



A Comparative Analysis of Loose Milk and Packed Milk in Term of Quality and Purity Among People in Ahmedabad City

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ABSTRACT

This study provides an in-depth examination of the consulting services offered by Head Quest HR Solutions LLP; a reputed HR consulting company based in Ahmedabad. The goals of the study are to examine the variety of services provided, the technologies used, and the efficiency of these services in improving organizational performance. This study combines quantitative information from structured customer surveys with qualitative data from semi-structured interviews with key stakeholders, through the use of a mixed-methods methodology. According to research, Head Quest HR Solutions LLP uses several approaches that are customized to match the specific needs of its clients. These approaches enhance employee engagement, talent management, and organizational development overall. Even when facing hurdles such as quantifying long-term impact and matching recommendations with customer culture, the company has proven quite successful in providing value-added services. This study provides suggestions to improve the efficiency and effectiveness of consulting services besides providing practical information on best practices in HR consulting.

INTRODUCTION

Paragraph: The Quality and Purity of Loose Milk And Packed Milk Among People In Ahmedabad City Street-vendors sell loose or fresh milk quite broadly. Aim: The present communication focuses on the determination of the quality of loose milk as compared to packed milk among residents in Ahmedabad city.

Milk is the primary food that provides or contains human essential nutrients, so many call it a complete food. Milk is an essential component that helps in the functioning of the body, it adds balance to the well-being due to its richness in proteins, calcium vitamins and minerals. An essential part of the daily diet of ppl all over the world, in India, dairy products have a cultural and nutritive significance. As a result at each phase of urbanisation and industrialisation, the methods of production, processing & consumption of milk have evolved wherein two major forms of milk are traded- loose milk & packed milk.

Loose milk has been one of the oldest modes of milk consumption, especially in rural and semi-urban areas, usually purchased directly from local dairy producers or milk vendors. Packed milk produced and packed in controlled conditions by commercial dairies has gained immense popularity in urban centers, because of its convenience, uniformity, and perceived safety. Ahmedabad city has now transformed into a cosmopolitan mega city with consumers and demand being diverse in nature, drawing more attention to informal (loose) and formal (packed) milk consumption patterns under scrutiny on its quality and safety- both for loose milk as well as hygienically packed milks.

Objectives of the Study To study about loose and packed milk quality & purity in Ahmedabad city different aspects experiences and perceptions among people. Ahmedabad, one of the major cities in Gujarat, has a deep-rooted culture of dairy with a long history of milk production and consumption. Along with other popular dairy brands, there is a network of local milk vendors who supply fresh, raw milk to residences across the city. Even though big dairy farms are sprawling across rural Punjab, and processed milk is now being sold at many outlets, loose milk still remains a popular choice for most residents who either find it cheaper or more fresh.

Given this backdrop, separating loose and packed milk in terms of their quality and purity becomes indispensable for consumers, policymakers alike. Packed milk is perceived as a product of superior quality, that is due to the strong conditions and rules set for processing dairy whereas loose milk most often sold in Delhi under unregulated or controlled situations may bring some risk factors like tainting, pollution and putting away circumstances. This makes it necessary to compare the two types of milk for their safety, nutrition and quality.

The present study focuses on the determining factors of loose and packed milk choice by consumers and assessing quality and purity of loose and packed milk in Ahmedabad. This study aims to gain an overview of the city milk market

in terms of its hygiene, safety and nutritional content and perceptions which may help to ascertain ideas about the issues related to provision of safe nutritious milk supply in urban populations.

Ahmedabad and the Milk Economy: The Politics of Urbanisation

Ahmedabad has transformed over the years, like many Indian cities; migration as well as urbanisation and increasing middle class have altered food habits. Historically, milk was sourced from nearby dairies or small-scale vendors, and the quality of the milk depended on these vendors' practices. But rise of demand for packaged, standardized and branded products pushed pack milk at the fore front as most commonly sold form of milk in urban areas.

Packed milk is also more easily available due to the emergence of organized retail chains, supermarkets and modern distribution systems, marketing packed milk as comparatively safe, hygienic and uniform than loose milk. In Ahmedabad, various regional dairy players along with brands like Amul and Mother Dairy have dominated the retail scene for packed milk with familiar availability everywhere across the city. Much like organic produce, these brands tend to focus on the purity and safety of their products, often advertising where milk is pasteurized or processed and touting health (or lack thereof) standards.

In stark contrast, loose milk while still having a big consumer base in Ahmedabad suffers from multiple factors affecting quality and safety. Loose milk can be bought either from local vendors or via direct contacts with the dairy farms. Loose milk, though preferred by many consumers for its fresh taste and lower cost, is produced and consumed in an environment without systematic quality control mechanisms, which raises doubts concerning its purity. Loose milk could be contaminated if it is not properly pasteurized and refrigerated, which could induce the growth of harmful bacteria or the presence of adulterants.

Comparing the Quality and Purity

When it comes to assessing the safety of milk, quality and purity is what matters the most. However, in the case of loose milk, most of its quality is governed by the source of milk from which it came, hygiene practices adopted by the vendor along with how they store and transport it. Loose milk is often sourced from cows, or buffaloes and not pasteurized to eradicate micro organisms which may still be found in unpasteurised milk. It also means that if loose milk is not handled correctly, it can be harmful to health.

In contrast, packed milk is processed and packaged through a meticulous process that ensures its safety and uniformity. Usually pasteurized, which means milk is heated to a certain temperature for a period of time to kill pathogens but very limited nutrient loss. Moreover, it is also fortified with vitamins and minerals like Vitamin D that are not always found in loose milk. The milk is packed in air tight pouches, so even during transport and storage, there are least chances of contamination and spoilage of items due to outside factors.

How Hygiene and Apart from Hygienic Situations Affect the Situation

Hygiene during collection, storage and distribution greatly determines the quality of milk mainly loose milk. Loose milk – very often sold in open containers or plastic bags, could be soiled with dust, dirt and other aerial particles settled onto the product. It is also possible that the milk vendors do not maintain proper sanitary precautions, resulting in contamination of the milk. The other consideration is the lack of refrigeration; milk left at warmer temperatures spoils quickly and can be a vector for disease.

Hygiene level :- The hygiene level of packed milk is usually more if you consider the environment due to processing plant. Because the milk is refrigerated from farm storage through transportation until consumption, spoilage can be eliminated (when it remains unopened) with proper overhead. Also, the packaging process automatically answers that the milk is contamination-free at the point of sale, unlike loose milk.

Adulteration in Loose Milk

One more big problem in case of the loose milk is that there are high chances of adulteration over here. Some milk vendors mix water in milk or add things like starch, detergent and urea to cut the cost of production thus ruining the purity of milk and increasing nutrient loss. Milk adulteration remains a scourge in Ahmedabad, as it is in many other parts of India, despite the authorities' attempts to stamp out the practice. Though packed milk is not free from the danger of adulteration even, it gets through more rigorous quality control and regulatory supervision.

Packed milk is tested and monitored at various levels like during processing and even after the packed milk reaches the retailer. Packed milk is comparatively safer because of these regulatory measures implemented by the food safety watchdogs such as Food Safety and Standards Authority of India (FSSAI).

Consumer Perceptions and Preferences

Largely, purchase of loose milk vs packed milk in Ahmedabad is driven by multiple factors such as pricing, taste and convenience & trustiness on supplier side etc. Loose milk is perceived by many to be cheaper, as well as fresher than packed milk. Moreover, many consumers consider loose milk to be closer to nature as it is mostly freshly obtained from local dairies and they believe that packed milk contains additives/additives & preservatives.

While packed milk though considered ideal in terms of quality and hygiene, as they perceive it more safe and reliable. Another reason beyond the convenience is the doorstep availability of milk that comes straight in consume ready manner. But the price increase in packed milk over loose milk is a turn off for price-sensitive consumers, especially those from low-income households.

Objectives of the Study

In this study, we attempted to achieve the following objectives:

Comparison of loose and packed milk with respect to nutritional quality, microbial contamination and adulteration

Study Objectives Consumer Preferences – To identify the reasons due to which consumer prefer loose as compared to packed milk in cities like Ahmedabad in terms of quality, price and convenience.

Hygiene and Safety Standards: To assess the safety and hygiene measures followed in handling, storing, and distributing loose as well as packed milk.

The study analyses these aspects to gain useful information on the challenges and opportunities being faced by consumers, milk producers and regulatory bodies in delivering safe and quality milk in Ahmedabad.

RESEARCH OBJECTIVES

The aim of this study is to compare quality and purity of loose & packed milk used in Ahmedabad. The objective of this review is to provide note on consumer preference, compliance with safety regulations, adulteration status, health impact and market perspective on milk to allow the reader making better decisions while consuming milk.

LITERATURE REVIEW

Only 5 from your report

RESEARCH GAP

Develop from LR

HYPOTHESIS (Only list)

H1: Perception of Milk Quality (Loose vs. Packed Milk)

H2: Taste Preference (Loose Milk vs. Packed Milk)

H3: Perception of Nutritional Value (Loose Milk vs. Packed Milk)

TABLE 1: VALIDATION OF QUESTIONNAIRE

Statements	Citation from JV citation file (You can add more than 1 citation)
Which type of milk do you perceive as being of better Quality ?	Vidani & Solanki, 2015
Compare the taste of Loose milk and packed milk(Scale:1-5,where 1 is "strongly prefer 2 " and 5 "Strongly prefer 1 ")	(Bhatt, Patel, & Vidani, 2017)
Compare the nutritional value of Loose milk and packed milk (Scale : 1-5 , where 1 is "strongly prefer 2 " and 5 "Strongly prefer 1 ")	(Modi, Harkani, Radadiya, & Vidani, 2016)

Source: Author's compilation

RESEARCH METHODOLOGY

Table 2: Research Methodology

Research Design	Descriptive
Sample Method	Non-Probability - Convenient Sampling method
Data Collection Method	Primary method
Data Collection Method	Structured Questionnaire
Type of Questions	Close ended
Data Collection mode	Online through Google Form
Data Analysis methods	Tables
Data Analysis Tools	SPSS and Excel
Sampling Size	No. of responses in Google form
Survey Area	Your area of data collection
Sampling Unit	Students, Private and government Job employees, Businessmen, Home maker, Professionals like CA, Doctor etc.

Source: Author's compilation

DEMOGRAPHIC SUMMARY

From your project

TABLE 3: RESULTS OF HYPOTHESIS TESTING

Add rows as per number of hypothesis you have created

Sr. No	Alternate Hypothesis	Result p =	>/< 0.05	Accept/Reject Null hypothesis	R value	Relations hip
1	H1: Perception of Milk Quality (Loose vs. Packed Milk)	0.001	<	H01 Rejected (Null hypothesis rejected)	0.058	Weak
2	H2: Taste Preference (Loose Milk vs. Packed Milk)	0.424	<	H02 Accepted (Null Hypothesis Accepted)	.107	Strong
3	H3: Perception of Nutritional Value (Loose Milk vs. Packed Milk)	0.090	>	Accepted (Null Hypothesis Accepted)	0.003	Strong

Source: Author's compilation

H1: Perception about Milk Quality (Loose v Packed Milk)

Outcome:

- p-value = 0.001
- R-value = 0.058
- Null Hypothesis (H₀) Rejected

DISCUSSION

The first hypothesis was whether or not there exists a significant difference in how the consumer perceives the quality of loose milk and that which has been packed. With a p-value of 0.001, it is way below the standard level for significance at 0.05. The null hypothesis has to be rejected. From the result of this, it clearly emerges that consumers judge loose milk and packaged milk differently. It is also deduced from this that although the relationship between the variables is weak,

with an R-value of 0.058, it does imply that quality perception does affect consumer preference.

To a significant extent, loose milk was perceived by the respondents as fresher and more natural compared to packed milk, which was associated with tight controls on quality and therefore more uniform and clean. Findings were congruent with earlier studies that pointed out the former milk type benefits from controlled production processes, whereas the latter one is more prone to fluctuations in quality due to variations in handling and storing conditions. Therefore, despite the weak association, quality perception is an essential variable for consumers to decide between loose and packed milk.

H2: Preference for Taste (Loose Milk vs. Packed Milk)

Finding:

- p-value = 0.424
- R-value = 0.107
- Null Hypothesis (H_0) Accepted

The second hypothesis tested whether gender influences taste preferences for loose milk versus packed milk. With a p-value of 0.424 bigger than the chosen significance level of 0.05, the null hypothesis is accepted. This therefore means that there is no significant difference in the taste preference as between loose and packed milk regardless of gender.

Interestingly, the R-value of 0.107 is indicating a somewhat strong relationship between gender and taste preference but not statistically significant to say that gender really impacts the taste preference. This means that though most people prefer one kind of milk over the other, it is not due to gender differences. Actually, cultural preferences or freshness of milk may be factors that leave a more important influence on the taste preference than gender can do. In fact, previous research has also shown that taste preferences are more based on factors such as the perceived healthiness of the milk, the freshness of the milk and the milks' fat content than demographic variables such as gender.

H3: Nutritional Perceived Value (Loose Milk vs. Packed Milk)

Conclusion:

- p-value = 0.090
- R-value = 0.003
- Null Hypothesis (H_0) Accepted

Discussion:

The third hypothesis, therefore, sought to ascertain whether there is a significant difference with respect to consumers' perception of the nutrition of

loose milk as compared to packaged milk. Since the calculated p-value is 0.090, which exceeds the threshold of 0.05, the null hypothesis is accepted. Thus, it implies that, by statistical standards, consumers do not significantly differentiate the nutrition between loose and packed milk.

This very low R-value of 0.003 also means a relationship between the two variables is far too weak, and thus perceptions of nutritional value are most probably not among the major influencers in deciding milk choice. There could be many reasons for this. For instance, packed milk is often fortified with extra nutrients such as vitamin D and calcium, which makes it look nutritionally superior in marketing and branding some times. However, many consumers would not know or think through these differences or even look at other factors such as price, taste or convenience with perceived nutritional content. This finding also goes in tandem with other research studies that suggested even though packed milk, in most cases, would possess more similar nutrient composition, the consumers do not always take into consideration this factor in their decision to buy if they believe in the quality of the local dairy or loose milk.

General Discussion

The findings of the hypothesis testing are informative towards the underlying factors of consumer preferences between loose and packed milk in Ahmedabad. Perception quality (H1) was found to vary significantly among loose and packed milk, but taste preference (H2) and perception towards nutritional value (H3) did not indicate significant statistical differences. These results suggest, however, that although quality perception remains a powerful influencer for milk purchase decisions, consumer responsiveness to differences in taste and nutritional properties is perhaps lower than that assumed.

1. Quality Perception: There is a big difference in terms of quality perception between loose and packed milk. Consumer trust in the milk's safety and consistency is one important aspect why consumers continue to buy loose milk alongside packed milk. Despite standardized processes in packed milk, most consumers perceive loose milk as fresher, and it has become their choice because it comes directly from local dairies. However, a low correlation between perceived quality and consumer preference indicates that other factors such as price, availability, and convenience may also play key roles.

2. Preferent Taste: Since there is no significant difference in the taste preference of loose and packed milk (as shown by H2), it seems that taste becomes not that decisive element for many consumers. Those who are in favor of one type of milk over the other remain as an exception because their preference does not relate to gender and sometimes even to any demographic criterion, which makes preferences subjective.

3. Nutritional Value: The acceptance of null hypothesis for H3 (the comparison in nutritional value) is such that consumers do not have feelings about the

nutritional differences between loose milk and packed milk, which are usually fortified and processed for specific health benefits. It might be the case that people are not aware of it in general, and it could be that consumers would favor other factors like freshness, taste, and price rather than the nutrient content.

THEORETICAL IMPLICATIONS

The following conclusions of this study thus serve important theoretical implications in contributing to the understanding of consumer behavior in the dairy industry, more especially in the context of loose and packed milk in an urban environment, such as Ahmedabad. By analyzing the relationships of quality perception, taste preference, and perception of nutritional value, this research furthers the current development of consumer choice, product differentiation, and consumer trust, shedding more light upon the influence role of socio-demographic factors on the milk consumption pattern.

1. Theories of Consumer Trust and Product Differentiation

The biggest discovery of this study is that the notion of the concept of quality associated with loose milk differs greatly from that associated with packed milk. Product differentiation theories postulate that consumers differentiate products based on attributes they perceive as valuable. Such attributes include quality, taste, and safety. In this paper, the perception of quality becomes an important variable describing why packed milk is safer and more hygienic, while loose milk is associated with freshness and authenticity. This result is consistent with models of perceived quality and consumer trust, where consumers tend to rely on their assessments of product quality to make purchase decisions, especially in cases where direct experience with the product, like its taste or nutrition, is scarce or not easy to determine.

2. Theory of Planned Behavior (TPB)

The Theory of Planned Behavior by Ajzen, 1991 presumes that an individual's behavior is governed by his/her intention, which in turn is influenced by attitudes, subjective norms, and perceived control over behavior.

The results on taste preference and perceived nutritional value introduce new dimensions to this theory in the food choice context. There is not a significant difference between loose and packed milk, in terms of taste preference or perception of nutrition value, so consumers' attitudes toward milk are apparently driven by perceptions of quality, but these two factors do not dramatically impact the decision process. Theoretically, therefore, it suggests that attitudes toward milk in terms of taste and nutrition may not be the decisive factors over and above other determinants like convenience, price, or socio-cultural influences.

3. Social Cognitive Theory (SCT) and Consumer Learning

The Social Cognitive Theory (Bandura, 1986) emphasizes the roles of observation, imitation and modeling in behavior acquisition.

This research concludes that consumer preferences are not much related to nutritional perceptions even when packaged milk is nutritionally enriched with vitamins such as vitamin D, calcium and others. This could be one aspect of consumer knowledge related to nutritional impacts of different types of milk. It seems that SCT suggest that individuals do learn through their environment and social interaction hence to the milk consumption social influence, as well as peer learning, may represent an influential factor in changing the consumer perception towards the nutrimental value of milk.

The findings of this study also suggest that attribute levels are weighted by consumers when making decisions about milk. While the final decision is not based on taste and nutritional value, the perception of quality is a critical attribute. Thus, perceived value and attribute salience are critical aspects that lead to differential consumer decision-making processes. Based on the research findings, quality indeed emerges as a basic characteristic with which the consumer compares loose v. packed milk even though taste and nutritional value are commonly amalgamated into the consumer's final decision.

4. From a marketer's perspective, such a conclusion would imply that the qualities that characterize quality factors such as sourcing, processing, safety, and purity may be more attractive to consumers than taste or health benefits, especially for packed milk. From this, aspects of product positioning regarding consumer concerns about product quality, such as transparency, safety standards, and ethical sourcing, should come to the fore.

5. Theory of Cognitive Dissonance

The Cognitive Dissonance Theory (Festinger, 1957) asserts that consumers may feel discomfort whenever their beliefs or attitudes conflict with their behavior and thus rationalize choices.

This is where a choice between loose and packed milk leads to a sort of cognitive dissonance to the consumers, mainly when perceptions about quality do not match with the usual tastes or nutritional values. For instance, a consumer prefers the taste of loose milk, but that goes out of the window when she perceives issues over safety and quality, thus becoming a packed milk buyer. The theory demonstrates that consumer decisions are indeed complex.

PRACTICAL IMPLICATIONS

The findings of the study have a number of practical implications for the stakeholders in the milk industry who are milk producers, marketers, policymakers, and health organizations. It helps shape product offerings, marketing strategies, consumer education, and policy interventions related to

consumer preferences and behaviors about loose and packed milk in Ahmedabad. Here are a few practical implications derived from the empirical analysis of the study.

1. Marketing Strategies for Milk Producers and Retailers

Key Insight : The perception difference in the milk quality of loose and packed milk is highly significant while there is no significant difference in taste and nutritional value perception, this infers that quality assurance and safety are most critical drivers of consumers' decisions at the milk market.

Practical Application

-Goods Quality Perception of Packed Milk. Marketing The perception of good quality is used to market packed milk. Producers indicate that packed milk is hygienically packaged and features standardized production processes and safeness. Marketing messages should make a bigger emphasis on the reliability and trust attached to packed milk. Production through advance technologies such as pasteurization and fortification appeals to consumers who are concerned about health and safety.

- To Loose Milk Street Hawkers Loose milk is regarded as fresh, natural, but quality perception becomes inconsistent with the handling and storage.

Freshness, local sourcing, and authenticity can be highlighted by the vendors to catch the buyer's preferences such as freshness and sense of tradition. Transparency in the loose milk product might also be necessary by describing where it originated, how it has been handled, and what safety measures were taken. Educating consumers about the potential risks of consuming unprocessed milk could help improve perceptions of safety without surrendering the "authentic" appeal of loose milk. Marketing Tactics

-a. Packed milk: The consistency and quality control campaigns can focus on the packed milk, with an emphasis on its fortification with calcium and vitamin D. Convenience factors about packed milk-for example, long shelf life and portability-would appeal to time-starved urban consumers.

-Loose Milk: Campaigns can use storytelling to emphasize the local and traditional roots of loose milk, appealing to consumers who prefer products that feel personal and fresh. Additionally, demystifying the safety standards for loose milk through transparency can attract more consumers who would otherwise be hesitant.

2. Consumer Education and Awareness Campaigns

Key Insight: Perceived quality is less significant than perceived taste and nutritional value in choosing milk, while consumers are the least conscious of the packed milk's nutritional benefits compared to the risks associated with loose milk regarding its safety.

Practical Application

- Health Organizations: Health-oriented campaigns may be based on the difference between consumer knowledge and decision-making. Consumers are probably not fully aware of nutritional fortification in packed milk, including vitamins and minerals added to it. Public health campaigns can be formulated to encourage consumers to drink packed milk which contains essential health benefits; for example, it might provide youngsters, elderly, and pregnant women with a number of advantages to their health.

Loose Milk Education: As effective would be directing education campaign messages towards the safety risks that may be associated with loose milk-contamination arising from mishandling-of such milk-after which consumers can be persuaded to make an educated decision. Consumers can be taught of the bacterial contamination risks associated with loose milk, especially when such milk is not boiled appropriately, which in turn should help mitigate health risks and increase the safety perception of milk packaged elsewhere.

Concrete Strategies:

- For packaged milk: Educational materials can take the form of posters, social media infographics and even advertisements to highlight fortification, pasteurization, among other health advantages associated with packaged milk.

- For loose milk: Engagement among farmers and vendors with the local health authorities can be achieved in transparency about sourcing and handling and promoting best practices that ensure milk safety.

3. Price and Availability

Takeaway: Although quality is the strong determinant of choice of consumer, price and availability will also be effective factors, as Ahmedabad is sensitive to price.

Practical Use

- For Producers of Packed Milk: Their price would factor in the price sensitivity of the segment to which they are targeting. While premium pricing of packed milk can be justified by convenience, safety, and nutritional fortification, milk producers might provide economy packs or discounted pricing for voluminous sales to attract cost-conscious consumers.

For Loose Milk Vendors Loose milk remains a highly competitive product because of its price. However, vendors need to balance the need for an affordable price with product quality so that the low price will not become a stigma. Loose milk vendors may also consider strategic partnerships with local producers or community-based marketing to build a stronger brand image.

4. Regulatory and Policy Recommendation

Key Insight: Loose milk should be made more regulated and standardized, more especially on those matters dealing with safety and quality control.

Practical Application:

- For Policymakers and Regulators: There is a need to strengthen the regulations on the safety and hygiene standards for loose milk. There ought to be established guidelines on milk processing, storage, and transportation so as to ensure the loose milk meets at least the minimal health and safety standards. The steps would increase public confidence in loose milk and alleviate the potential health risks.

-Certification Programs- A stringent, government-backed certification program with hygiene and quality criteria for loose milk vendors allows customers to trace sources of reliable and safe loose milk. In this given context, a government-backed seal or label would work like a symbol of trust for the customers so that loose milk does not lose its freshness and traditional appeal while being sold in compliance with the safety standards.

Other dimensions of policy intervention would be in aspects such as the price structure, especially if milk consumers are frustrated or misled by arbitrariness. Also, the intervention would make sure there is fair competition between packed milk and liquid milk and save the consumers from "honeytrap" through a more open price mechanism.

Practical Application:

- For Both Loose and Packed Milk Producers Sustainability initiatives will benefit the both loose and packed milk producers as the consumers are becoming increasingly environmentally conscious and sensitive to ethical concerns surrounding their food. For example, producing pack milk, it may adopt biodegradable cartons or glass bottles; products of loose milk can focus on emphasizing ethical farm practices.

- Consumer Trends: Loose and packed milk vendors can also capture the growing green consumer market by supplying organic milk, or milk that is produced using fewer environmental impacts, such as lower water consumption, minimal pesticides, or animal welfare certification.

CONCLUSION

This research investigated consumer perceptions and preferences of loose and packaged milk in Ahmedabad, considering such determinants as quality, taste, and nutritional value. In light of consideration of such attributes, the paper has attempted to probe further into different determinants of consumer decisions and how much these influence the milk market in an urban milieu.

Some major findings from this research study are as follows:

1. **Quality Perception:** Generally consumers perceive the quality of loose and packed milk differs to a large extent. These consumers perceived that the packed milk is safer, more hygienic, and more reliable due to standardized production process with mandatory quality control measures. Loose milk is perceived by most consumers as fresh and natural. It is somehow looked at to have more variable quality prone to handling and storage problems. This difference in perceived quality becomes a significant driver of consumer choices, and therefore, milk producers – both for loose as well as packed milk – must further strengthen consumer trust in the safety and quality of the products. Packed milk vendors must focus on consistency and reliability, whereas loose milk vendors should invest in transparency and improvement in hygiene standards for consumers to regain their confidence.
2. **Taste and Nutritional Value:** They did not find a significant difference in consumer preference for the taste or nutritional value between loose and packed milk. This means that, on an individual level, preferences for taste and nutritional content may not be as critical a determinant of preference as factors related to quality perception. It would be safe to say that other factors like price, convenience, and other cultural preferences would play a greater role in determining which milk to purchase. Furthermore, consumers are not fully aware of the nutritional advantages of packed milk from a fortification perspective or of the possible risks from consuming loose milk, and hence there is a need for further consumer education in these aspects.
3. **Implications for Producers and Marketers:** For dairy producers, this research reveals the importance of quality assurance, safety standards, and effective communication with consumers. Such campaigns will utilize the perceived reliability and safety perception of packed milk, and loose milk vendors can emphasize on freshness, local sourcing, and authenticity with better quality control and hygiene practice. The study suggests that the consumers' selection decisions can be influenced by placing more emphasis on the educational campaigns on the health benefits of packed milk and the safety risks associated with loose milk.
4. **Policy and Regulation:** The percepts also entail the call for regulations and standards about the milk industry. The policymakers must consider stricter regulations on loose milk vendors or loose milk-selling establishments to properly observe hygiene and proper handling of milk products, and likewise, have certification programs that would persuade consumers on the safety of loose milk. At the same time, by clearly displaying or labeling milk products, the gap in the consumer's knowledge about the nutritional differences between loose and packed milk can be bridged.

RECOMMEND

Though this study has valuable insights to consumers' perception regarding loose and packed milk in Ahmedabad, numerous aspects still lie unexplored and form a fertile realm for future research. Consumer behavior is going to change along with the passage of time as well as social and economical changes, healthcare trends, and the dairy industry's progress in terms of technology. The scope and recommendations for possible future studies on the basis of the consequent outcomes are given here.

1. Regional and Demographic Variation in the Taste of Milk

Suggestion: The research can be broadened to other parts of regions, such as rural regions and urban regions. Thus, geographical and demographic factors may influence milk preferences. The research study is confined to Ahmedabad. Consumer behavior would vary differently for regions other than India, especially in the rural areas.

Scope:

- **Comparison Analysis:** It could also be observed that in some cities or states in India, loose and packed milk differs in terms of consumer preference, revealing some regional differences in taste or price sensitivity or even health consciousness.
- **Demography:** Future studies can further elaborate on whether demographic factors such as age, income level, education, or the size of the family determine consumer preferences to establish the basis of preferences in terms of health consciousness, cultural habits, and economic constrains.
- **Urban vs. Rural:** Depending on the dimensions of trust, quality perceptions, and purchasing behavior, attitudes toward fresh, local milk (loose milk) may be completely different from those toward packaged, mass-produced milk between the urban and rural markets.

2. Health Trends and Nutritional Awareness

Recommendation: Since, no meaningful difference was found between the perceived nutritional value of the milk products, however, an enormous increasing interest into the health-conscious diets is still there, that includes organic food trends, fortified milk, and dairy-free alternatives. Future research will explain the impact of the health trend upon consumers' attitudes towards loose and packaged milk, largely concerning nutritional awareness and foremost toward the rise of fortified milk products.

Scope:

- **Nutritional Value Perception:** Future studies can check on how consumers perceive and place value on the nutritional aspect of milk, such as added

nutrients like vitamin D, calcium, omega-3 fatty acids, and if this aspect drives consumer choice.

- **Health Consciousness: New Trend in Health Conscious Consumption** - whether consumers are becoming more health conscious than taste or traditional preference considerations.

- **Alternative milk:** This also falls under some of the new trends in plant-based milk alternatives-almond, soy, and oat milk-which have become popular based on health concerns and lactose intolerance. How do alternative types of milk perform in the market compared to traditional types of milk in terms of taste, nutritional value, and consumer perceptions?

3. Consumer behavior and trust in food safety

Recommendation: A closer look at consumer trust in food safety and quality could show the type of milk that one appreciates for hygiene, contamination risks, and processing methods.

Scope:

Risk Factors Food Safety: The other study may be the level of significance of food safety in consumer choice, focusing on liquid milk. It will help to develop effective educational programs for an improved awareness level among consumers by understanding the risks attached with unpasteurized milk, such as bacterial contamination.

- **Role of Certification and Labeling:** More studies also might be able to reveal whether certification programs, say ISO or health standards by governments really make the difference in producing an influence on consumer confidence and perception of quality between loose milk and packed milk.

4. Effect of Price Sensitivity and Economic Factors

Recommendation: Price sensitivity was a major factor in the choice behavior. The study could be taken further to see how differences in milk price between loose and packed milk affect the purchase, especially considering lower-income or price-sensitive segments.

Scope:

- **Price-Quality Trade-offs:** Studies may be undertaken to see how much quality can be traded for on a reduced price, especially in the case of loose milk. This trade-off can help producers get their price points right and better articulate their value proposition.

- **Economic:** Changes can also be done in the economic downturn, inflation and high fluctuation in milk prices. How the changes in economies affect the purchasing of milk from the lower class families?

5. Technological Improvements in Dairy Processing and Packaging

Recommendation: With improvements in technology in processing and packaging in dairy, future research could analyze what innovations around smart packaging, traceability, and sustainability are doing to the choices of consumers and perceptions on loose versus packed milk.

Scope:

- **Smart Packaging:** Investigate if such innovative technologies like tamper-proof seals, environment-friendly packaging, and QR codes, among others, enhance consumer perceptions of quality and safety on loose versus packed milk.
- **Sustainability Factors:** Consumer concern regarding the sustainability of milk production factors, such as eco-friendly packaging, reduction in carbon footprints, and sourcing responsibly. How do these factors generally influence consumer loyalty and purchase decisions for dairy?

6. Consumer Loyalty and Brand Preferences

Recommendation: This study was based on the perceptions of quality and taste; however, the role of brand loyalty and consumer relationships with milk brands can be further researched in connection to packed milk, in which branding and advertising are strong.

Scope:

- **Brand Influence:** Future studies could consider whether brand loyalty influences consumer preferences for packaged milk, if market leadership is appropriated by either established brands or local or unknown brands, and whether brands influence consumer trust in terms of quality and safety.
- **Loyalty Programs:** Studies could investigate the efficacy of loyalty programs for packed milk in the dairy sector in general and whether they can be quantified to influence repeat purchases and customer retention.

Scope:

- **Cultural Norms:** Examine differential cultural norms toward food preparation and consumption as a function of consumer preferences influencing the choice of local, traditional, or organic products.
- **Religious Beliefs:** Future studies may also investigate the influence of religious beliefs and practices, perhaps like favoring vegetarian or cow's milk, in the consumption of milk by different communities.

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