4pts, reducing the gap in liking between the average dairy-free product and the dairy benchmark by 66%

Dairy-free leaders are performing competitively on taste

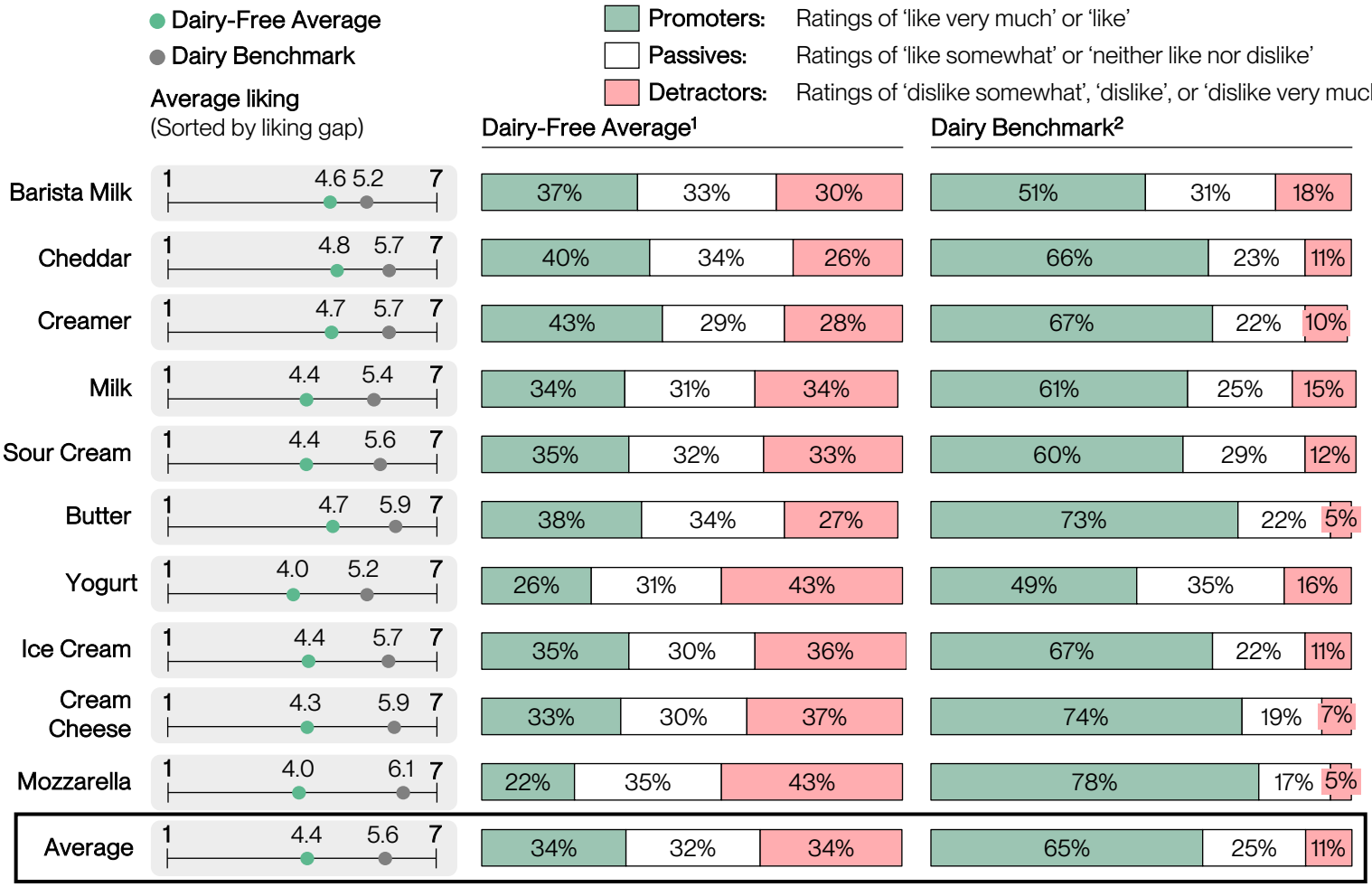
- Average dairy-free leader scored 5.2pts in mean overall liking (versus 5.6pts for dairy), indicating the potential for taste parity across many categories with further R&D

Dashboard access: Explore the full dataset here.

1. Aggregated across all dairy-free products tested for each category. Product count by category: Barista Milk (10), Salted Butter (10), Cheddar (9), Cream cheese (10), Creamer (10), Ice Cream (10), Milk (18), Mozzarella (9), Sour Cream (5), and Yogurt (7).
2. The dairy-free product with the highest share of consumers rating it the 'same or better' as the dairy benchmark on overall liking in each category.
3. The dairy product tested in each category, selected based on having the highest retail sales volume in order to effectively represent the 'typical' dairy product in that category.

While R&D improvements are broadly required, some categories require more urgent intervention

How would you rate your **OVERALL LIKING** of XXX?, % of participants



Takeaways

Most categories significantly underperformed the dairy benchmark at the aggregate level

- 8 out of 10 categories had a gap in liking of at least 1pt or more between the dairy-free average and dairy benchmark

Urgency and required level of R&D needed varies by category

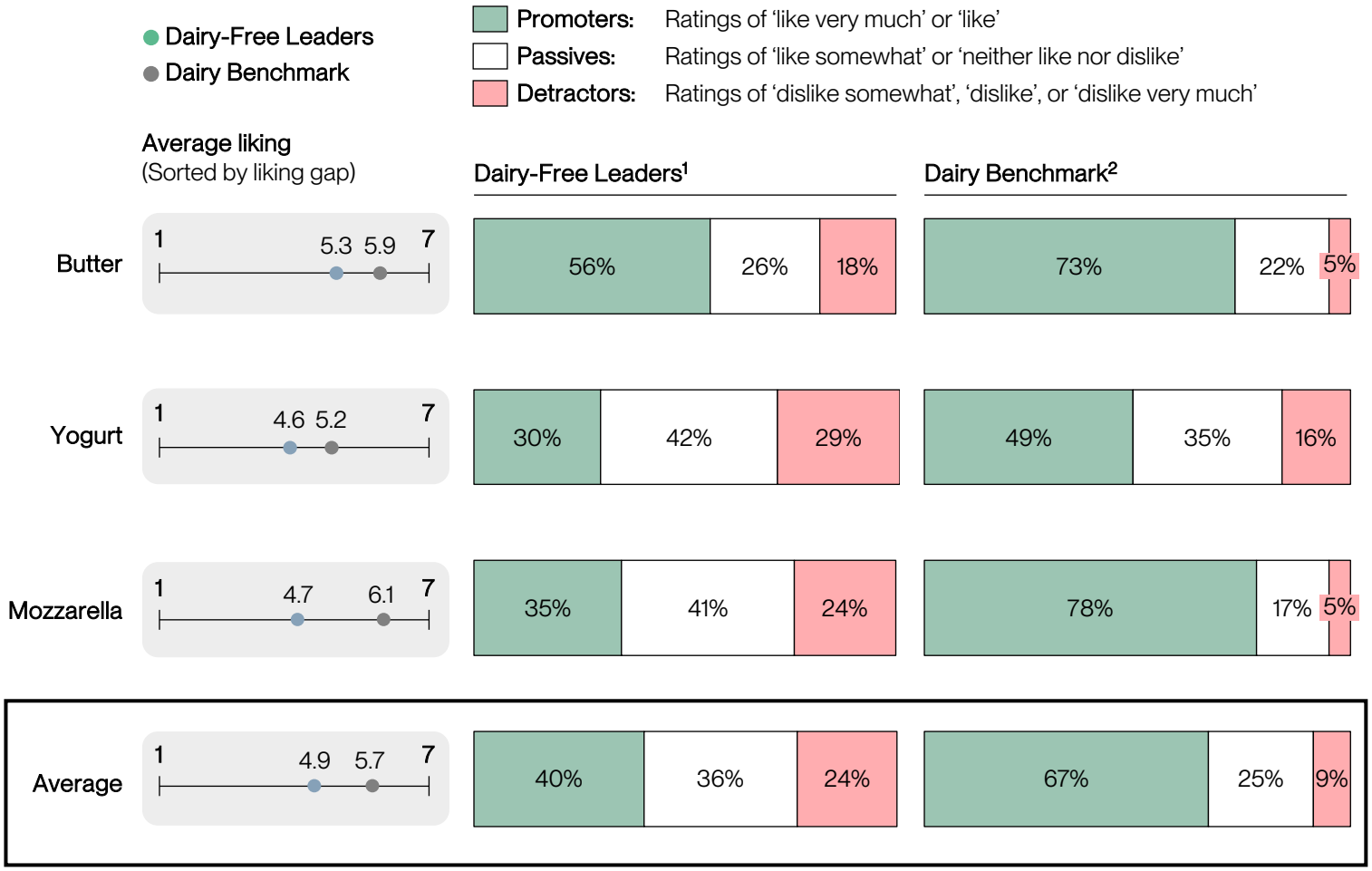
- Dairy-free barista milk performed the best relative to the dairy benchmark with a gap of 0.6pts
- Ice cream, cream cheese, and mozzarella were furthest behind the dairy-based benchmark with gaps of 1.3pts to 2.1pts

Dashboard access: Explore the full dataset here.

1. Aggregated across all dairy-free products tested for each category. Product count by category; Barista Milk (10), Salted Butter (10), Cheddar (9), Cream cheese (10), Creamer (10), Ice Cream (10), Milk (18), Mozzarella (9), Sour Cream (5), Yogurt (7).
2. The dairy product tested in each category, selected based on having the highest retail sales volume in order to effectively represent the 'typical' dairy product in that category.

New R&D breakthroughs are still needed in butter, yogurt, and mozzarella

How would you rate your **OVERALL LIKING** of XXX?, % of participants



Takeaways

Dairy-free leaders are still meaningfully behind the dairy benchmark in butter, yogurt, and mozzarella

- Average overall liking for dairy-free leaders across these categories is 4.9 (versus 5.7 for dairy benchmark)
- In these categories, the dairy-free leader was 'disliked' by 2.5× more participants than the dairy benchmark

White space for a new category leader in mozzarella

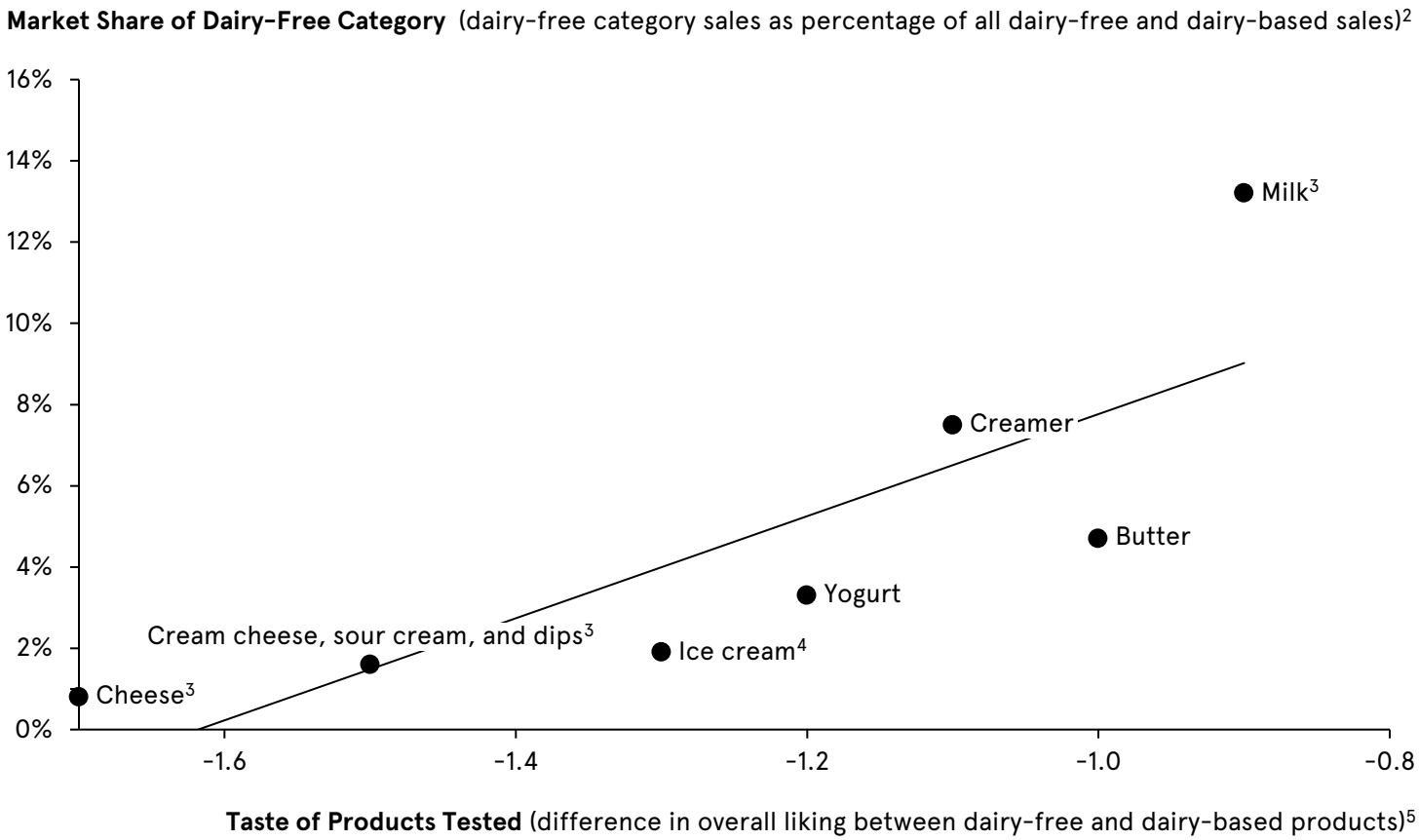
- Category with the largest gap between dairy-free leader and dairy benchmark of 1.4pts (versus an average gap of just 0.4pts across all categories)

Dashboard access: Explore the full dataset here

1. The dairy-free product with the highest share of consumers rating it the 'same or better' as the dairy benchmark on overall liking in each category.
2. The dairy product tested in each category, selected based on having the highest retail sales volume in order to effectively represent the 'typical' dairy product in that category.

Taste improvements are correlated with sales growth

Relationship between 2025 Retail Sales Data and *Taste of the Industry 2026* Product Sensory Performance[1]



Takeaways

Better taste enables much higher category penetration[6]

- Milk, the best-tasting category, has 15× higher market share than cheese, the worst-tasting category
- The relationship between taste and market share is statistically significant ($p<0.05$)
- Categories that were rated at least 1.3pts worse than the dairy-based product have captured less than 2% of the market (e.g., cheese, cream cheese + sour cream, ice cream)

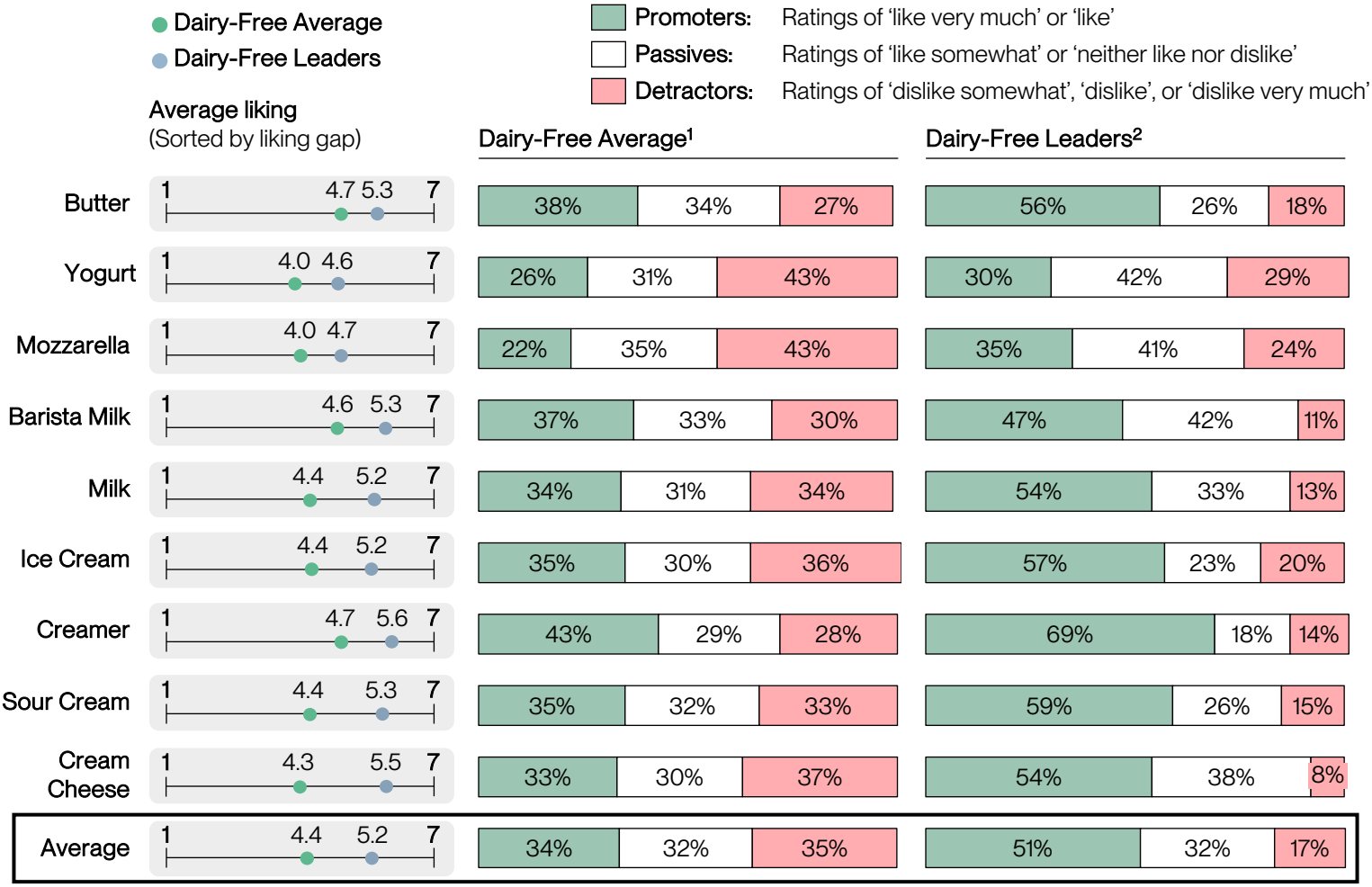
Dashboard access: Explore the full dataset here

Source: NECTAR 2026 TOTI Sensory Database; Good Food Institute, "Closing the taste gap, growing the category," Alt Protein Planet, March 18, 2026; Team Analysis

1. Linear regression is statistically significant ($R^2 = .66$, $p < 0.05$)
2. Calculated as the total dairy-free sales of the product category in retail divided by the total retail sales of the product category (dairy-based and dairy-free). This is calculated at the category-level and includes products that were not tested in this research.
3. Taste performance of several NECTAR categories was aggregated to align with sales categories: Cheddar + Mozzarella, Cream Cheese + Sour Cream, Milk + Barista Milk
4. All sensory data comes from the ice cream category while sales data includes ice cream and frozen novelties.
5. Calculated as the mean overall liking score (7-point scale) for all dairy-free products within the category minus the overall liking score of the corresponding animal product. Only includes products tested in this research that are being sold in retail.
6. Sensory performance is one of many factors influencing market penetration; marketing investment, distribution, merchandising, brand equity, product format, etc. also play meaningful roles.

Leaders show that meaningful improvement is attainable in almost all categories

How would you rate your **OVERALL LIKING** of XXX?, % of participants



Takeaways

Most products can improve significantly by following the examples of dairy-free category leaders

- 9 out of 10 categories had a gap in liking of at least 0.5pt or more between the dairy-free average and leader
- On average, the leader outscored dairy-free products by 0.8 points in overall liking, with even larger gaps in creamer, sour cream, and cream cheese

Dairy-free leaders are well-liked by 1.4x more participants than average products

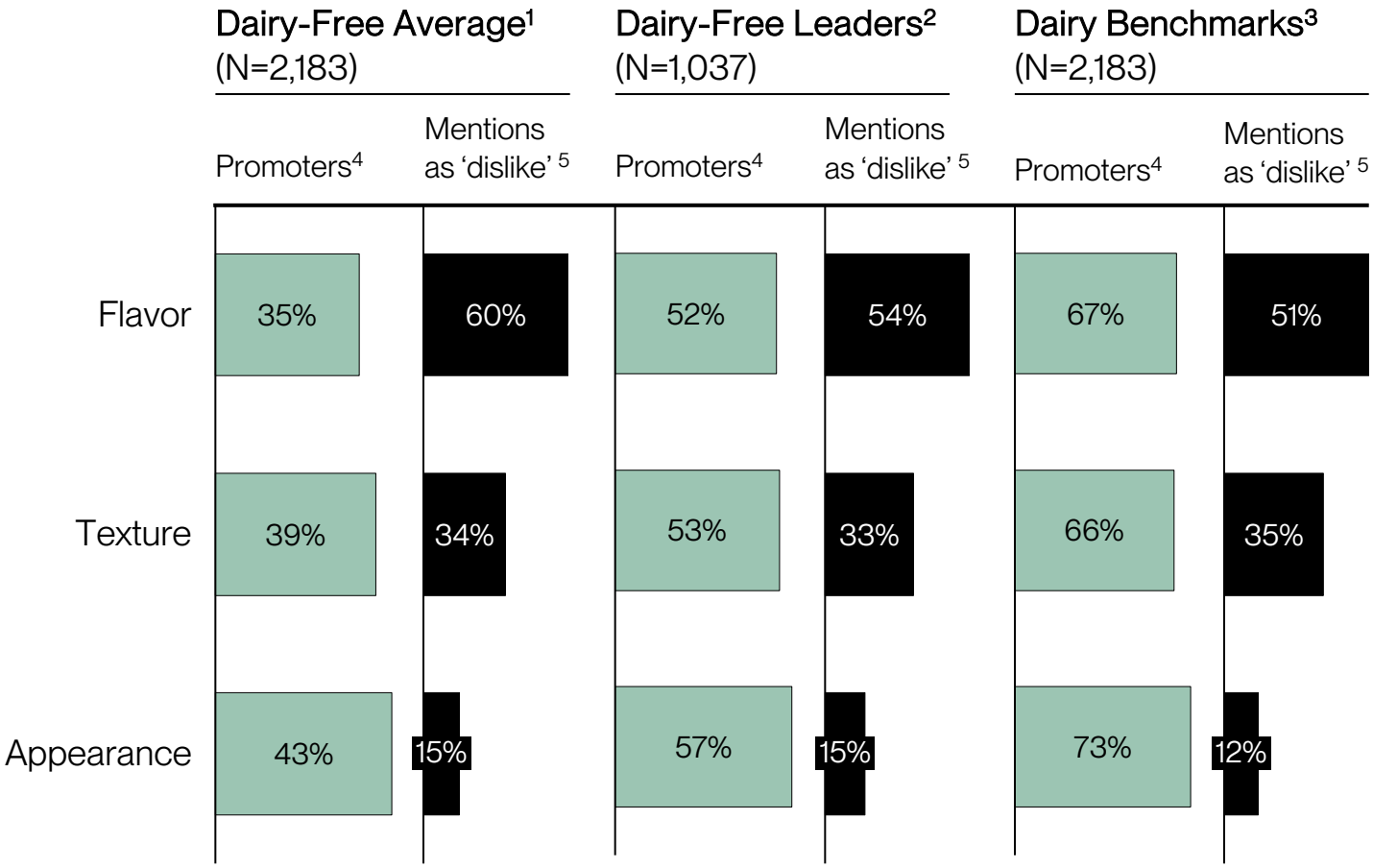
- Across these 9 categories, the dairy-free average was rated as 'like very much' or 'like' by just 34% of participants (versus 51% for the dairy-free leader)

Dashboard access: Explore the full dataset here

1. Aggregated across all dairy-free products tested for each category. Product count by category; Barista Milk (10), Salted Butter (10), Cheddar (9), Cream cheese (10), Creamer (10), Ice Cream (10), Milk (18), Mozzarella (9), Sour Cream (5), Yogurt (7).
2. The dairy-free product with the highest share of consumers rating it the 'same or better' as the dairy benchmark on overall liking in each category.

R&D should focus on flavor

Improvements to flavor should be prioritized with texture and appearance as secondary focuses



Takeaways

Flavor was the biggest gap in liking for dairy-free products

- Dairy-free products scored lowest on flavor relative to texture or appearance

Meaningful gaps in liking exist across all sensory attributes

- Consumers were 1.9× more likely to rate the flavor of dairy benchmarks as 'like' or 'like very much' compared to the dairy-free average, and 1.7× more likely for texture and appearance.

Flavor matters most, while appearance is rarely mentioned

- On average across all dairy-free and dairy products, flavor was mentioned by at least 50% of participants in both qualitative likes and dislikes (versus less than 20% for appearance)

Dashboard access: Explore the full dataset here

1. Aggregated across all dairy-free products tested for each category. Product count by category: Barista Milk (10), Salted Butter (10), Cheddar (9), Cream cheese (10), Creamer (10), Ice Cream (10), Milk (18), Mozzarella (9), Sour Cream (5), and Yogurt (7).
2. Aggregated across all dairy-free leaders for each category. Dairy-free leader is the dairy-free product with the highest share of consumers rating it the 'same or better' as the dairy benchmark on overall liking in each category.
3. Aggregated across all dairy products tested in each category. The dairy product tested in each category, selected based on having the highest retail sales volume in order to effectively represent the 'typical' dairy product in that category.
4. Ratings of 'like very much' or 'like'.
5. % of consumers who specifically cited the sensory attribute as a negative in their qualitative responses according to an AI model in Dec '25 and may not align with public dashboard.

Flavor opportunities are generally highest impact, particularly increasing richness or reducing off-flavors / off-aftertastes

Top R&D opportunities ranked by priority[1]

Barista Milk
1. Increase richness
2. Increase creaminess
3. Decrease bitterness[2]
4. Increase fattiness
5. Increase butteriness

Milk
1. Increase richness
2. Increase whiteness
3. Decrease off-flavor
4. Increase expected color
5. Decrease artificial/chemical flavor

Flavor
Texture
Appearance

Creamer
1. Increase sweetness
2. Increase richness
3. Decrease off-flavor
4. Decrease dullness
5. Increase silkiness

Butter
1. Increase richness
2. Decrease artificial/chemical flavor
3. Decrease off-flavor
4. Decrease off-aftertaste
5. Decrease oily/greasy

Yogurt
1. Increase whiteness
2. Decrease off-aftertaste
3. Decrease off-flavor
4. Increase brightness
5. Increase richness

Ice Cream
1. Increase richness
2. Decrease off-flavor
3. Increase sweetness
4. Increase butteriness
5. Decrease off-aftertaste

Cream Cheese
1. Increase richness
2. Decrease off-flavor
3. Increase shininess / glossiness
4. Decrease off-aftertaste
5. Decrease off-color

Sour Cream
1. Decrease off-flavor
2. Decrease off-aftertaste
3. Increase creaminess
4. Increase expected color
5. Increase richness

Cheddar
1. Increase richness
2. Decrease off-flavor
3. Increase sharpness
4. Decrease artificial/chemical flavor
5. Decrease waxiness

Mozzarella
1. Increase richness
2. Decrease sticks to teeth
3. Increase stretchiness
4. Decrease gumminess / gooeyness
5. Decrease artificial/chemical flavor

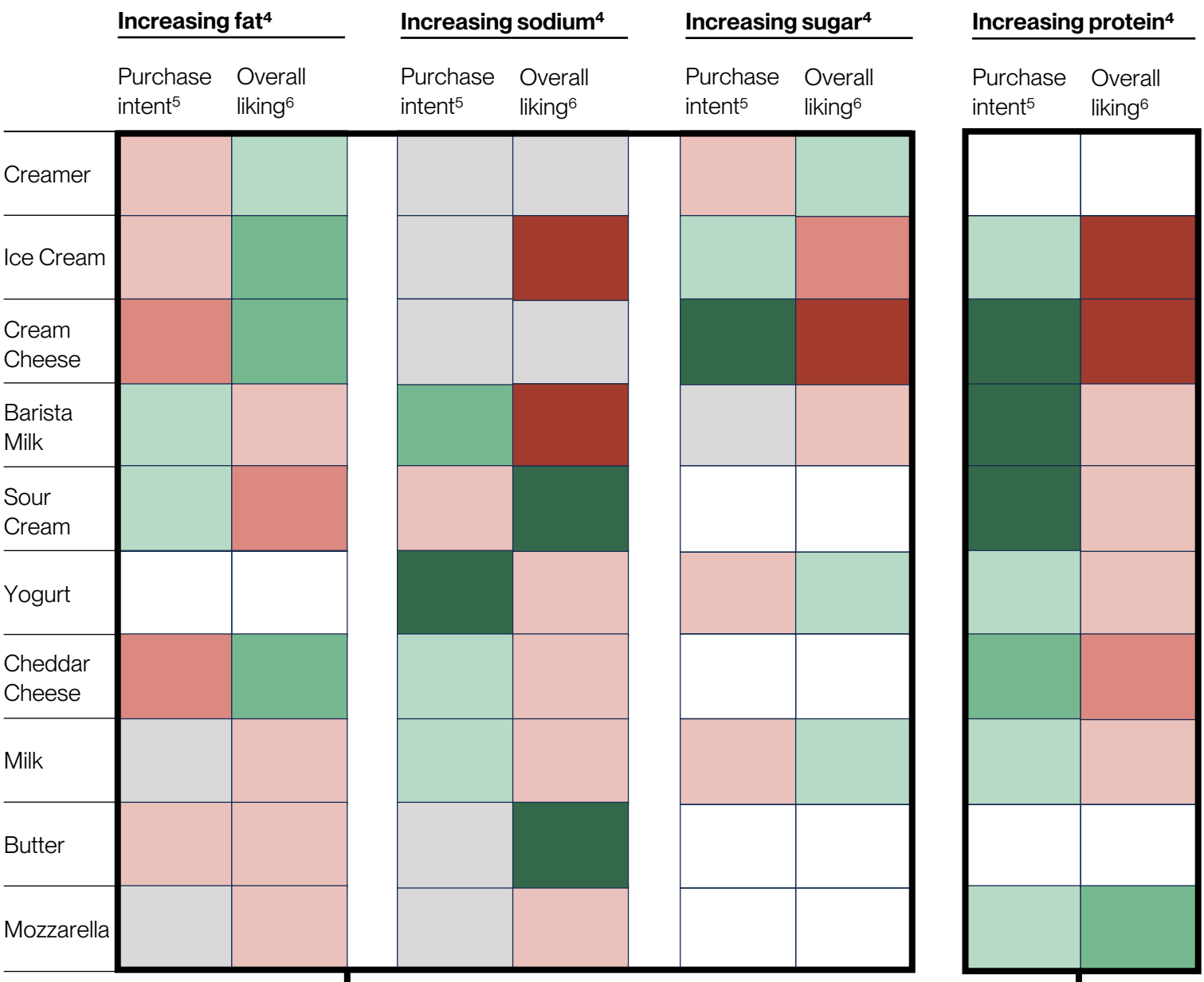
Dashboard access: Explore the full dataset here

1. "Yellow appearance" was removed because it was primarily reported for the dairy benchmark, indicating its effect reflected the benchmark's strength rather than the attribute itself.
2. Due to failure to mask bitterness of coffee rather than the product itself.

Except for protein, macronutrients have a limited impact on purchase intent and product performance

Impact of nutrition panel on product performance and purchase intent

Strong positive effect[1,2]
Moderate positive effect[1,2]
Weak positive effect[1,2]
Strong negative effect[1,2]
Moderate negative effect[1,2]
Weak negative effect[1,2]
Weak neutral effect[1,2]
N/A[3]



Most nutrition levels have a weak and/or moderate effect on purchase intent and overall liking

Higher protein increases purchase intent but reduces overall product performance

Dashboard access: Explore the full dataset here

1. Based on the R-Squared value using a linear regression. Thresholds are defined as: Strong (0.5 or higher), Moderate (0.3-0.5), Weak (0.3 or lower).
2. Based on the Slope from a linear regression. Thresholds are defined as: Positive impact (0.1 or higher), Neutral (-0.1 to 0.1), Negative (-0.1 or lower).
3. Products in these categories did not contain the specified nutrients.
4. Nutrition levels are standardized on a per calorie basis and normalized to the animal benchmark.
5. Calculated by comparing Mean Expected Purchase Intent and Purchase Intent after Pricing Reveal. Mean Expected Purchase Intent is estimated from overall liking using historical relationships between liking and purchase intent. The mappings from overall liking to purchase intent, both on a 7pt scale, are 1→1.1, 2→1.8, 3→2.7, 4→3.4, 6→5.2, 7→6.5.
6. Relative difference in mean liking from the dairy-based benchmark.

Ingredients may be noticeable but have little impact on purchase intent or overall liking

Impact of ingredients on product performance and purchase intent

Strong positive effect[1,2]
Moderate positive effect[1,2]
Weak positive effect[1,2]
Strong negative effect[1,2]
Moderate negative effect[1,2]
Weak negative effect[1,2]
Weak neutral effect[1,2]
N/A[3]

Type	Ingredient	Purchase intent[3]	Overall liking[4]	Relevance to consumers (% selected)[5]	% of dairy-free products with attribute
Primary base	Cashew			27%	11%
	Almond			27%	13%
	Coconut			28%	11%
	Oat			24%	26%
	Soy			21%	14%
	Pea			14%	19%
Oil	Coconut Oil			15%	34%
	Canola Oil			18%	11%
	Sunflower Oil			14%	20%

Takeaways

Ingredients have very limited impact on purchase intent and product performance

- There were no moderate or strong correlations between major ingredients and purchase intent or overall liking

Consumers are more likely to notice proteins than oils

- Protein ingredients overall, except for pea, were reported by at least 20% of consumers as having an impact on their purchase intent (versus 16% for oils on average)

Dashboard access: Explore the full dataset here.

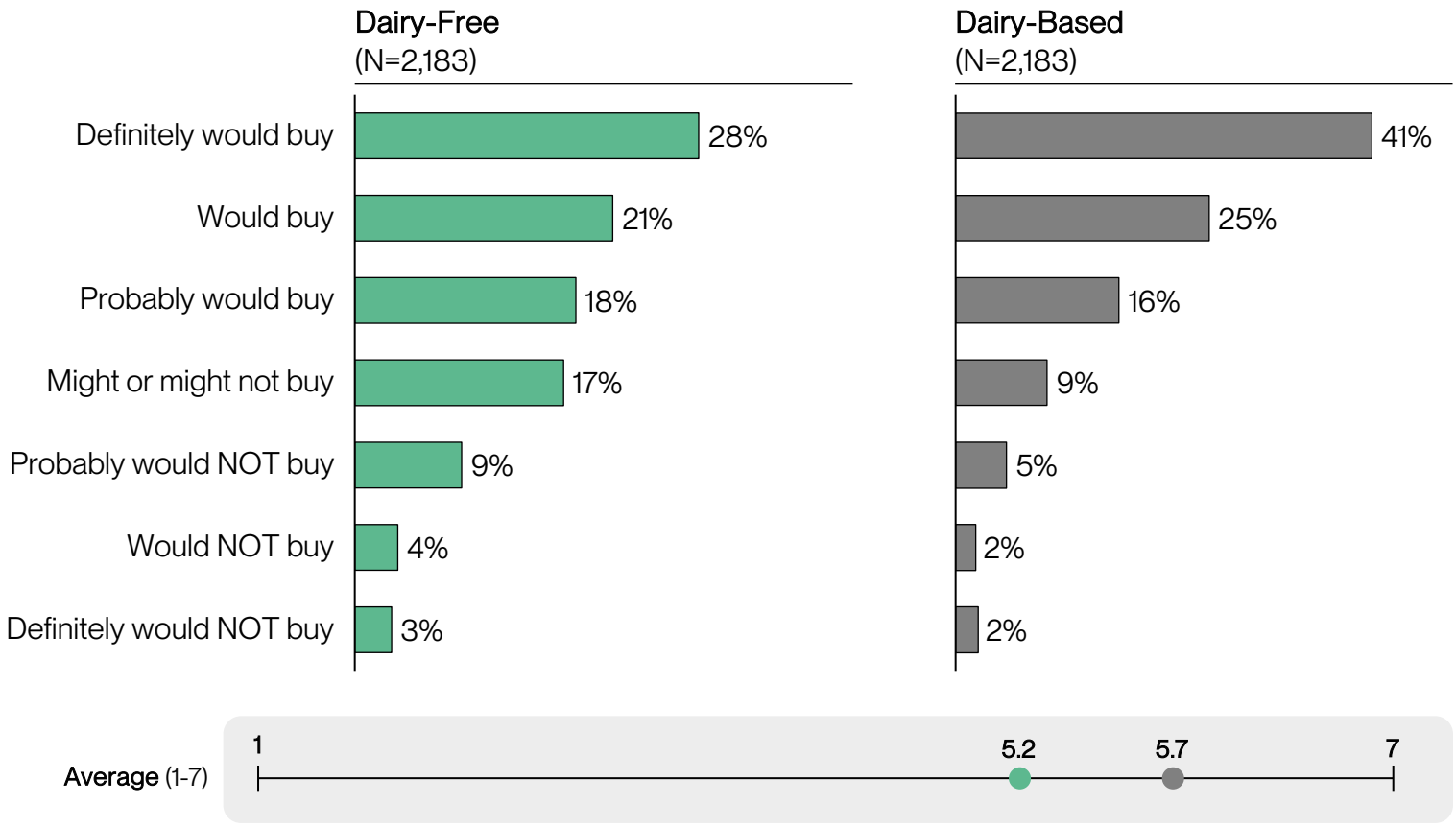
1. Based on the R-Squared value using a linear regression. Thresholds are defined as: Strong (0.5 or higher), Moderate (0.3-0.5), Weak (0.3 or lower).
2. Based on the Slope from a linear regression. Thresholds are defined as: Positive impact (0.1 or higher), Neutral (-0.1 to 0.1), Negative (-0.1 or lower).
3. Calculated by comparing Mean Expected Purchase Intent and Purchase Intent after Pricing Reveal. Mean Expected Purchase Intent is estimated from overall liking using historical relationships between liking and purchase intent. The mappings from overall liking to purchase intent, both on a 7pt scale, are 1→1.1, 2→1.8, 3→2.7, 4→3.4, 6→5.2, 7→6.5.
4. Relative difference in mean liking from the dairy-based benchmark.
5. Percentage of the time the nutrition attribute was included and explicitly selected as a factor for purchase intent rating. Answer options were more generalized instead of including specific quantities (e.g., "Calorie count" or "Amount of protein").

Marketing Strategy

Broader adoption relies on taste and price

Dairy-free products show strong purchase intent, but dairy is still ahead

How likely would you be to PURCHASE XXX Category?, % of participants



Takeaways

Purchase intent for dairy-free products is generally positive and outperforms plant-based meat

- 67% of consumers said they 'probably would buy', 'would buy', or 'definitely would buy'
- Dairy-free average scored 0.4pts higher on purchase intent ($p < 0.1$) compared to plant-based meat (score of 4.8)

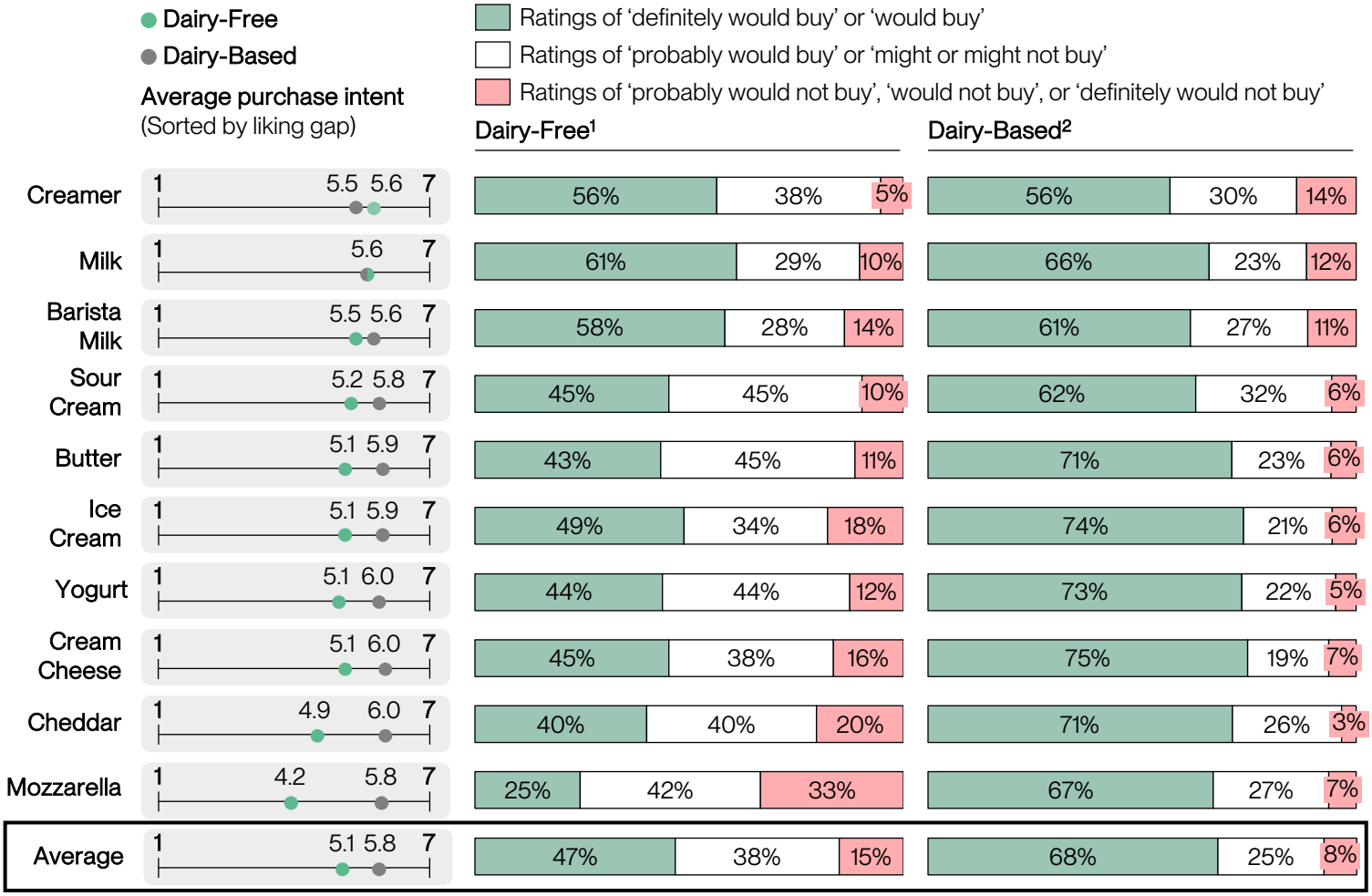
Dairy-based products are still ahead

- Average purchase intent was 0.5pts higher compared to dairy-free
- 66% stated that they 'definitely would buy' or 'would buy' dairy products (versus just 49% for dairy-free products)

Dashboard access: Explore the full dataset here.

Purchase intent varies by category, with some matching or exceeding traditional dairy

How likely are you to **PURCHASE XXX?**, % of participants



Takeaways

Creamer, milk, and barista milk categories show that it is possible for dairy-free to meet or even exceed dairy purchase intent

- Dairy-free creamer scored a mean purchase intent of 5.6pts (versus 5.5pts for dairy creamer)
- Average purchase intent for dairy-free milk is equal to dairy and dairy-free barista milk is only 0.1pts behind

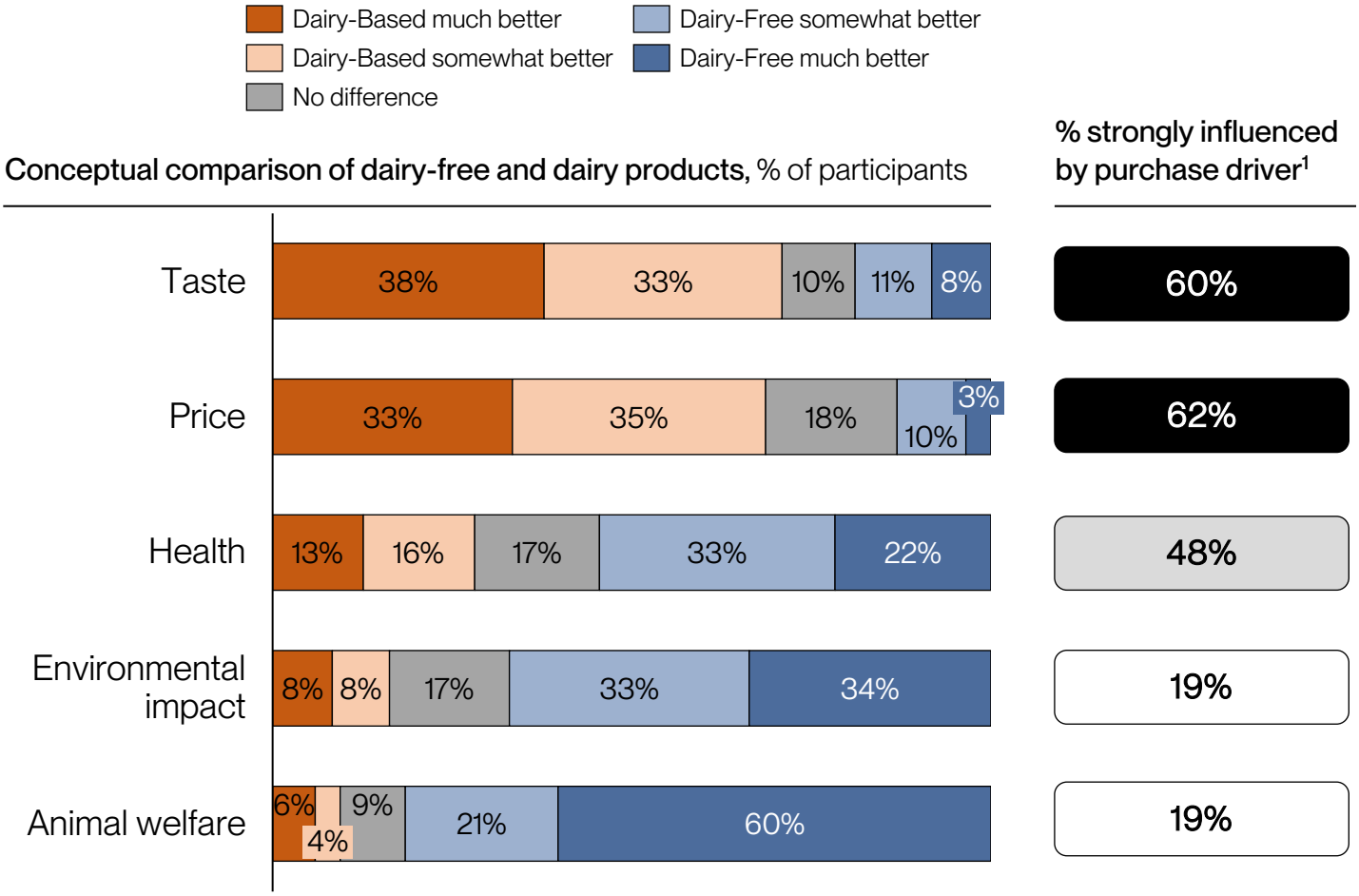
Other categories are still significantly behind, especially cheddar and mozzarella cheese

- Across all categories, 47% rated dairy-free products 'would buy' or 'definitely would buy' (versus 68% for dairy)
- The gap was highest in mozzarella (25% versus 67%) and cheddar (40% versus 71%)

Dashboard access: Explore the full dataset here

1. Aggregated across all dairy-free products tested for each category. Product count by category: Barista Milk (10), Salted Butter (10), Cheddar (9), Cream cheese (10), Creamer (10), Ice Cream (10), Milk (18), Mozzarella (9), Sour Cream (5), and Yogurt (7).
2. The dairy product tested in each category, selected with the goal of broadly representing the category performance.

Conceptually, health can drive near-term adoption while taste and price enable long-term mass appeal



Takeaways

Dairy-free products are winning in small market subsegments

- Consumers who 'strongly agree' that environment and animal welfare guide their purchasing decisions are much more likely to prefer dairy-free products, but only make up 13% of consumers

Shifting views on importance of health offers an opportunity to unlock the next wave of adoption

- 48% 'strongly agree' that health factors into their decision making and were significantly more likely to purchase dairy-free products than the general population

Taste and price are still barriers to mass adoption

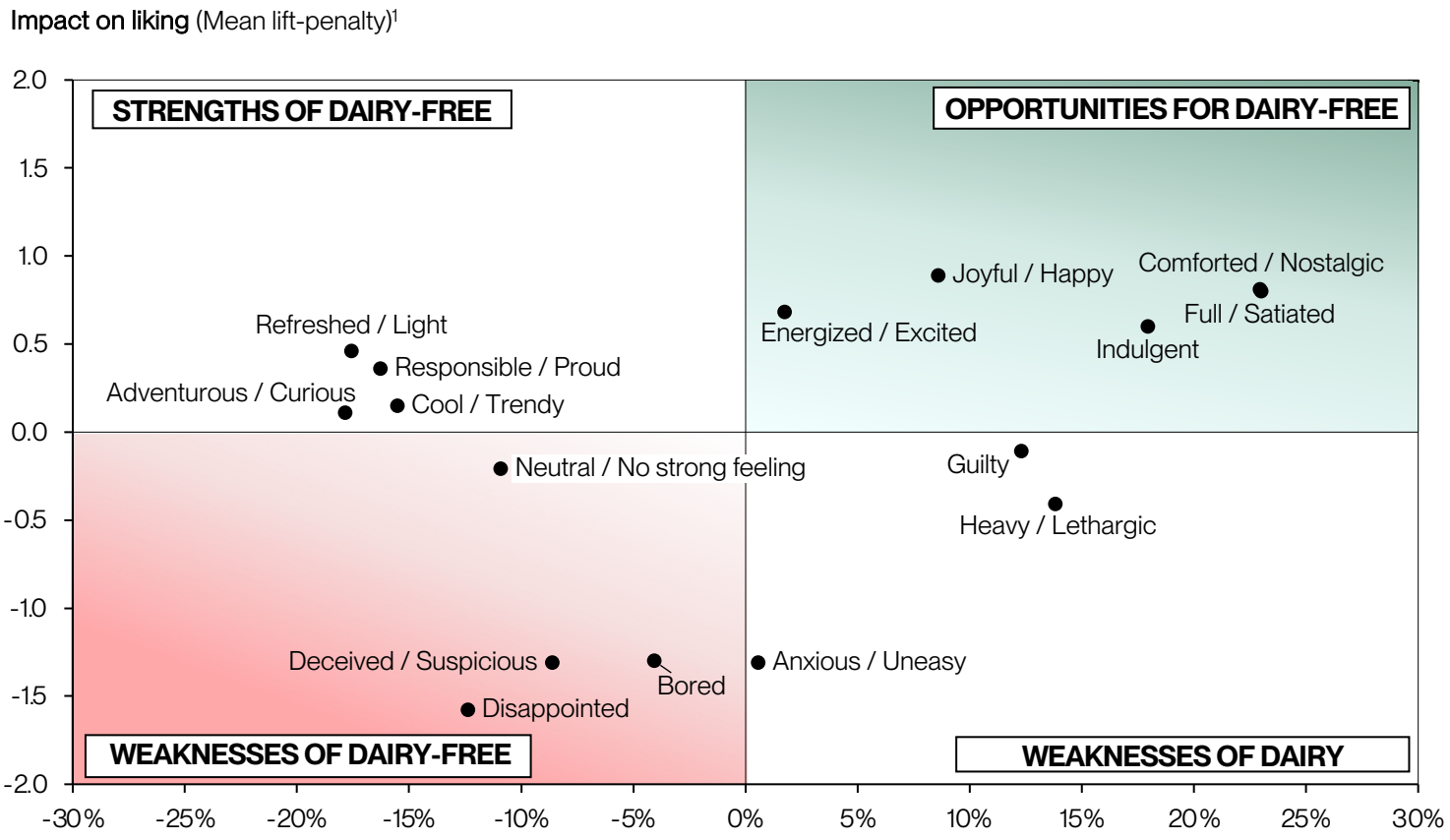
- 60%-62% 'strongly agree' that they shop based on taste or price and are currently much more likely to purchase dairy-based products (0.5-0.8pts higher in average purchase intent compared to dairy-free)

Dashboard access: Explore the full dataset here.

1. Percentages do not add to 100% because they are not mutually exclusive (e.g., someone can 'strongly agree' that both price and taste guide their purchasing decisions)

Dairy-free brands can boost appeal by evoking emotions of joy, comfort, satiation, and indulgence

Penalty analysis on emotions using check-all-that-apply responses, Mean drop/lift and Prevalence



Takeaways

Dairy-free products benefit from making consumers feel more refreshed and responsible

- Participants experienced these emotions more frequently with dairy-free products, and these emotions were associated with moderate increases in purchase intent of 0.3-0.5pts

Opportunity to increase purchase intent by recreating positive emotions from dairy and avoiding negative dairy-free reactions

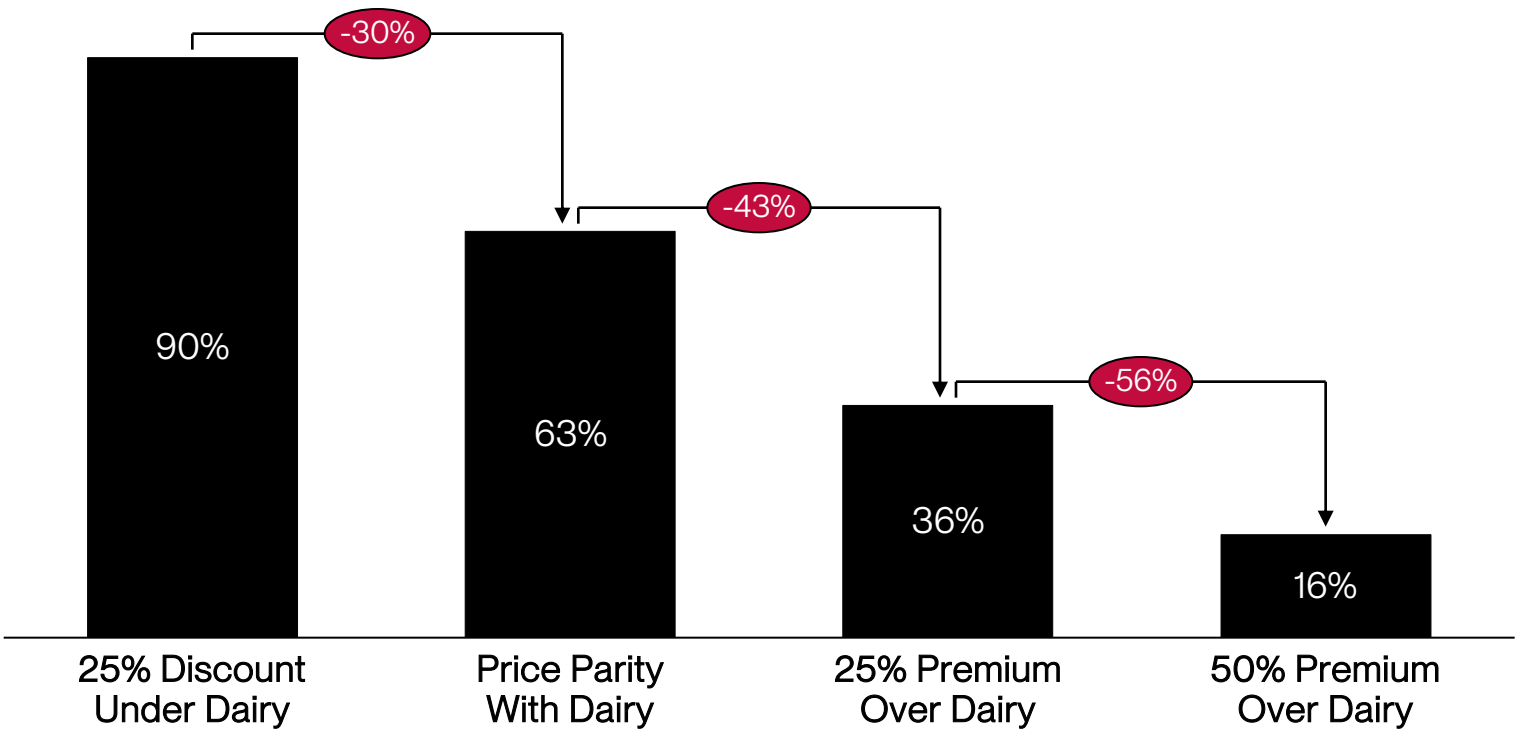
- Nostalgia, indulgence, satiation, and joy were more frequently associated with dairy-based products and led to large increase in purchase intent of 0.6-0.9pts
- Suspicion and disappointment were more commonly experienced with dairy-free products and had a very large negative impact on purchase intent of -1.3-1.6pts

Dashboard access: Explore the full dataset here

1. The average change in overall liking on 7pt scale for all responses that reported the relevant emotion compared to the mean liking for all responses that did not.
2. Calculated as the share of participants selecting that emotion for the dairy-based minus the share of participants selecting that emotion for the dairy-free product.

Price premiums, especially in high-cost categories, can significantly reduce the addressable market

At what price would dairy-free [Category] start to become expensive, but you'd still purchase it?, % of participants[1]



Takeaways

Charging price premiums drastically reduces addressable market

- Introducing a 25% price premium prices out almost half (43%) of the consumers compared to price parity, while an additional 25% premium further reduces it by 56%

Consumers tend to focus on absolute dollars instead of percentages

- Consumers were less likely to pay a premium when the reference price of the dairy-based benchmark was higher
- Opportunity to reduce the perceived price gap with smaller pack sizes or messaging focused on absolute dollar discounts

Dashboard access: Explore the full dataset here.

1. Quantities were standardized (e.g., 8 oz tub of cream cheese) and the dairy price point was given as a reference.

Final Takeaways

Conclusion

Conclusion

Making Sense of the Present

Taste parity is here, but the work isn't over

The evidence is clear**: taste parity with dairy is no longer a distant goal. It's happening now.** Califia Farms Oat Barista Blend has achieved statistically significant taste parity with Horizon Whole Milk, with three additional products showing no significant difference from dairy benchmarks in blind tastings. Twenty-seven products earned TASTY Award recognition, representing roughly 25% of all products tested.

Category leaders in barista milk, creamer, milk, sour cream, and cream cheese have closed the gap to within 0.4 points of dairy benchmarks, outperforming the dairy-free average by 0.8 points on overall liking. These results prove that excellence is not only achievable, it's replicable.

Yet the journey is far from complete. Plant-based milk, the category with the largest penetration, still owns just 14-15% of the total milk market.[1] While top performers shine, the average dairy-free product was rated "like very much" or "like" by just 33% of participants compared to 63% for dairy benchmarks. Categories including mozzarella, yogurt, butter, ice cream, and cheddar require R&D breakthroughs, with gaps of 0.5 to 2.1 points separating even the best dairy-free options from traditional dairy.

Taking Action for the Future

The path to a more sustainable future runs through taste-forward innovation

The business case is compelling: better-tasting categories achieve up to 15× greater market share than worse-tasting categories. This isn't theoretical. It's measurable market reality that rewards excellence and penalizes mediocrity.

The path is straightforward. **R&D must prioritize flavor**, particularly increasing richness and eliminating off-notes, followed by targeted texture improvements, especially in cheese categories. Category leaders have already demonstrated the formula for success, creating a roadmap that others can follow. Meanwhile**, price sensitivity remains critical**: a 25% premium eliminates 43% of potential consumers, demanding parallel investment in cost optimization alongside taste improvements.

Beyond product formulation, strategic marketing can accelerate adoption. Health-conscious consumers (48% of the market) show significantly greater openness to dairy-free products. Brands that evoke joy, comfort, satiation, and indulgence while maintaining associations with refreshment and responsibility can drive the transition from niche to mainstream.

With the dairy sector generating 4% of emissions globally,[2] **scaling better-tasting dairy alternatives represents one of the most impactful climate solutions available**. The data provide the roadmap. Now it's time to execute.

To explore how this data can inform your strategy or to participate in future research, contact NECTAR's Director Caroline Cotto at caroline.cotto@nectar.org.

Dashboard access: Explore the full dataset here.

1. Good Food Institute. (2025). Plant-based retail market overview. https://gfi.org/marketresearch/
2. Yadav, M. K., & Kumar, A. (2023). Life cycle assessment of greenhouse gas emission from the dairy production system — review. Tropical Animal Health and Production, 55, 2594. https://doi.org/10.1007/s11250-023-03748-4

Key Stakeholders

NECTAR

NECTAR is a nonprofit initiative of Food System Innovations that accelerates the protein transition through large-scale sensory research. We provide actionable taste data and foster industry collaboration to help alternative protein brands enhance consumer satisfaction and drive market adoption. Learn more at www.nectar.org.

Food System Innovations

Food System Innovations (FSI) is a philanthropic impact platform investing in a humane and sustainable future of food. FSI is a strategic hub that accelerates change by combining multiple tools and approaches, acting as both a funder and operator, directly implementing programs while empowering others through grants, investments, and capacity building. Learn more at www.fsi.org.

Palate Insights

Palate Insights is a product feedback platform pioneering authentic, affordable, and agile tools exclusively for the better-for-us food industry. Palate helps companies get consumer feedback through pop-up events with their restaurant and grocer partners and chef feedback through their panel of 1,000+ Executive Chefs. Learn more at www.palateinsights.com.

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