

INSIGHTS ON THE PLANT-BASED DAIRY CATEGORY IN INDIA

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EXECUTIVE SUMMARY

In the evolving dietary tapestry of India, plant-based milk is gaining momentum and weaving its way into consumer preferences. As it emerges as a distinct category, it is evident that consumers aren't merely familiar with the concept, but a majority can astutely distinguish between plant-based and animal-derived milk based on characteristics like appearance, taste, and consistency. Among the alternatives, soy milk stands out as the frontrunner in awareness, with almond and oat milk not far behind.

The allure of plant-based milk is not just in its novelty - users consistently praise its taste, ease of digestion, and inherent health/nutritional benefits. When advocating for this category, many cite the health advantages as their primary persuasion. Yet, an interesting dichotomy exists—two-thirds of plant-based milk users continue to also use animal-derived milk in their households. This juxtaposition is driven by the availability, affordability, and versatility of conventional milk.

In response to the accessibility-related challenges of commercial plant-based milk, consumers sometimes make plant-based milk at home. At the same time, consumers are willing to pay a premium of up to 20% for plant-based milk and also switch brands based on pricing. Brands can leverage this trend by introducing varied pack sizes in the short term and refining the supply chain in the long term to help achieve the desired pricing. Moreover, the category can also benefit from emphasizing its compatibility with beloved hot beverages like tea and coffee and highlighting additional product benefits like enriched calcium content.

On the criteria of ethical sourcing, users rate plant-based milk better compared to animal-derived milk. However, plant-based milk's association with sustainability is not fully understood. To accelerate the category's upward trajectory, brands must educate consumers on the positive impact of plant-based dairy while simultaneously bolstering its accessibility and versatility.

INTRODUCTION

Over the last few years, plant-based dairy has been gaining immense traction across the world and plant-based milk is the most developed plant-based category. **The category is worth \$2.8 billion**, accounting for 36% of the plant-based food market and 15% of all dollar sales of retail milk in the U.S. in 2022. Meanwhile, other categories like yogurt, cheese, butter, creamer, ice cream, etc are also growing.

There are **45+ brands and 223 SKUs** in the plant-based dairy category in the Indian market ranging from milk, yogurt, butter, cheese, paneer, ghee, etc. As per GFI India and Deloitte's **economic analysis**, the domestic market size for plant-based dairy in India is estimated to be around INR 250 crores in 2021 and is projected to reach INR 891 crores by 2025. By 2030, the market size in India has the potential to reach anywhere between INR 4,827 crore to INR 10,625 crore. There is also an opportunity for exports ranging from INR 459 crores to INR 1889 crores by 2030.

As per the **research** conducted by GFI India and Ipsos in 2020, 90% of plant-based milk users have also consumed animal-derived milk in the past 12 months. This report is aimed at understanding the user experience toward both sources of milk (animal-derived and plant-based) and offers insights for manufacturers to develop and grow the share of plant-based dairy categories in India.

Key research questions answered

1. How much do consumers understand the category **plant-based milk**?
1. What is the **awareness and trial** for the category?
1. What are the **drivers and barriers** to consumption?

Research methodology

- The research is based on a qualitative survey conducted in partnership with **Metrix Labs**.
- Respondents were screened for eligibility criteria and were invited to participate in the group discussion.
- Respondents joined the discussion through an online platform.
- The conversation was led by a moderator. Along with open-ended questions

and polls, respondents were also shown stimuli related to the study and were asked to offer their opinions.

- This research is based on a limited sample of participants (sample size of 87). No statistical inferences should be drawn from these results since the sample sizes were small and there is a group dynamic where respondents are exposed to results from each other.

Profile of the respondents

- Age: 18 to 45
- Men and women
- Type of household: NCCS A
- Monthly Household Income (MHI) of INR 50,000 and above
- From Delhi, Mumbai, Bangalore, and Kolkata
- Mix of vegetarians & non-vegetarians (flexitarians)
- Total sample size of 87
- Users and non-users in the ratio of 80:20
- Users are defined as the respondents who have tried/are consuming plant-based milk in the past six months
- Non-users are the respondents who are aware of the category, but not in the trial stage yet

Key Findings:

1. Consumers' comprehension of the plant-based milk category

1.1. UNDERSTANDING THE TERMINOLOGY

Consumers who are aware of the category are clear about the term and source of plant-based milk. They primarily associate 'derived from plants/non-dairy' with plant-based milk. Some sources like soy and almond have a spontaneous playback. Some of the quotes by consumers for explaining plant-based milk are as below:

- *"Naturally sourced. Filled with vitamins and calcium. No added preservatives."*
- *"Like milk, with ingredients from plants like almonds, oats, etc."*
- *"Milk that is derived from plant sources like almonds, cashews, coconuts, soya, etc."*
- *"Source of origin is plants. The raw material is plants. Milk extracted from plants"*
- *"Milk extracted from plant sources"*
- *"Which is derived from plants like soy and almond."*

1.2. ABILITY TO DIFFERENTIATE BETWEEN PLANT-BASED AND ANIMAL-DERIVED MILK

55% of the users claim that plant-based milk is easy to differentiate from animal-derived milk. Color, taste, and consistency are some of the attributes that help in differentiating between both sources of milk. Some of the ways to differentiate between plant-based and animal-derived milk quoted by the consumers are:

- *"Through color, taste, smell, and density"*
- *"Taste, and consistency of the drink"*
- *"By thickness, color, and aroma of the milk"*
- *"Tastes slightly different and light in taste"*
- *"The taste of it or the color of it. Plant based is not fully white, but animal milk is"*

- “Animal-based milk is creamy and yellowish, but plant-based milk is super white & thin”

11% of the users think it’s not easy to differentiate between plant-based and animal-derived milk. Some of the reasons quoted by them are:

- “Plain plant-based milk tastes the same as animal-derived milk.”
- “The density, color, and form are totally the same”
- “Whithout labeling, we were not able to differentiate because both are white and thick.”

1.3. PERCEPTION OF PRODUCTION PROCESS

While a subset of users has a clear understanding of the production process of plant-based milk, the majority remain ambiguous. The following outlines the consumers’ perceptions of this process:

- “Plant-based milks are made by grinding a bean or a nut, then adding water, flavors, vitamins, and minerals. The nutrients and the amount of sugar in plant-based milk varies considerably based on how it was produced and what has been added.”
- “It is extracted from the nuts. Basically, juiced out of it. I prepare my almond milk by diluting almonds and a little water in a mixer and then using a muslin cloth to filter.”
- “By grinding seeds/nuts with a little amount of water”
- “From soy extract and almond extract”
- “By smashing the plant, crop, and fruits like coconuts”
- “By processing specific plant parts”
- “From plant-based ingredients like coconuts, almonds, and soya”

extracted grinding
 boiled to sterilize **made from soy** soaked
 made from nuts **made from oats** fertilized mixing
natural/plants processed squeezing
 others **made from coconut**
made from almond

1.4. ALTERNATIVE TERMINOLOGIES FOR PLANT-BASED MILK

Consumers find the word milk the most relevant to be used for plant-based alternatives with qualifiers such as ‘plant-based/dairy free’, etc.

However, if there are restrictions around the use of the term milk, some of the other words that could be used as an alternate term for plant-based milk are:

- Plant liquid/juice/drink
- Protein drink
- Nutrition drink
- Plant extract
- Vegan drink
- Plant beverage

These terminologies along with qualifiers like dairy free, dairy alternative, non-dairy, etc., make sense from a consumer perspective.

1.5. ASSOCIATION WITH SUSTAINABILITY

The majority of consumers interviewed demonstrated an awareness and general comprehension of the concept of sustainability, often articulating it as “conserving the planet” for future generations.

- *“Not harming anyone and maintaining a balance with the environment.”*
- *“Sustainability is a societal goal that broadly aims for humans to safely coexist on planet earth.”*
- *“Being cautious about the long-term effects on the environment and altering choices accordingly.”*
- *“Using resources in such a way that our future generations have it without any problem.”*
- *“Reusable and eco-friendly”*
- *“Saving for the next generation”*

However, when considering sustainability, alternative proteins, including plant-based milk, aren’t the primary association for many. Instead, actions like ‘tree planting’ and ‘plastic avoidance’ were frequently cited by the target group as their contributions to a more sustainable planet.

Some of the most common choices made by consumers for a sustainable lifestyle include:

- Carrying cloth bags for shopping
- Planting trees
- Recycling items for multiple uses
- Segregating wet and dry waste or e-waste
- Using/purchasing products or brands that are sustainable and eco-friendly
- Taking public transport

A few consumers believed that animal-sourced milk is more sustainable as it avoids cutting down trees.

- *“Cutting down the plants will impact sustainability.”*
- *“No need to destroy plants for sourcing the milk. We can get milk from animals.”*

Though consumers are keen on using products/brands that are sustainable and eco-friendly, none of the alternative proteins including plant-based milk are top of mind when making these choices. Creating consumer awareness about the sustainable nature of plant-based proteins, coupled with clear communication on the packaging, can potentially steer consumer preferences in this direction.

2. Awareness, trial, and buying behavior

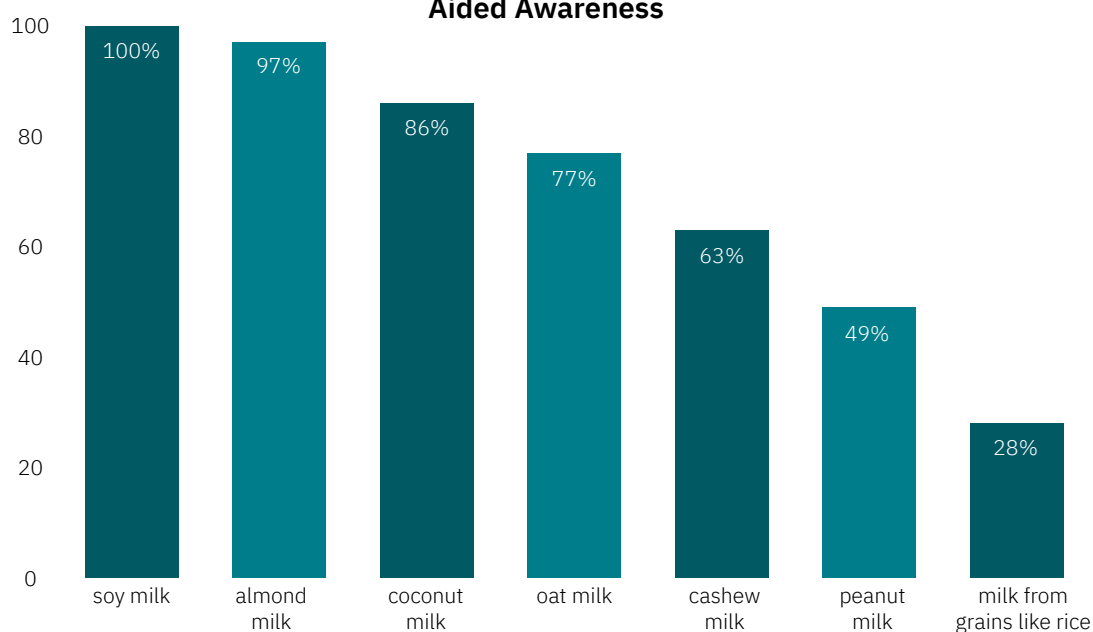
2.1. AWARENESS LEVELS FOR TYPES OF PLANT-BASED MILK

Awareness of soy milk was the highest at both aided and unaided levels, followed closely by almond milk. Both oat and coconut milk also registered significant recognition among consumers.

Unaided Awareness

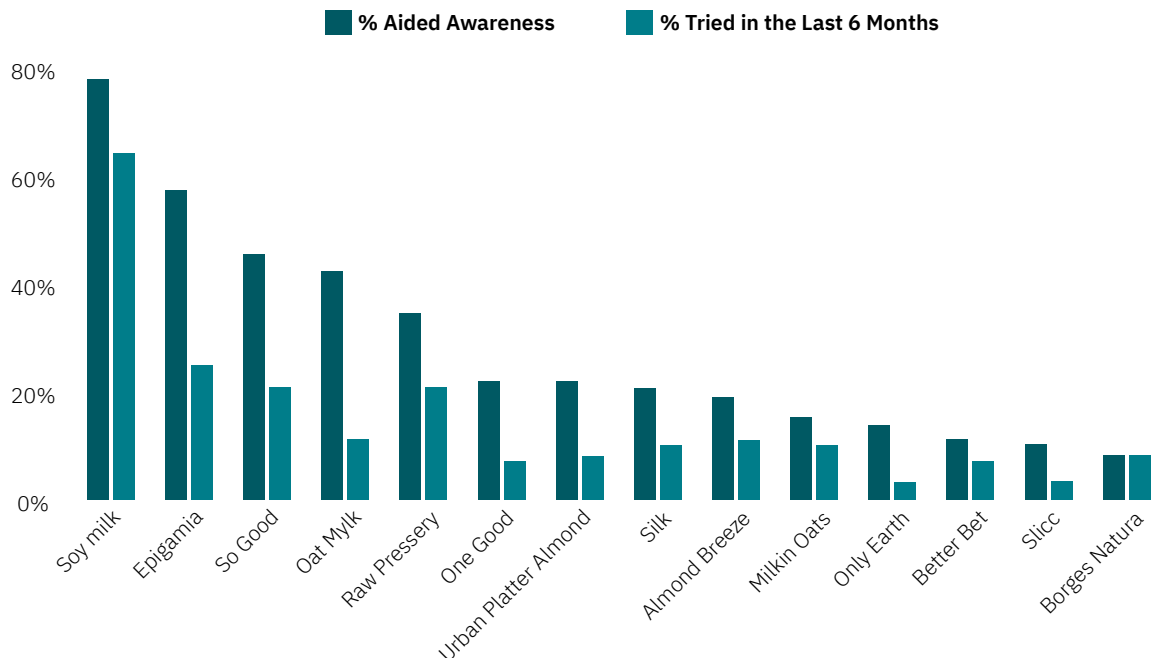
soy milk	96%
almond milk	80%
oat milk	40%
coconut milk	36%
cashew milk	14%
rice milk	3%

Aided Awareness



2.2. BRAND AWARENESS AND TRIAL RATES

Sofit ranks the highest in terms of brand awareness as well as usership followed by Epigamia and So Good. Oat Mylk, Raw Pressery, Urban Platter, and Silk, are some of the other brands recalled and used by consumers.



2.3. FACTORS INFLUENCING BRAND SELECTION

Taste followed by availability, feedback from other consumers, brand name, and health are the key factors that influence the purchase decision.



- **Taste (23%)***
"Tastes better than other brands. Costs a little lesser."
"I can trust it and like the taste of it."
- **Availability (19%)**
"It is available near my house. I can get it easily."
- **Consumer Feedback (19%)**
"I tried it as a suggestion from my friend."
"Good reviews"
- **Brand Name (17%)**
"This is a well-known and most trusted brand for plant-based milk."
"Popular brand"
- **Health (17%)**
"It is very healthy."
"It is healthy, no chemicals. High fiber and proteins."

2.4. MOTIVATIONS BEHIND BRAND SWITCH

Affordability is the single most important factor influencing the switch between brands, followed by availability.



- **Cost-effective (36%)**
"Will switch if I get a better price"
"Price reduction and has all other benefits like calcium, protein, desired flavors etc"

*Figures in the () indicate the number of consumers mentioning the particular attribute

- **Easy availability (13%)**

“More flavors and available easily—online and in supermarkets”

“If other brand products have more benefits or the one which I regularly use is not available”

“Pricing and availability. Flavors maybe. And less sugar”

- **Flavors (10%)**

“Flavors, taste, format”

“More flavors, easily available and lighter”

“More flavor options. Price”

- **Taste (9%)**

“If it is better in taste”

“If I change, the reason will have to be taste and experience of different milk”

- **More health benefits (7%)**

“More health benefits than what I am currently using”

“Better health benefits—calcium, good for bones”

**Figures in the () indicate the number of consumers mentioning the particular attribute*

3. Determinants of plant-based milk consumption: drivers and barriers

3.1. CONSUMERS' PERCEPTION OF ANIMAL-DERIVED MILK

Consumers predominantly view animal-derived milk as a good source of calcium, beneficial for general good health and strengthening of bones. Conversely, concerns around bloating/indigestion, lactose intolerance, adulteration of the milk, and animal exploitation are also prevalent.

3.1.1 DRIVERS FOR CONSUMPTION

Calcium	57%
Healthy	25%
Bone Health/Strengthening	16%
Vitamins and Minerals	13%
Easy Availability	10%
Food Substitute	7%
Nutrition	7%
Taste	7%
Protein/Casein Protein	4%
Strength	4%
Versatility	4%
Stamina	3%
Cheaper/Economical/Pocket-friendly	3%
Digestion	3%
Good fat	3%

Base, 69

3.1.2 BARRIERS TO CONSUMPTION

- **Bloating & indigestion (21%)**

"Sometimes it can create gastric issues and indigestion, leading to bloating"

"Not suitable for a lot of people, causes bloating and stomach irritation"

"It's tough to digest and causes indigestion"

- **Lactose intolerance (15%)**

"It contains lactose. Doesn't suit me"

"It has lactose and it's a problem for people who are allergic to it"

"It has lactose. Not everyone can digest it"

- **Adulterated (15%)**

"Sometimes very watery and not so pure leading to digestion issues"

"Added preservatives"

- **Not ethically sourced (11%)**

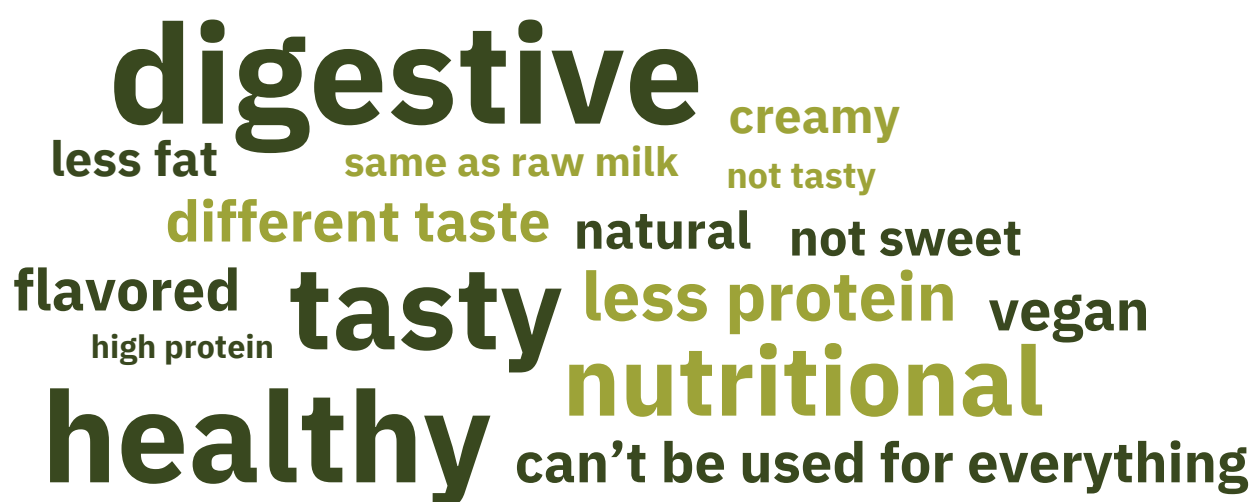
"Harder to break down and digest. It is also exploitation of animals"

"Not ethically sourced. Has a lot of added preservatives and is not pure"

"Milk is procured from animals which is not right ethically speaking"

3.2. CONSUMERS' PERCEPTION OF PLANT-BASED MILK

9 out of 10 consumers who have tried plant-based milk, find the milk to be tasty and easily digestible with nutritional/health benefits.



**Figures in the () indicate the number of consumers mentioning the particular attribute*

3.2.1 DRIVERS FOR CONSUMPTION

- **Healthy (31%)**

"Might be healthier and better for the human body than animal-based milk. It also avoids cruelty towards animals."

"Low in fat, very low in cholesterol, and healthy. Good for digestion, good in vitamins and natural plant-based proteins"

- **Easy to digest/no gastric issues (30%)**

"I don't get stomach aches, diarrhea, gas, etc. It is easy to digest"

"Relief from stomach irritation and indigestion. It is light and gives good energy."

- **Less fat content/cholesterol-free (28%)**

"No cholesterol, low in fat"

- **Nutrition (25%)**

"High nutritional value and tastes good"

- **Protein (24%), vitamins & minerals (21%)**

"High protein"

"It has vitamins and calcium."

Base, 62

Users of plant-based milk use health as the primary reason to convince friends and family to try it.

"I would suggest that it's safe and healthy. Tasty as well as good for the body."

"It's very healthy. Nutritional value is quite high and good for stomach."

"I would say it's very healthy and nutritious. Has good protein and is easy to digest."

"I would advise people to consume it for health benefits and strength."

"I challenge them to taste plant-based milk. Once they do, they will love it and it's also healthy."

"I will tell them that this milk has more protein, and has calcium which is good for health and keeps bones fit."

"I would try to inform them about the health benefits of plant-based milk, and I think the lack of any animal products in it is a good selling point as well."

*Figures in the () indicate the number of consumers mentioning the particular attribute

3.2.2. BARRIERS TO CONSUMPTION

- **Costly/expensive (32%)**

25% of plant-based milk users prepare it at home due to the high price of the product or due to lack of availability. 75% of the users buy it from the store due to the lack of time or knowledge on how to prepare plant-based milk at home.

"It is quite costly. Many people can't afford it."

"High Pricing! Lack of good flavor."

"Bland in taste compared to animal-based milk, and more expensive."

"Expensive. Lacks the nutritional values that are in animal-based milk."

"Prices are high, not everyone likes the flavored milk."

- **Not easily available (22%)**

"Costly and is not available always in local stores."

"Not easily available while traveling. It is an extra task to make it at home and is expensive to buy from outside. It doesn't taste good with everything."

"It is not easily available in small towns, and prices of the packed ones are higher."

- **Not tasty/flavorful (18%)**

"Not very tasty. Uses are limited and it is costly."

"Might not suit everyone and taste needs to be acquired."

"Little sour and expensive "

"It can be tasteless."

- **Not versatile/limited uses (15%)**

"Cannot make buttermilk, ghee, etc."

"It's expensive. We cannot make things like ghee and curd from it."

"Can't make cheese out of plant-based milk."

**Figures in the () indicate the number of consumers mentioning the particular attribute*

3.3. PRICE PERCEPTION OF PLANT-BASED MILK

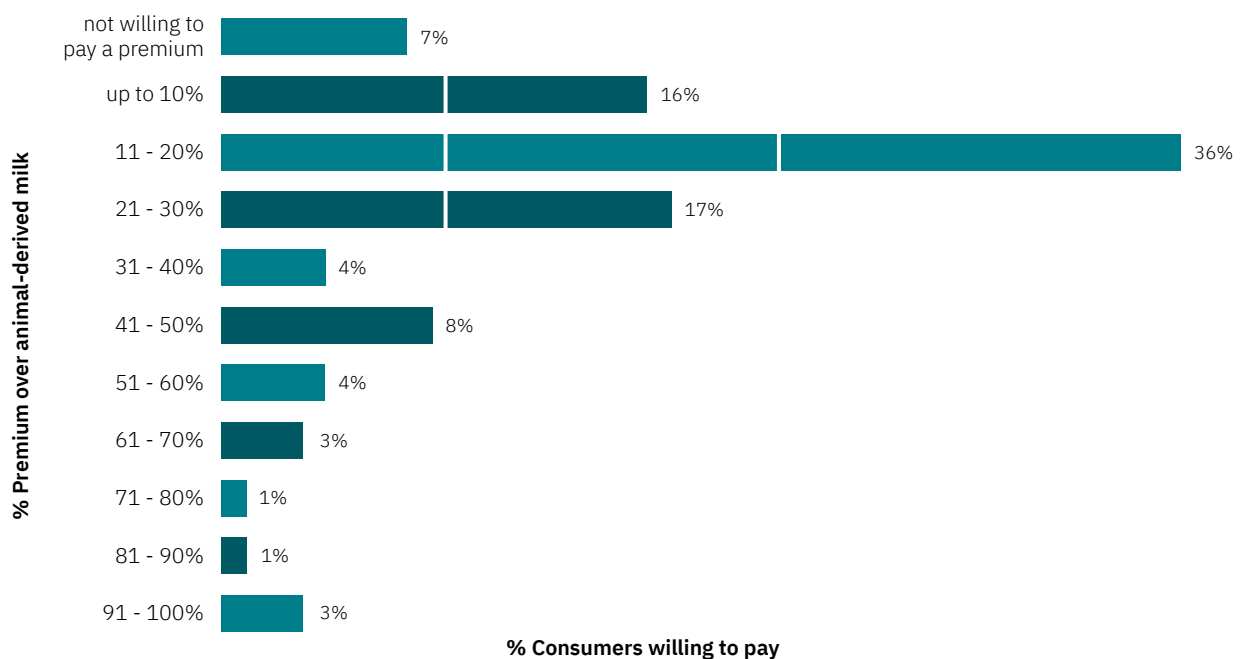
Most consumers in the target group are willing to pay about a 20% premium for plant-based milk over animal-derived milk.

“Since it is healthier and tastier compared to animal-derived milk, I won’t mind paying extra for better quality.”

“If I can get a healthier and better alternative at a bit more price then no issues, I am willing to pay more.”

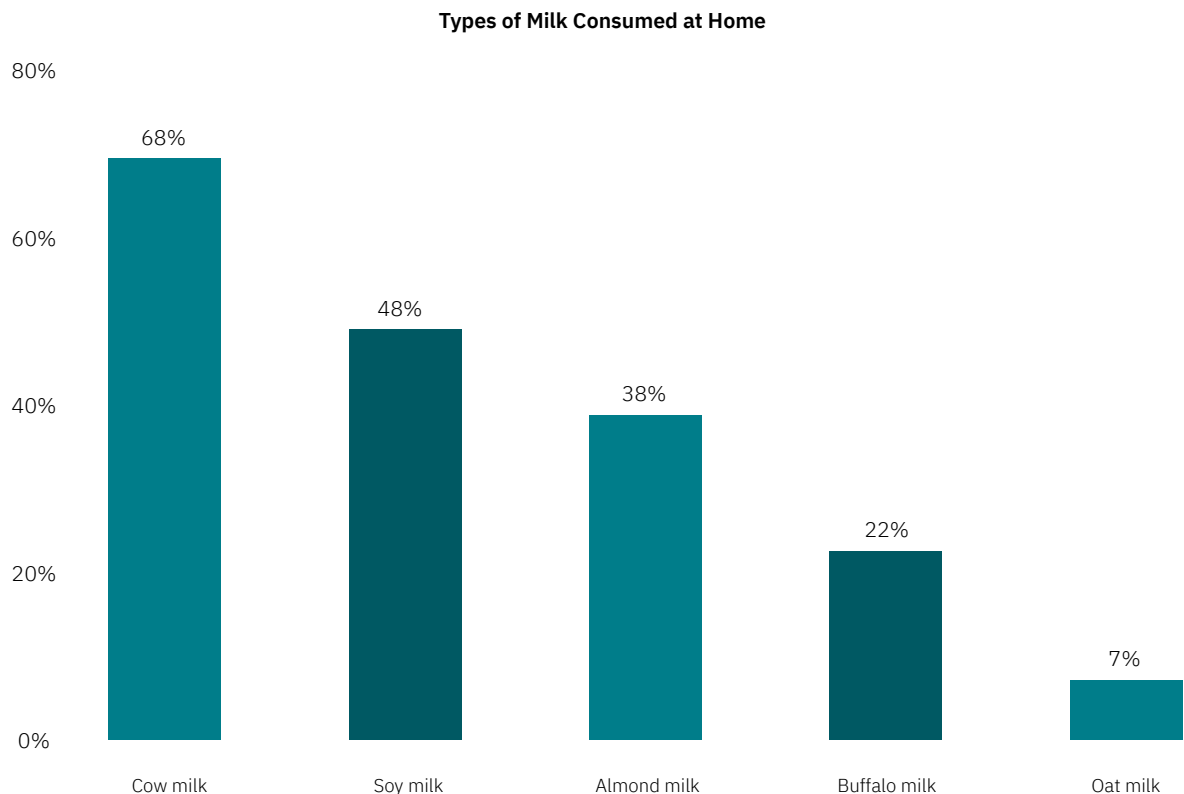
“More nutritious value, cruelty-free, and less cholesterol.”

“They contain different minerals, vitamin B12, and they are healthy for us.”



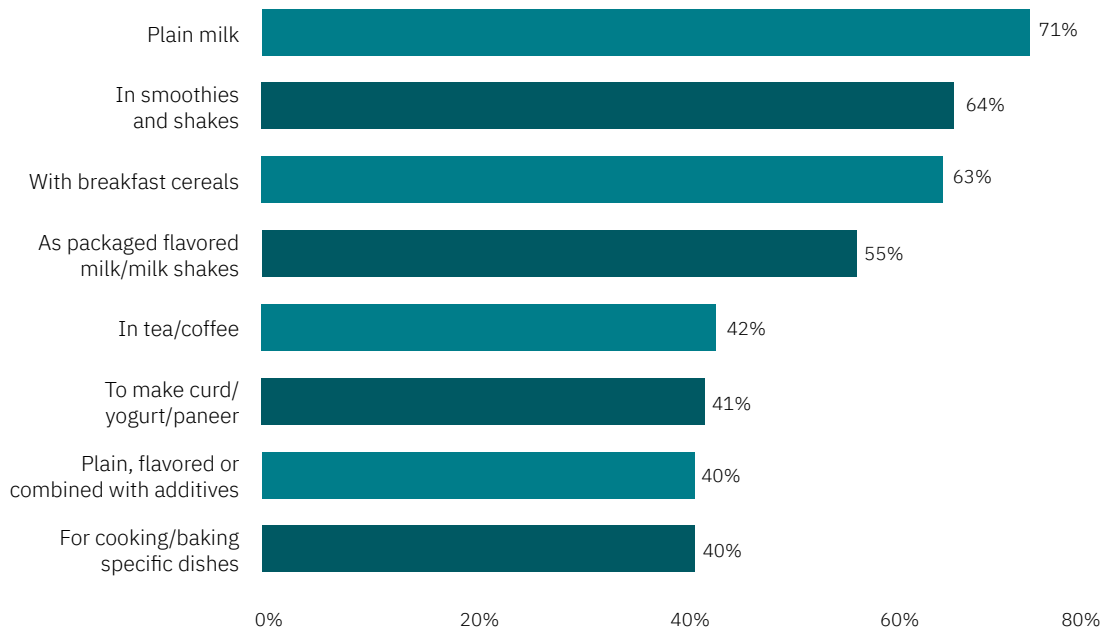
4. Use of plant-based vs animal-derived milk

- Nearly two-thirds of plant-based milk users also incorporate animal-derived milk into their diets.
- Among these households, cow milk is the most commonly used followed by soy, almond, and buffalo milk.



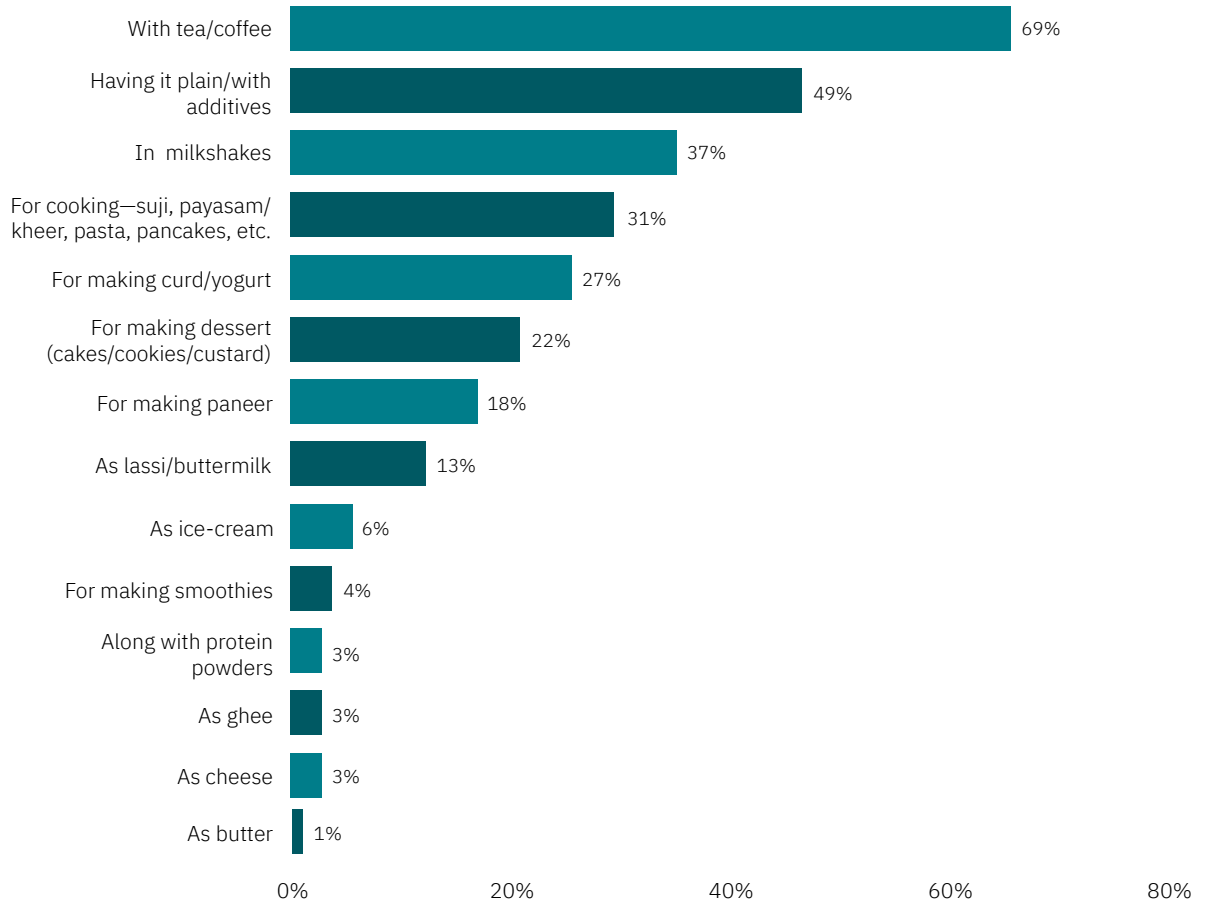
- Both animal-derived milk and plant-based milk are consumed as a family unit in the households. 59% of the users claim that their entire household consumes plant-based milk as opposed to 31% who consume individually.
- The primary uses for plant-based milk among consumers include direct consumption (either plain, flavored, or combined with milk food additives like Horlicks or Bournvita) and as a base for making milkshakes/smoothies. Some also add it to their breakfast cereal.

Ways to consume of plant-based milk

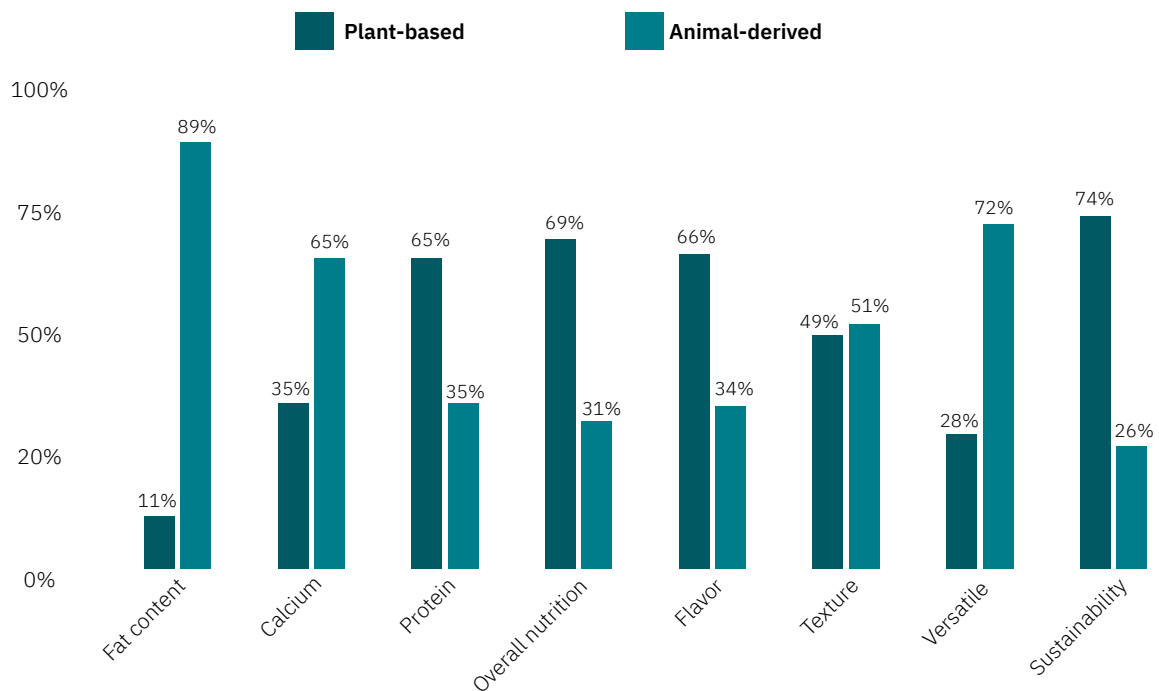


- Consumers usually consume animal-derived milk in tea or coffee followed by having it plain and using it to make milkshakes.

Ways to consume animal-derived milk



- Overall, plant-based milk is preferred over animal-derived milk amongst the users of plant-based milk. The reasons cited are that it is “healthy” and is “sourced ethically,” along with being the only consumption option for people with lactose intolerance.
- Even among the users, animal-derived milk fares better than plant-based milk in versatility and as a source of calcium. Plant-based milk scores better as a source of protein with low fat and for better flavor, nutrition, and sustainability.



CONCLUSION

Users of plant-based milk are clear on the source of milk and can differentiate between plant-based and animal-derived milk. They consume plant-based milk in similar ways as animal-derived milk. Consumers are mainly drawn to plant-based milk because of its overall health and nutritional benefits and factors such as ethical sourcing. However, the majority of users of plant-based milk continue to use animal-derived milk despite having a higher overall preference for plant-based milk. Availability, affordability, and versatility of conventional milk are the key reasons for this dual use. Plant-based dairy as a category has to focus on improving affordability and distribution along with emphasizing its compatibility with India's favorite hot beverages like tea and coffee.

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The Good Food Institute India (GFI India) is part of an international network of nonprofits with partners in Brazil, Israel, U.S., Europe, and the Asia Pacific, on a mission to build a healthy, sustainable, and just global food system. With unique insight across the scientific, policy, industry, and investment landscapes, GFI India is using the power of food innovation and markets to accelerate the transition of the world's food system toward smart proteins.