



PERCEPTIONS OF MILK ALTERNATIVES IN CONTEMPORARY URBAN INDIA (A QUALITATIVE STUDY)

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Significance & objectives of this study



Significance of this study

Until recently, the mass production of animal-based foods was relatively more widespread in industrialized nations (Thornton, 2010). However, we are starting to witness the same in countries like India where the production of animal-based foods is gradually changing from small-scale backyard farming to large-scale factory farming (Food and Agriculture Organization of the United Nations, 2006).

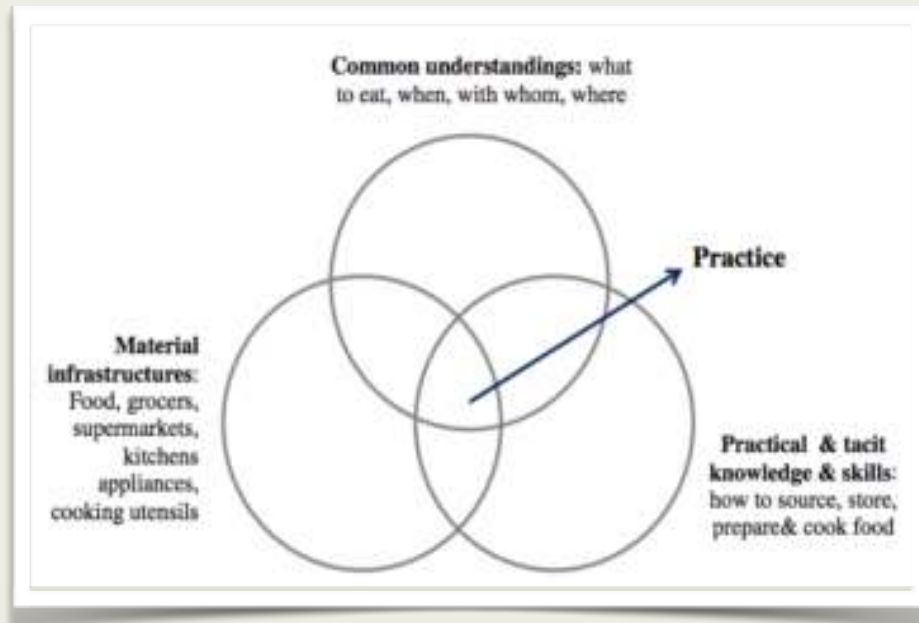
On the topic of dairy, India – over the last few decades - has transitioned from a milk-deficient country (Atkins, 1989; Food and Agriculture Organization of the United Nations, 2006) to one of the world’s largest producers of milk (Statista Research Department, 2022). However, the reported consequences of India’s growing dairy industry is its significant contribution to water pollution and numerous other related environmental hazards (Raghunath et al., 2016; Sinha et al., 2019). The industry in India has also galvanized debate about ethical consequences of dairy farming (Animal Equality India, n.d.; Chatterjee, 2017; Narain, 2013).

Given the reported health-related (Fukui et al., 2002; Namiki, 2007; Omoni & Aluko, 2005) ethical and environmental benefits (Horton & Lo, 2015; Willett et al., 2019) of plant-based alternatives, this study aimed to explore Indian consumer views towards milk/ non-dairy substitutes. In addition, it also aimed to contribute to the body of knowledge in this relatively sparse yet rapidly changing space.

Study objectives

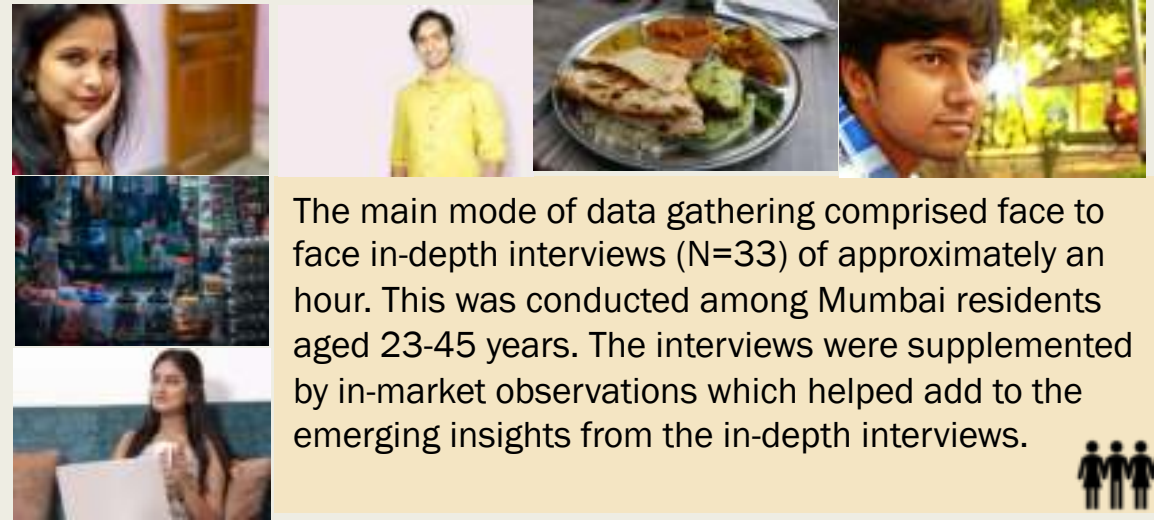
- The overarching aim of this qualitative study was to explore meat-eating practices in contemporary urban India, with a view towards encouraging a reduced meat diet.
- As part of exploring urban Indian eating practices, **this study also explored consumption of other forms of animal protein, such as dairy as well as views towards non-dairy alternatives.**

Approach and key questions



This exploratory study used the **Social Practice Theory** framework by Shove, Pantzar and Watson (2012) for exploring the dynamics of eating practices in India.

This framework defines a practice as comprising three elements: *materials* (which refer to material tools and infrastructures); *meanings* (which refer to imagery and symbolisms) and *competences* (which refer to skills and know-hows).



This study reports on a specific set of questions relating to dairy consumption which were asked as part of the exploratory study on eating practices:

- What practices are prevalent in urban India today in relation to the consumption of dairy and dairy alternatives?
- What role do the three elements play within this contemporary urban practice, and how are those roles changing?



FINDINGS



- I begin this presentation by discussing urban Indian perceptions of plant-based eating practices - in particular awareness and perceptions of vegan eating practices.
- Understanding how vegan eating was perceived helped contextualize participant views and opinions towards non-dairy milk/ milk substitutes



In general, levels of awareness about a vegan diet seemed rather low among our participants



“I haven’t heard of this diet before”
(AA, male, under 30 years)

“Vegan diet?...it's a beef diet? I'm not sure. Vegan...pork diet or something?” (FK, female, 30-39 years)

“not (aware of) vegan as such but...there's this community called the Jain community...they had a vegetarian menu and a Jain menu. And I thought - what is the difference? How can the two be different?”

(AS, male, under 30 years)

Among those who were aware of or somewhat familiar with a vegan diet, had these views



“It's like...vegetarianism on steroids!”
(TS, female, 40-45 years)

“you might find it (vegan eating/diets) in cities...probably not outside Bombay, Delhi, Bangalore... you really have to search for a vegan person in Nagpur or Gorakhpur...(laughs)”
(PK, male, 30-39 years)



“It's a boring diet...good for the person who are more into modelling...into dieting, or an air hostess...They have to be very particular to the diet, and they have to eat very less”
(SA, male, under 30 years)

Despite seemingly low levels of awareness and knowledge, some felt a vegan diet is increasingly being adopted among young urban-ites for the following key reasons:



Being vegan is becoming 'a fad'

"I've seen few of my non-vegetarian friends who started becoming vegan, not even vegetarian, vegan!... there are a few Bollywood actors. They are saying that we are vegan...so most of the people try to follow them"

(VY, female, under 30 years)

Animal welfare concerns & peer pressure

"while growing up, no one really paid attention to where the chicken is coming from...But now you get the exposure to these things...it's primarily Internet, references from friends, and all that...You have some friends who are animal lovers who specifically show you these videos ...what you're eating"

(TK, male, 30-39 years)



Health-related concerns

"I used to drink a lot of milk...but it doesn't agree with me too much anymore...I have a friend who is very heavily lactose intolerant, so she makes her own soy milk and almond milk"

(RB, female, 40-45 years)



- Overall, levels of awareness and knowledge in relation to a vegan diet seemed rather low among urban Indian participants.
- On the other hand, dairy and dairy products continue to hold significant socio-cultural importance, value and meaning.



“I remember being threatened by this really strict teacher at school...my mother used to just bring a flask of milk...and tell my teacher "You need to make sure that she finishes this all right?" (SM, female, 40-45 years)



“milk is the most important form of calcium... have your calcium base strong in your body rather than taking supplements. So I think milk is one important thing you cannot leave”

(FK, female, 30-39 years)



Dairy and dairy products tend to be seen as “necessary” foods

“milk comes in my comfort food category. If I don't want to have dinner, I'll just have a glass of milk and go to bed”

(RS, female, 30-39 years)



Non-dairy alternatives – mainly soy – were seen to have some benefits if & where dairy fell short. Otherwise, dairy was the default food and a common everyday preference. Awareness of dairy alternatives, besides soy, was also relatively low/ non-existent.



Soy milk was seen as suitable for a lactose intolerant minority

“My nephew at some point was lactose intolerant. So every time I baked a cake or something that required there to be some milk, I used that (soy milk)”

(SM, female, 40-45 years)

Soy milk was suitable for only some specific functional purposes, such as for sports or exercise

“I don't like that soy ... the flavour is little bland...But for the fitness people, it is really very energetic. It gives you good energy on the sport, after walks”

(LS, male, under 30 years)

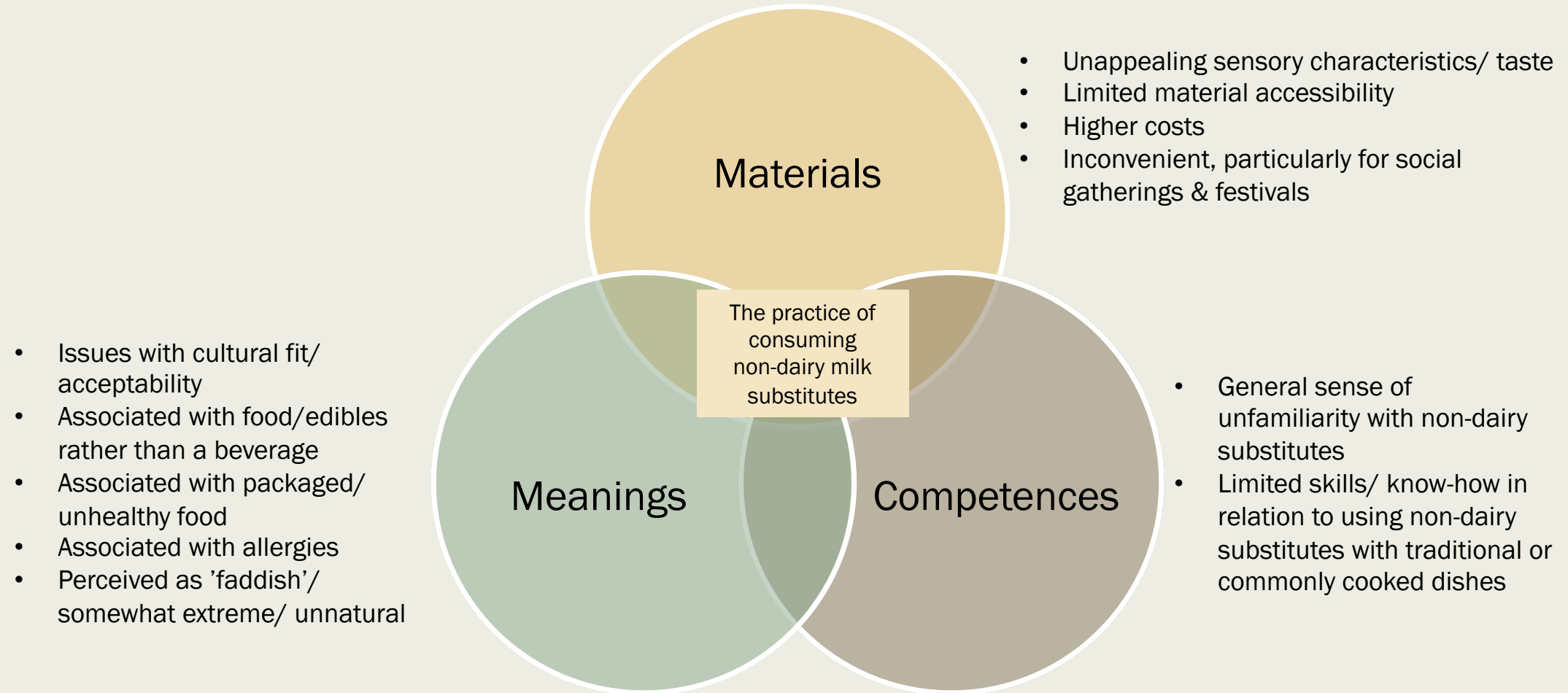


Soy milk was also suitable for some other health-related concerns

“There's so much literature around cow's milk...It's been pumped with steroids...doctors have told me that yeah, it does include some amount of pus which, if you think about it, is disgusting”

(NB, female, 30-39 years)

Despite some benefits, our findings identified many barriers in relation to the consumption of non-dairy alternatives (mainly soy milk). These barriers have been presented here, using social practice theory as a framework.



Material barriers: 'Poor' taste/ limited sensory appeal was one of the key barriers to the consumption of non-dairy milk



“we used to pull pranks on each other where, instead of milk, we used to have **the talcum powder mixed with water**, and give it to someone...I have been pranked like that once and that is almost exactly like what soy milk tastes like...I'm going to have a problem if dairy gets replaced!”

(TK, male, 30-39 years)



“It's (soy milk) **too watery**...It's just a juice that's taken out. It's just like almond milk in a way. It's water that has been mixed with juice”
(PG, female, under 30 years)

“it (soy milk) was **quite flat in taste**”
(PK, male, 30-39 years)

“I didn't really like the taste so much. I think it had a little bit of a **chalky taste**, according to me”
(AB, female, 30-39 years)

Other key barriers to material accessibility

Non-dairy alternatives are not as easily accessible in general

“once or twice in a week you would have soy milk...we have to purchase it in a Tetrapak...you have to go and purchase it (especially)...whereas our milk is readily available all the time”
(RK, male, under 30 years)



Non-dairy alternatives are more expensive

“It’s (non-dairy milk) very costly, thirty or thirty five rupees so you can’t have that everyday” (PA, male, 30-39 years)

“it's expensive...something as simple as almond milk. I would have almond milk if it wasn't so expensive”
(PG, female, under 30 years)



Non-dairy alternatives are an inconvenience to one’s general lifestyle

“I would say probably a difficult choice...Probably like one of those Jain diets where you avoid garlic and all those things, like they have to be very careful...Like when you go out, you have to ask the person like does it have this, does it have that?” (PK, male, 30-39 years)



Meanings: Non-dairy alternatives were not quite seen to 'fit' with other significant cultural and eating practices



“milk is ... starting with tea, it's everywhere! And Indian sweets have milk, all Indian sweets are milk-based. So I would actually wonder how they manage to stick to that diet?”

(AK, male, 30-39 years)

“I love tea...Tea has the milk. I love sherbets also. Flavored milk and sherbets. And curd and lassi. Everything has milk in it!”

(ZM, female, under 30 years)



”my parents have milk on the regular. At breakfast, they drink a glass of milk...Cheese tends to get used a lot. Cheese and buttermilk. After every meal we have buttermilk”

(TK, male, 30-39 years)

Other meanings associated with non-dairy alternatives are also significant barriers

Non-dairy alternatives are seen as too processed, unlike “fresh” milk and fresh foods which are preferred

“Not a fan, especially the packaged ones some of them are rubbish.”
(KS, male, 30-39 years)

“fresh made or something might be better. Like say, you have coconut milk from one of those Tetra things, it won’t be as good as using fresh coconut...the packaged one I didn’t like ”
(LS, male, under 30 years)



Soy’s association with a vegetable makes soy milk feel unpalatable to some

“soya beans are ok as a vegetable...but as a milk thing, I didn’t really like it!” (SM, female, 30-39 years)

“(it has a)...soybean oily-ish type of a taste” (JT, female, 40-45 years)



Soy milk’s association with tofu – which did not seem popular – also made it unpalatable

“I’ve tried tofu. It’s like rubber. Nothing, no taste, nothing at all...Foam ke jaisa hota hai (it is like foam). And a dirty colour it has...It is not even close to paneer. It’s like synthetic paneer” (SS, female, 40-45 years)



Non-dairy alternatives were seen to be somewhat suitable for specific health-related problems, rather than a substitute for milk

“You know allergies are very big now. In India suddenly everyone has allergies...So I have friends who are celiacs and they're gluten intolerant and they're egg intolerant and dairy intolerant, whatever, whatever, whatever. So if you need to go vegan because of a health reason, sure!”
(TS, female, 40-45 years)

“I was diagnosed with an anxiety disorder. So because of lack of sleep and panic attacks, I tried a vegan dabba (tiffin) service for about two months...” (KS, male, 30-39 years)



On the other hand, some associated non-dairy alternatives in general with "a [passing] fad" and expressed some skepticism



"see, that's the thing about diets, especially in a place like Bombay, everyone's on a diet, and everyone gets fanatic about that diet! - and the moment people start advocating for it, like this is IT, whether it's diets, religions or whatever, I switch off....I'll figure it out for myself, what works for me"

(SM, female, 40-45 years)

"

"It's (vegan diet) such a fad...it's not endorsed by doctors, by medical professionals. Secondly, I see a lot of bloggers and a lot of young people sticking to this...I don't think they're informed enough to make such comments...I think it's more of a belief in something rather than proven"

(SM, female, 30-39 years)



- Despite there being some limited perceived benefits to the consumption of non-dairy alternatives, there are several material, symbolic and competency barriers which pose as significant obstacles to this practice becoming more widely adopted



As part of the study's aim to encourage a plant-based diet in a rapidly changing urban India – with a growing penchant for animal-based protein - we are looking at the following question which will be explored further in future research:

How can non-dairy alternatives be made more appealing in urban India, given dairy has had & continues to have strong socio-cultural relevance and meaning?



Some strategies we are exploring further– future research continues in this space...

Encouraging the consumption of non-dairy/ plant-based milks through the use of reference groups within India's collectivist culture

- Findings from this study highlight that local celebrities adopting plant-based foods has helped contribute to its rise in India.
- This is likely because, within India's high power distance culture (Ghosh, 2011), social status holds important value (Ghosh, 2011; Hofstede, 2001).
- Using reference groups to promote meanings of novelty and trendiness in relation to non-dairy/ milk substitutes might be effective given there is greater social pressure in collectivist cultures to follow in-group norms (Triandis, 2004).



...the brand ambassador is John Abraham. He endorses the (soya milk) brand...he's very good in fitness, body, he's got a good physique”
(LS, male, under 30 years)

Increasing the sensory appeal of plant-based alternatives in India

- As India's urban landscape increasingly offers an array of diverse new cuisines - many of which contain animal-based protein - the challenge would be to make non-dairy milks appealing from a sensory perspective.



“the vegan diet...it's traditionally perceived as bland...(but) if it's done well, it's actually delicious...”
(KS, male, 30-39 years).

Promoting plant-based eating in urban India by blending novelty with tradition

- Despite a desire to embrace novel foods, food neophobia tends to be higher in India relative to other cultures (Bryant et al., 2019). Other work highlights that India today is a hybrid of traditional conservatism and a desire for novelty (Mathur, 2014).
- Keeping this in mind, perhaps non-dairy/ milk substitutes could be reintroduced as encapsulating a blend of modern newness and cultural familiarity.



Dishes like “Tofu Amarnath” (named after the Hindu shrine located in North India) and “vegan lassi (an Indian beverage traditionally made from dairy milk but, in this case, dairy is substituted for coconut milk), traditional sweet dishes made without milk (Sawhney, 2019) are some examples of blending tradition with novelty

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