

NECTAR

Accelerating the protein transition



with taste.

Hi, I'm Caroline Cotto

Director, NECTAR
Food System Innovations (FSI)

- Venture-backed startup founder
- Co-founded Upcycled Food Association (UFA) & served as Board President
- 10+ years experience across food & tech



10 Brands



10 Brands



10 Brands



SALE



60% of consumers say **taste** drives their purchasing



In the US,
sales declines in
 all categories of
 plant-based
 dairy

First impressions
 matter!

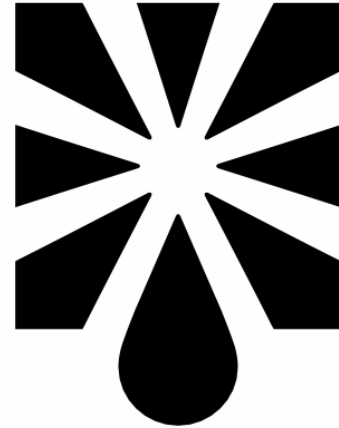
| Category | 2024 dollar sales | Dollar sales growth (2023-2024) | 2024 unit sales | Unit sales growth (2023-2024) | Average retail price change (2023-2024) |
|--|-------------------|---------------------------------|-----------------|-------------------------------|---|
| Plant-based milk | \$2.8 B | -5% | 721 MM | -4% | -1% |
| Plant-based meat and seafood | \$1.2 B | -7% | 195 MM | -11% | +4% |
| Plant-based creamer | \$760 MM | -4% | 153 MM | -4% | 0% |
| Plant-based meals | \$442 MM | -17% | 84 MM | -18% | +2% |
| Plant-based protein liquids and powders | \$450 MM | +11% | 30 MM | +13% | -2% |
| Plant-based yogurt | \$400 MM | +1% | 143 MM | -4% | +5% |
| Plant-based ice cream and frozen novelty | \$357 MM | -7% | 66 MM | -8% | +1% |
| Plant-based butter | \$323 MM | -6% | 78 MM | -5% | -1% |
| Plant-based bars | \$290 MM | +1% | 71 MM | +2% | -1% |
| Plant-based ready-to-drink beverages | \$264 MM | +2% | 64 MM | +2% | 0% |
| Plant-based cheese | \$218 MM | -4% | 43 MM | -3% | 0% |
| Tofu, tempeh, and seitan | \$221 MM | +7% | 73 MM | +6% | 1% |
| Plant-based cream cheese, sour cream, and dips | \$132 MM | -4% | 24 MM | -2% | -2% |
| Plant-based baked goods and other desserts | \$111 MM | +13% | 18 MM | +13% | 0% |
| Plant-based condiments and dressings | \$80 MM | -15% | 13 MM | -16% | 1% |
| Plant-based eggs | \$46 MM | +2% | 7 MM | -24%* | +34%* |
| TOTAL | \$8.1 B | -4% | 1.8 B | -5% | 1% |

Meet NECTAR

A non-profit research initiative of the climate philanthropy Food System Innovations (FSI)

- **Mission:** Accelerate the protein transition with taste
- **Vision:** Empower stakeholders to make sensory-informed decisions
- **Value Prop:** Amass the largest public dataset on the sensory performance of alt proteins

NECTAR



Our Foundational Pillars



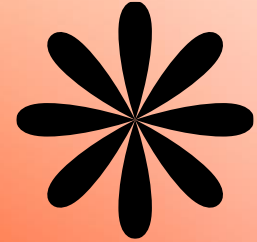
Learn

by conducting rigorous, large-scale, **blind sensory analyses** of alternative protein products.



Support

brands & manufacturers in **accelerating product development** by utilizing our novel and robust datasets.



Celebrate

great-tasting products by **elevating their culinary credibility** & expanding awareness and distribution to drive broader adoption.







Taste of the Industry 2026

Flagship **annual report** report maps the sensory landscape of sustainable protein products in widespread distribution.

- **2,183** American consumers
- **98** dairy-free products
- Range of ingredient types, processing methods, company sizes & channel strategies













Core Methodology

-  Blind taste tests
-  Omnivore consumers
-  Restaurant settings
-  Served “in-context”
-  Animal benchmarks
-  Diverse participant pool





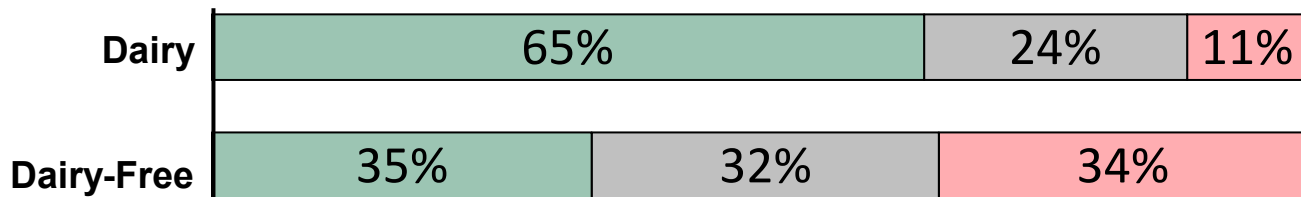
| Category | Recipe | Dairy Benchmark ² | Products tested |
|---|------------------------------|---|---|
|  Barista Milk | In a hot latte | Horizon Whole Milk | 10 Dairy-free, 1 Dairy |
|  Butter (Salted) | On a warm dinner roll | Land O' Lakes (sticks) | 10 Dairy-free, 1 Dairy |
|  Cheddar | Grilled cheese sandwich | Sargento Cheddar Cheese Medium (slices) | 9 Dairy-free, 1 Dairy, 1 Balanced Dairy ¹ |
|  Cream Cheese | On a warm bagel | Philadelphia Original Cream Cheese (tubs) | 10 Dairy-free, 1 Dairy |
|  Creamer | Served alongside coffee | Chobani Dairy Sweet Cream Coffee Creamer | 10 Dairy-free, 1 Dairy |
|  Ice Cream | On its own | Blue Bell Homemade Gold Rim Vanilla Ice Cream | 10 Dairy-free, 1 Dairy |
|  Milk ³ | On its own | Horizon 2% Milk | 20 Dairy-free, 1 Dairy, 2 Balanced Dairy ¹ |
|  Mozzarella | Cheese pizza | Sargento Mozzarella Shreds | 10 Dairy-free, 1 Dairy, 1 Balanced Dairy ¹ |
|  Sour Cream | On a seasoned baked potato | Daisy Sour Cream | 5 Dairy-free, 1 Dairy |
|  Yogurt | Served with a simple granola | Chobani Nonfat Plain Yogurt | 7 Dairy-free, 1 Dairy |

6 Key Takeaways

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Overall dairy-free product satisfaction, today:

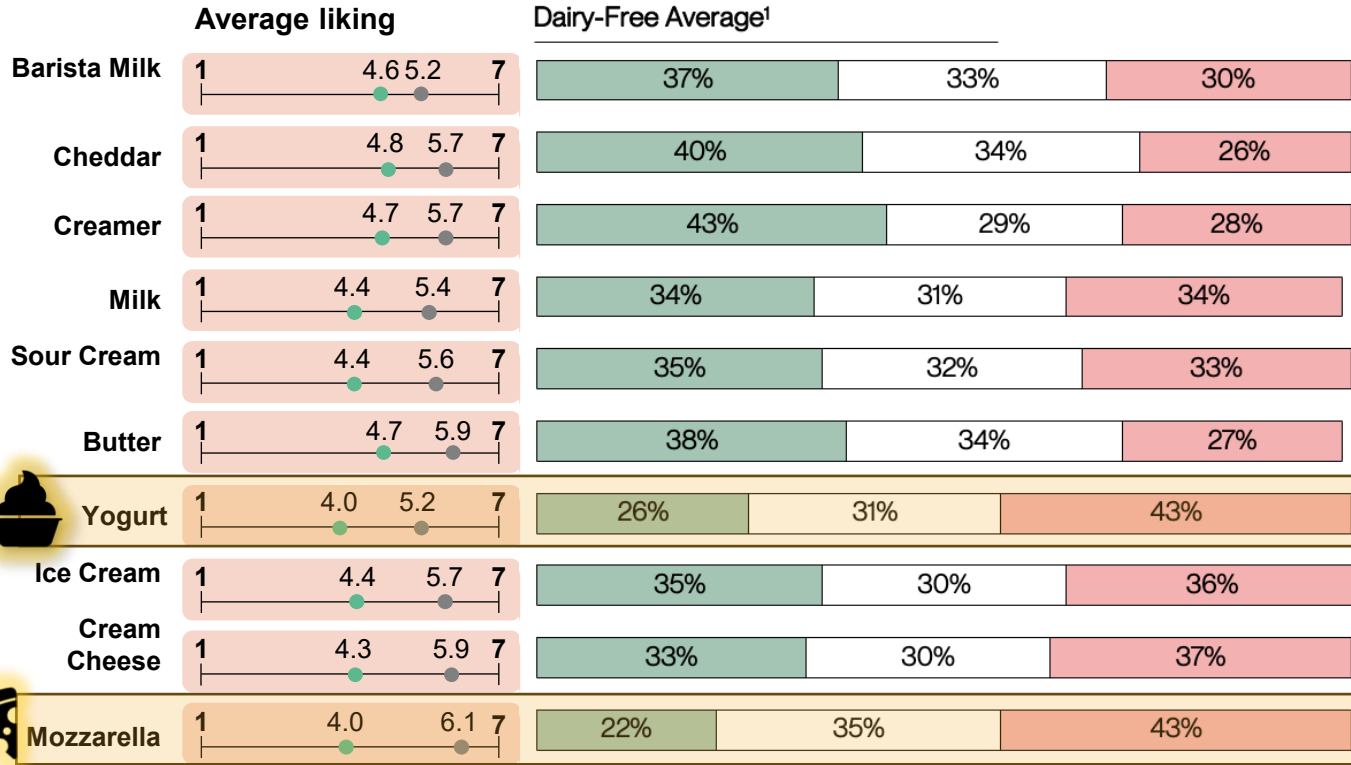
- Promoters:** Ratings of 'like very much' or 'like'
- Passives:** Ratings of 'neither like nor dislike' or 'like somewhat'
- Detractors:** Ratings of 'dislike very much', 'dislike' or 'dislike somewhat'



Most categories
significantly underperform the dairy benchmark

Urgency varies by category

Average liking of dairy-free products



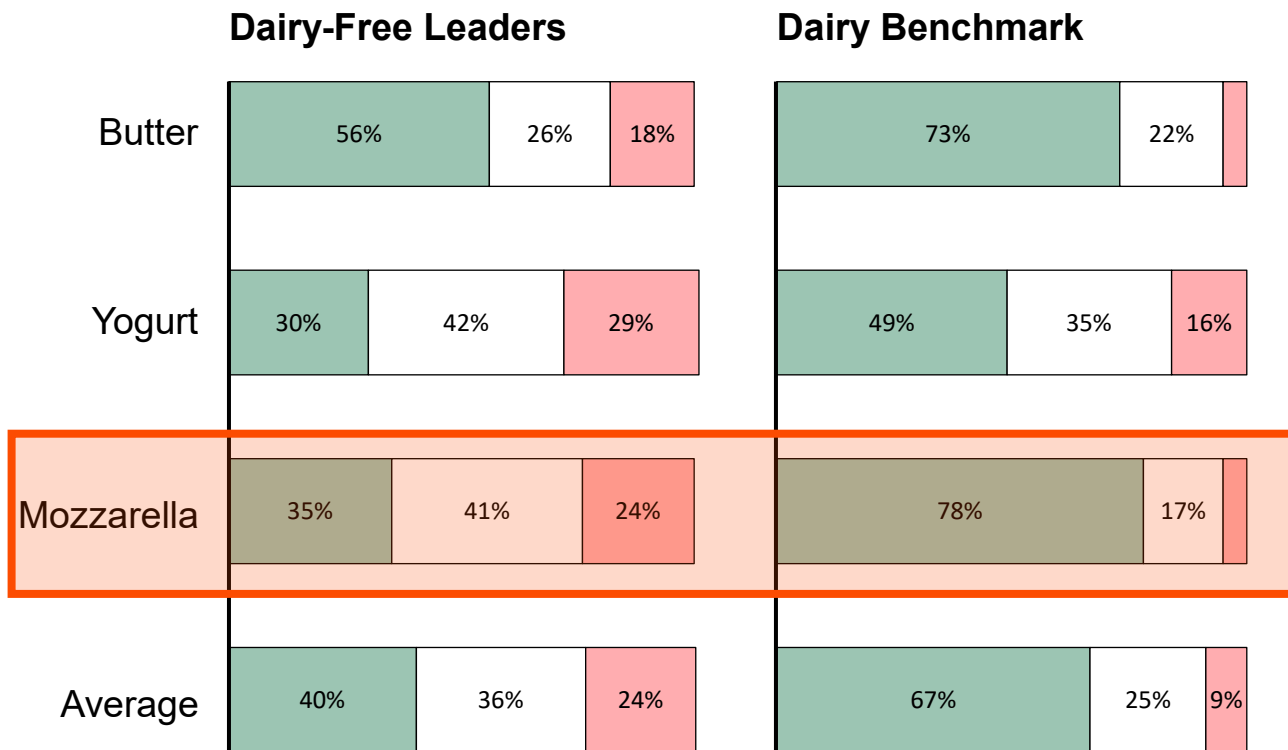
Greek yogurt & mozzarella had the lowest average liking

Mozzarella had the fewest promoters

● Dairy-Free Average ● Dairy Benchmark

■ Promoters □ Passives ■ Detractors

Categories with biggest gaps from leader to animal

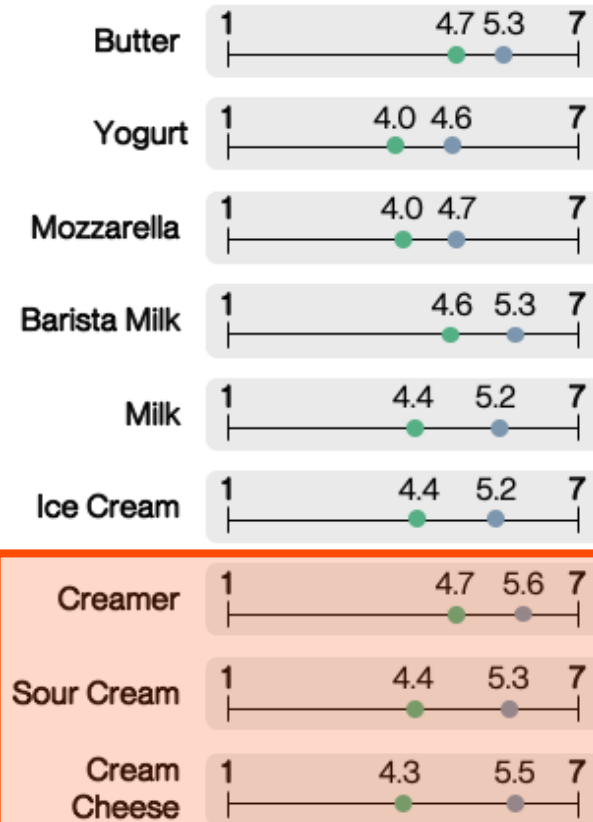


Category with the largest white space: **mozzarella**

Takeaway #1

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

Categories with the biggest gaps between dairy-free leader and average products



On average, leaders outscored average products by 0.8 pts

● Dairy-Free Average ● Dairy-Free Leaders

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

● Dairy-Free Average ● Dairy-Free Leaders ● Dairy Benchmark

How would you rate your **OVERALL LIKING** of XXX?



Leading dairy-free products **near performance of animal dairy**

Takeaway #2

Sensory improvements are clearly attainable.

2026 TASTY Award Winners

| | | | | | | | | |
|---|---|---|---|--|---|---|---|---|
|  Barista Milk |  |  |  |  |  |  | | |
|  Creamer |  |  |  |  |  |  | | |
|  Butter (salted) |  |  |  |  |  |  |  | |
|  Cheddar |  |  |  |  |  |  |  | |
|  Cream cheese |  | |  |  |  |  |  |  |

1. Product marketed as "non-dairy" according to FDA regulation. Contains less than 2% micellar casein (a milk derivative).

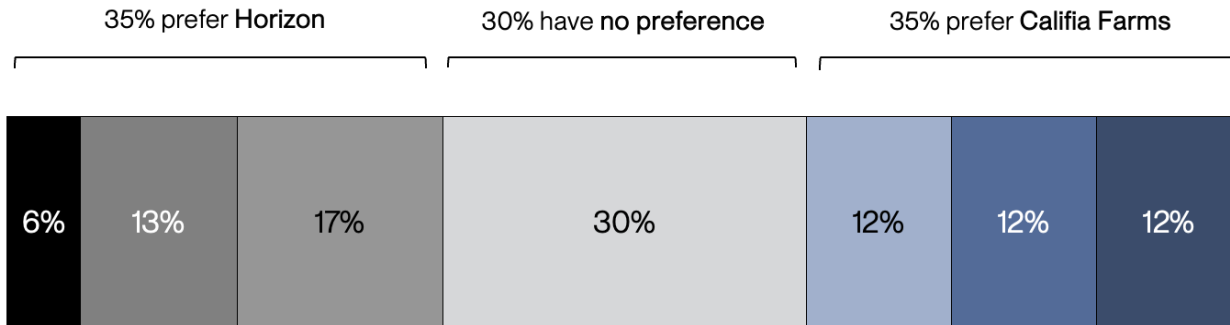
At least **50%** of tasters must rate the product the **"same or better"** than the dairy benchmark on overall liking



In fact, **taste parity** has been achieved

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

Strongly prefer dairy Somewhat prefer dairy Somewhat prefer Califia Farms Strongly prefer Califia Farms
Prefer dairy No preference Prefer Califia Farms



No statistically significant
difference with dairy^{2,3}



Taste parity with dairy^{2,4}



Taste superiority over dairy^{2,5}



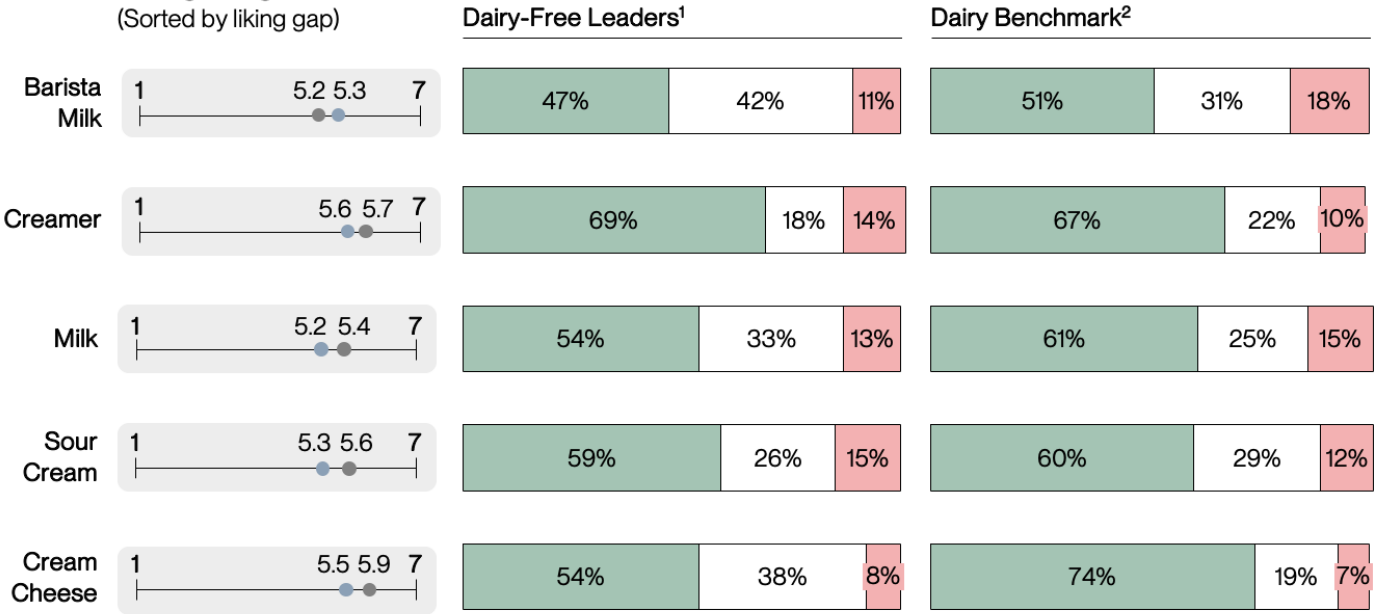
Califia Farms Oat
Barista Blend
**achieved equal
preference**
with Horizon
Whole Milk

Several categories are pulling ahead



- Dairy-Free Leaders
- Dairy Benchmark
- Promoters: Ratings of 'like very much' or 'like'
- Passives: Ratings of 'like somewhat' or 'neither like nor dislike'
- Detractors: Ratings of 'dislike somewhat', 'dislike', or 'dislike very much'

Average liking
(Sorted by liking gap)



Barista Milk & Creamer leaders achieved strongest performance (within 0.1 pts of dairy)

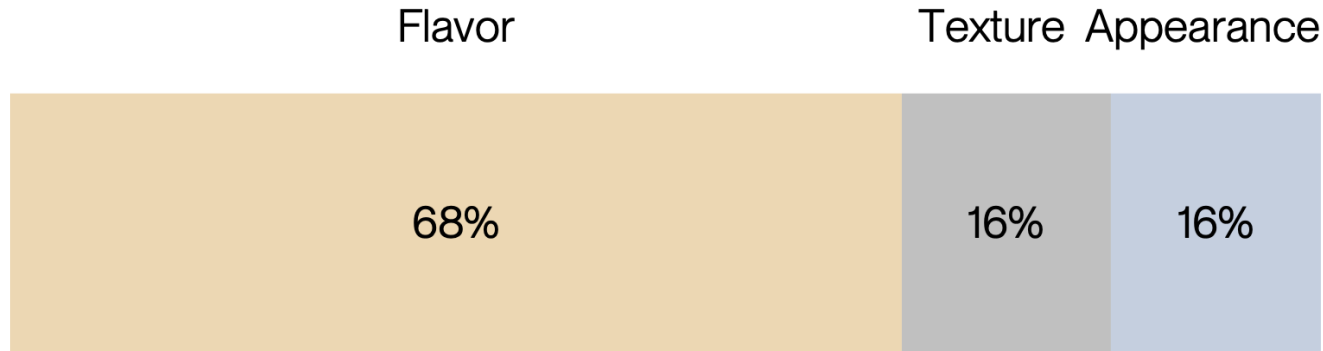
3 additional products nearing taste parity

Takeaway #3

Taste parity achieved;
many products are **worth celebrating.**

TL;DR: The work is not done

Share of the top R&D opportunities by sensory modality



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

4x more opportunities identified for flavor

Top R&D opportunities, ranked by priority

■ Flavor
 ■ Texture
 ■ Appearance



Flavor was the biggest gap in liking:

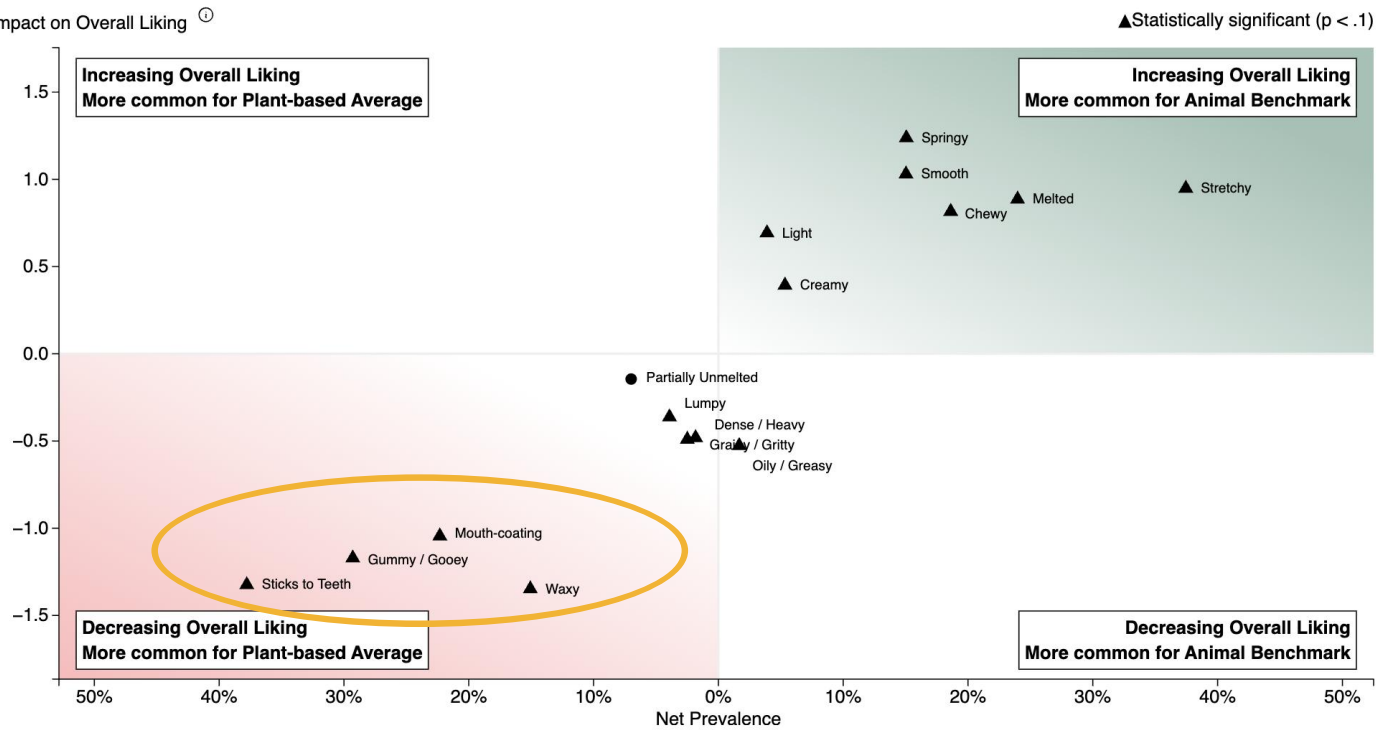
↑ Increase richness

↓ Reduce off-flavors

Texture key for **cheese**, especially mozzarella



Impact on Overall Liking [Ⓢ]



For pizza cheese:

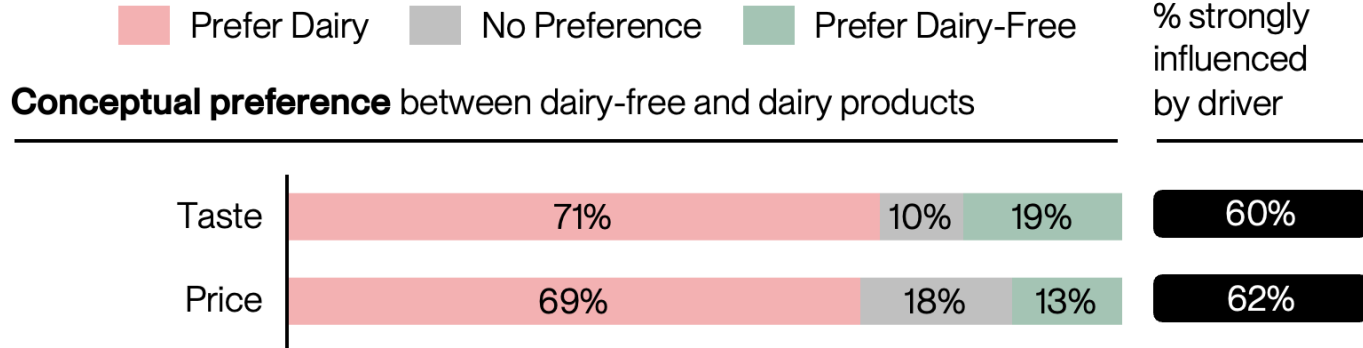
↑ Increase stretchiness

↓ Reduce stickiness & gumminess

Takeaway #4

R&D should **focus on flavor.**

Why this matters: Taste & price still king



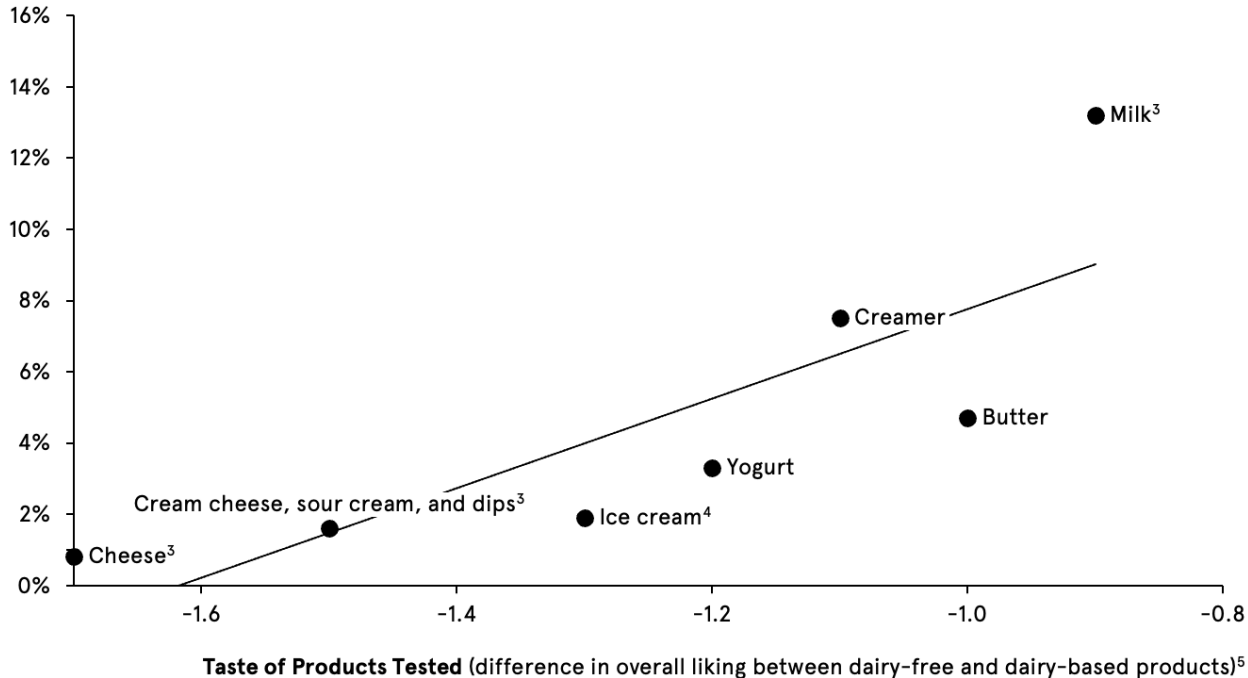
60%-62%
of consumers
'strongly agree'
they **shop on taste**
or **price**

Significantly more
likely to **purchase**
dairy

Taste improvements are correlated with sales growth

Relationship between 2025 Retail Sales Data and *Taste of the Industry 2026* Product Sensory Performance¹

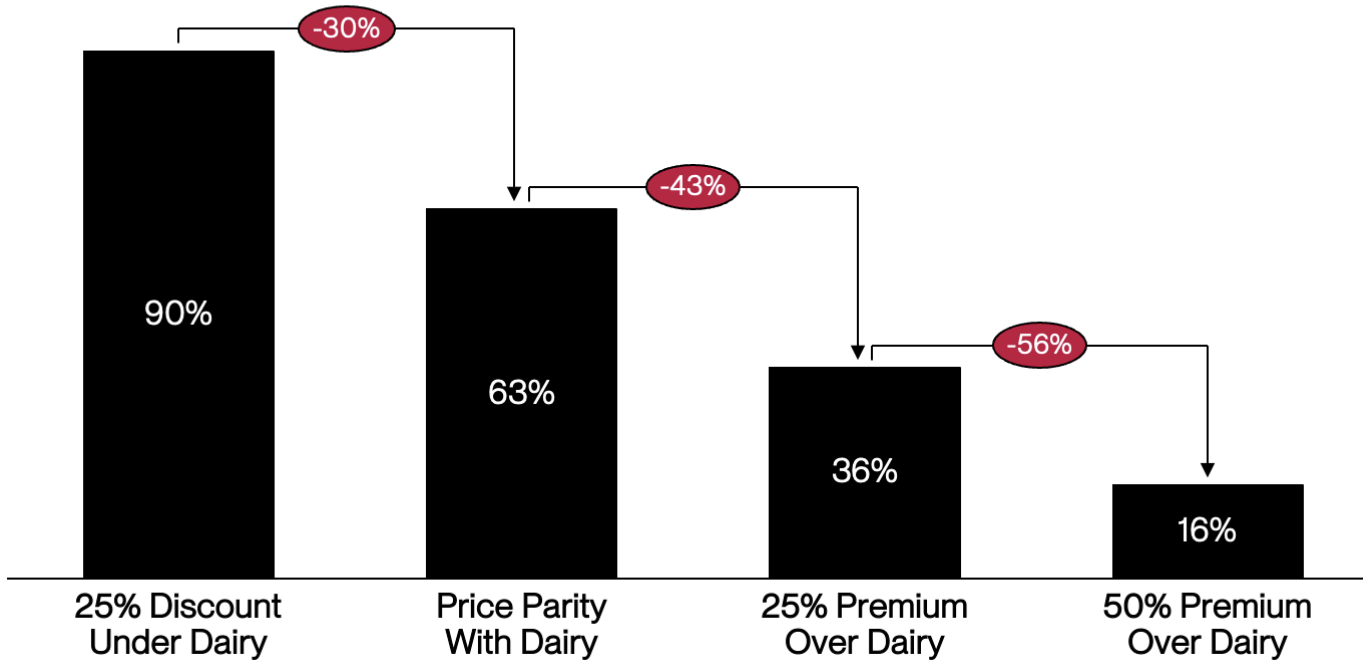
Market Share of Dairy-Free Category (dairy-free category sales as percentage of all dairy-free and dairy-based sales)²



Milk, the best-tasting category, has **15x higher market** share than cheese, the worst-tasting category

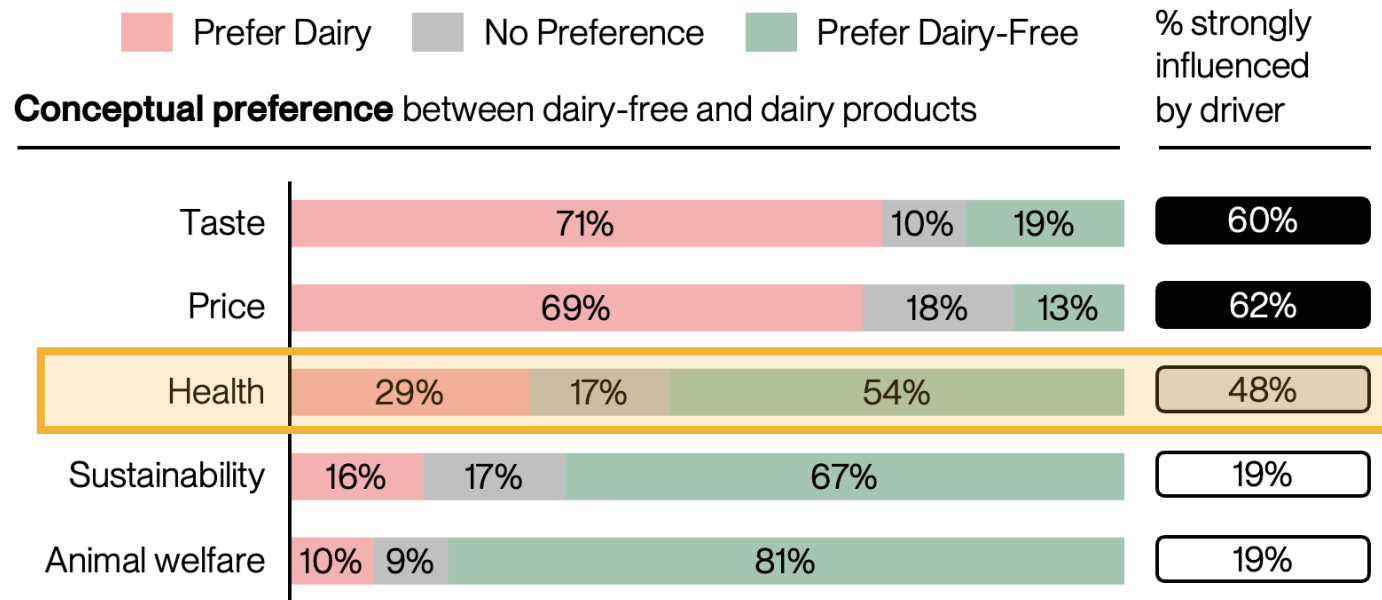
Charging price premiums drastically reduces addressable market

% Willing to pay



25% price premium prices out almost half (43%) of consumers

Health can drive near-term dairy-free adoption



48% of consumers 'strongly agree' that health influences their decision making

Significantly more likely to purchase dairy-free

Takeaway #5

Health is a quick win.
Taste & price are key long-term.

Positive Emotions from Dairy



nostalgia



comfort & joy

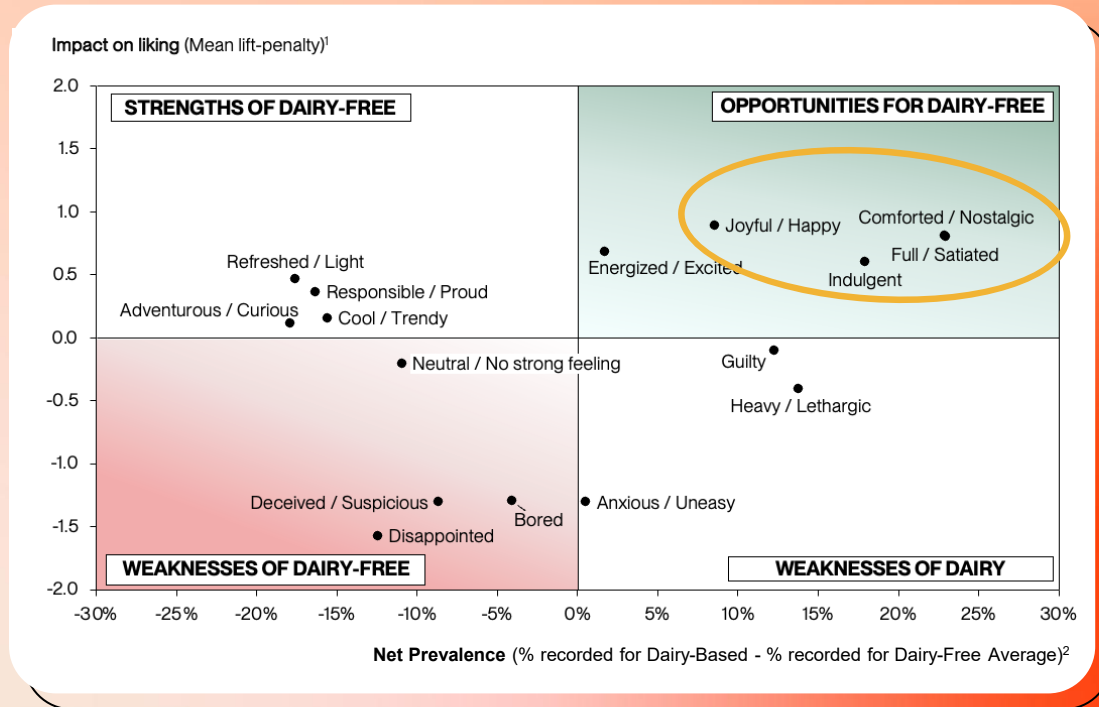


indulgence

Dairy-free brands can boost appeal by evoking key dairy emotions: *nostalgia, indulgence, satiation, joy*



Dairy-free products make consumers feel refreshed & responsible, but also **suspicious & disappointed**



Large **negative impact** on purchase intent (-1.3-1.6 pts)

Takeaway #6

Dairy is **emotional**.
Important to avoid negative
dairy-free reactions.

6 Key Takeaways

- 1. Significant **R&D is still needed** for most dairy-free products.
- 2. **Sensory improvements** are clearly attainable.
- 3. **Taste parity** achieved; many products **worth celebrating**.
- 4. R&D should **focus on flavor**.
- 5. **Health** is a quick win. Taste & price are key long-term.
- 6. Dairy is **emotional**.

Democratizing Data Access

NECTAR turns mainstream consumer preferences into product development roadmaps

Free public interface →

- **Consumer insights & detailed analytics**
- **Competitive benchmarking**
- **Actionable R&D guidance**
- **Marketing intelligence**
- **Trend identification**



Powered by  Palate

What is hybrid dairy?

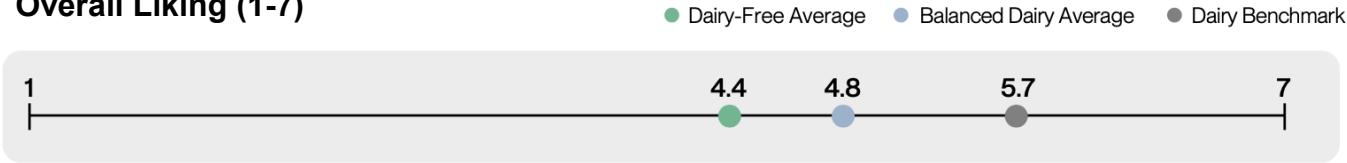
Hybrid (balanced) dairy is a category of products that **substitute at least 30%** of the animal-based ingredients for ingredients made from plants, cultivated animal cells, and/or microbial fermentation.

Examples include milk, cheese, and cream that blend traditional dairy with plant proteins such as **soy, pea, fava bean, and oat**.

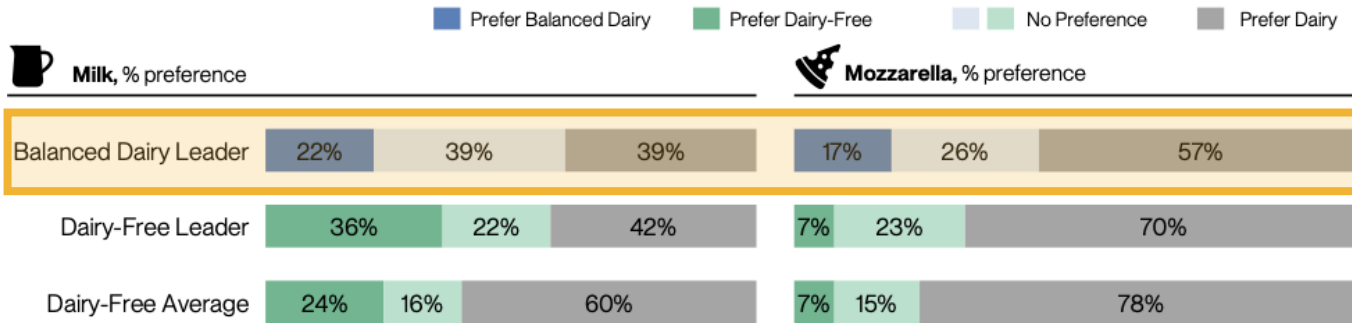


Balanced (Hybrid) Dairy is closing the the taste gap

Overall Liking (1-7)



Note: Averages reflect a weighted mix of Cheddar, Mozzarella, and Milk scores, based on balanced dairy product count.



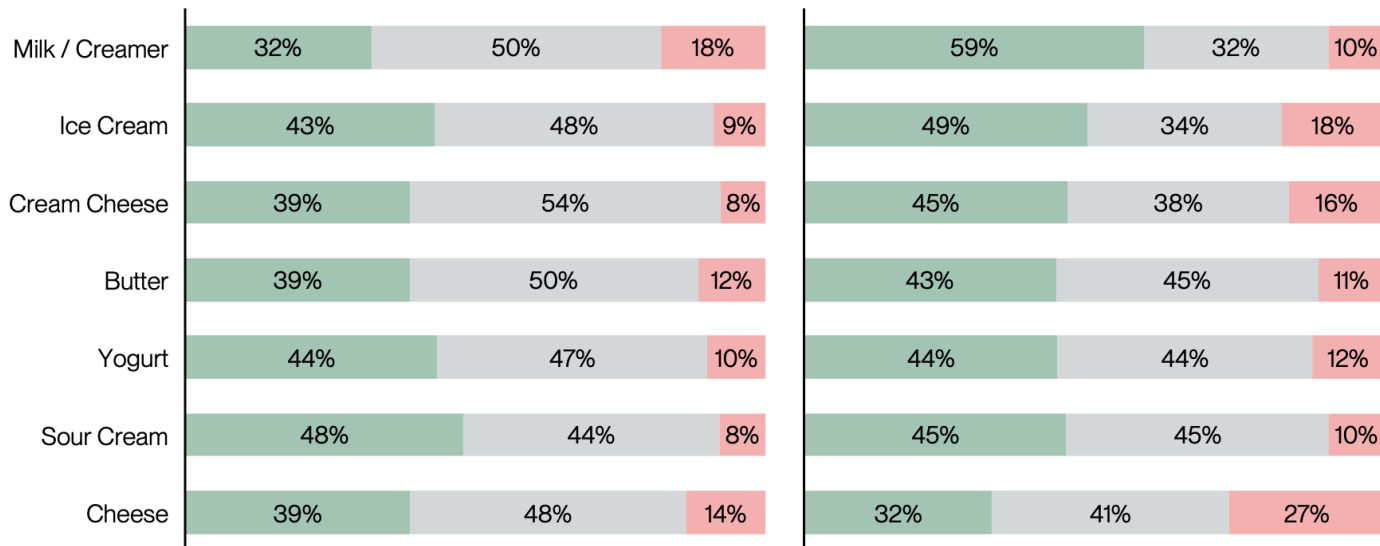
Balanced dairy **outperforms** all dairy-free mozzarella and milk products, despite the category's nascency

Balanced Dairy should prioritize marketing

■ **Promoter:** Ratings of 'definitely would buy' or 'would buy'
■ **Passive:** Ratings of 'probably would buy' or 'might or might not buy'
■ **Detractor:** Ratings of 'probably would not buy', 'would not buy', or 'definitely would not buy'

Balanced Dairy

Dairy-Free



Conceptual appeal for Balanced Dairy products **lags** dairy-free in most categories

What's next for NECTAR?



- **Plant-Based Meat in India (Oct 2026):**
Sensory analysis of **34 plant-based meat** products in India, in partnership with GFI India
- **Taste of the Industry (March 2027):**
Sensory analysis of **100 meat-alternatives in Europe (Germany + UK)**, will include some balanced proteins (hybrid meat).
Actively recruiting brands / products!

Have a category or region we should research?

Drop us a line:
contact@nectar.org

2027

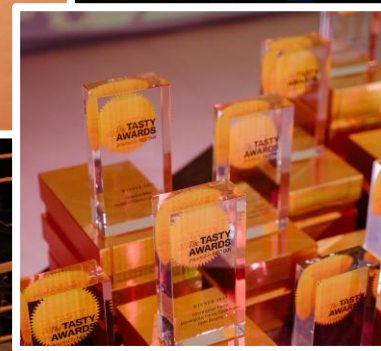
The TASTY AWARDS

powered by NECTAR

COMING SOON!

Join us in
London!

BEZOS CENTRE
FOR SUSTAINABLE PROTEIN



Get Involved with NECTAR



CONTACT



Share data to facilitate further insights



Partner with us on a new sensory study



Participate in a sensory test of your product



Elevate your brand with the TASTY Awards



Leverage sensory data to inform purchasing



Explore philanthropic opportunities

Caroline Cotto

Director, NECTAR

caroline@nectar.org
www.nectar.org