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ABSTRACT

This study aims to explore the perception of brand introduction i.e., AMUL, in consumers purchase decision of flavoured camel milk and to determine whether the pre-and post-purchase intention occurs in Gujarat state of India. The present research used an exploratory research approach and a quantitative study. For the study, 500 respondents were selected through a judgmental sampling technique but 388 qualified for final analysis using structured questionnaire. The study includes 329 males and 59 females between the age group of 21 to 65 years (Mean=30 and SD= 1.85) with average graduate-level education. The data of the study were analyzed using R software. This study has found a significant correlation between awareness, health benefits, and therapeutic uses to purchase camel milk. AMUL brand has significantly affected the purchase intention and to flourish the flavoured camel milk market, AMUL would have to create awareness and market it well. The market for flavoured camel milk in India is entirely untouched and untapped. The consumption of AMUL camel milk depends upon the consumer demands and it will be stimulated through awareness campaigns and advertisements. The study has the unique contribution that purchase decision towards AMUL products is found favourable, and therefore, it could be assumed that with more available flavoured choices people would be more attracted towards AMUL's flavoured camel milk.

Key words: Perception, Camel milk, Purchase decision, AMUL, Flavoured milk

India is the world's largest milk-producing country and constitutes one-fifth of the world's milk production, precisely 22 per cent [1]. Global milk production is estimated at 843.2 million tonnes compared to India's 187.7 million tonnes in 2018-19 [2]. The world estimated average consumption of milk is 294 grams per day, and the per capita availability of milk in India is 374 gram per day during 2017 [3]. It depicts that India has sufficient milk production for the growing population. As per the report of Organization for Economic Co-operation and Development [4], the world milk production is expected to reach at 997 MT with a probable growth rate of 1.6 per cent by 2029, quicker than most of the primary agricultural commodities and projected that India and Pakistan would account for more than thirty per cent of total world milk production in 2029. Besides that, fifty per cent of milk is consumed on-farm only [1]. It is one of the vital sources of

income for rural families and provides employment and creates opportunities for mainly marginal and women farmers.

The total Livestock population is 535.78 million, but the camel population is 0.25 million in the country as per 20th Livestock Census, 2019 [5]. According to FAO, Somalia has the highest population of camel, and India ranks seventh in the world with a population of 0.63 million [6]. Camel is used primarily to produce hair, milk and meat and is utilized for national security, tourism and sports [7-8]. Generally, the camel is known as the beast of burden in the desert. However, the camel population in India was 0.6 million in 1951. In the next couple of decades, it increased between +2 to +6 till 1972 and then remained static to 0.6 million in 2005 [9]. Despite its potential to burgeon under extreme conditions with meagre resources, the camel population has decreased drastically, from 0.4 million in 2012 to 0.25 million in 2019 [5].

India had earned Rs 65 billion from the export of dairy products in 2019-20 and in India's GDP, around 4.2% is contributed by the dairy and animal husbandry sector [10]. Although camel was domesticated for milk since ancient times and used to transport goods and people [11-12], of the total milk production globally, camel's milk contribution is only 0.4 % [2]. While majority is occupied by cow milk which is 81 per cent, buffalo milk's contribution is 15% [2]. Camel is universally highly valued, and apart from milk, its meat, wool and leather are also widely utilized in most countries [13-14]. Camel milk consumption is typical observed in western

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countries like UAE, USA, Saudi Arabia, Somalia, Kenya, Sudan, Kazakhstan, Ethiopia and other African countries [15-17]. Camel milk consumption is extensively accepted and consumed in few parts of Asian countries as well. However, in India, it is mainly consumed in few significant parts of Rajasthan and MP [18]. The culture of consuming milk in India is entirely different and distinctive as it was considered taboo in many parts.

Camel milk is gaining popularity in other countries than India due to its nutritional, health benefits and therapeutic uses [19-20]. There is a dire need to cater for this niche market as this product has a huge potential in the world market. As per FAO, if this product is marketed correctly, it can capture \$10 billion market. In the USA, Saudi Arabia, and African countries, Camel milk is marketed by leading dairy brands [21-22]. Camel milk has a great scope of attracting private investment in dairy products like Mozzarella cheese, Chocolates, skimmed milk powder (SMP), and flavoured milk which are exported to USA, European countries, China and other Asian countries. Only AMUL has tried to captivate camel milk in India by launching pet bottles (amul.com). AMUL Dairy is the largest dairy in India, and was founded in 1946 with the objective “to stop the exploitation by middlemen”. Sixteen million milk producers comprise of 222 milk processed cooperative Milk unions and are marketed to 28 states by State Marketing Federations, i.e., Gujarat Cooperative Milk Marketing Federation (GCMMF) [23]. In Gujarat, Kutch District Cooperative Milk Producers Union Ltd, popularly known as Sarhad Dairy, tied up with GCMMF to commence operation for India’s first camel processing plant in Kutch in 2018 and is procuring 5000 to 6000-litre of camel’s milk per day [23].

Furthermore, Gujarat is the second-highest state in camel population after Rajasthan [24]. Despite many benefits, camel population is declining due to many reasons such as shrinkage of land, the emergence of camel diseases, bad climatic condition, growing usage of intensive agricultural practices, thereby leading to less dependency on the camel for transportation and farming, and change in Indian policy [25].

Conceptual framework

Past research studies have proved that camel milk has curative properties for curing various ailments. Camel milk could be used as a home remedy for curing autism, controlling diabetes, allergy, and also as prevention for liver cirrhosis [26-28]. Camel milk contains a high concentration of unsaturated fatty acids, are rich in healthy vitamins and minerals, has fat range between 1 and 4%, and gives strength, endurance, high calorific nutrition’s intake and stamina [29-31]. In India, the number of diabetic patients is highest globally, and camel milk is the best remedy to control diabetes [32]. Hashim *et al.* [33] stated that camel milk has complete nutritional constituents and influence the growth and development of body parts due to nutrients absorption metabolism nature. The affluent customers look for quality attributes in food products such as branding, nutritional information, added ingredients and price to meet their diverse needs and preferences [34]. As camel milk is exceptional in its composition with several nutritional characters, it can reinforce urban consumers’ purchase decisions [35].

Purchase decision or intention is the indirect promise to repurchase the product on the next visit to the market. The consumers’ preference would be affected by the product’s attributes and indeed, it would induce purchase intention. It is a multi-step process in which the customer gets information about the desired brand, who then evaluates its attributes by

purchasing the product and then analyses if it fulfils the expectations and eventually contemplating to make a purchase decision after experiencing one purchase attempt from a specific brand. AMUL can play a vital role in changing the perception of Camel milk among the urban population by using its brand image.

Perception of brand and purchase intention/decision

A brand is not just a name or symbol but also is an important instrument to create a positive image in a customer’s mind. Customers are more likely to spend more money on a brand with an excellent reputation. It assists customers in determining whether a particular brand is a better alternative for them and forces them to make several purchase decisions Khraim *et al.* [36] defines purchase intention as a “situation where consumers tend to buy a certain product in certain conditions”. Mirabi *et al.* [37] explains that some independent variables such as brand image, product knowledge, product involvement, product qualities, and brand loyalty, influence consumer purchase intention positively. A favourable brand image promotes the formation of long-term relationships between the product and its end users. The brand image also reveals its unique qualities that capture the targeted consumer’s purchase intention [38].

Chi *et al.* [39] studied the impact of brand image on consumer purchase intention and they found that consumers are more inclined towards the branded product. If the food product is attached to a brand, then the preference for buying that product will increase and be associated with healthy food. Strong brands make a more assertive relationship with the consumer and achieve a justifiable share in the market [40]. So, therefore it can be stated that perception of brand will impact the consumer’s purchase intention of camel milk. Arsalan *et al.* [41] elaborates that “purchase intention is a kind of decision-making that studies the reason to buy a particular brand by consumer”. Thus, the authors aimed first to evaluate customer perception of the AMUL brand by a field survey in order to discover the consumer’s purchasing decision of AMUL’s flavoured camel milk.

Therefore, the study hypothesizes that:

H₁: Introduction of Brand (B) will affect the purchase decision (PD) of AMUL’s flavoured camel milk.



The independent variable was B regarding camel milk and PD is the dependent variable.

MATERIALS AND METHODS

Design and participants

The present research used an exploratory research approach to determine the consumer’s purchase decision of AMUL’s flavoured camel milk. The present research is a quantitative study. The researchers have collected data using a structured questionnaire. For the study, 500 respondents were selected through a judgmental sampling technique but 388 qualified for final analysis. It includes 329 males and 59 females between the age group of 21 to 65 years (Mean=30 and SD= 1.85) with average graduate-level education. The subsequent intention of the study is to impart knowledge and to probe consumers to buy camel milk if they are not buying it.

Procedure and measures

The research aims to find the impact of brand introduction i.e., AMUL, in consumers purchase decision of flavoured camel milk. AMUL has only launched camel milk in three Gujarat cities: Ahmedabad, Gandhinagar, and Kutch. In three cities, there were a total of 780 stores offering the product [42]. The study was conducted in the capital of Gujarat, i.e., Gandhinagar, as the authors have deliberately chosen the city and was performed during the period August to December 2019. The participants were available at shopping complexes (Sector 21, Info-city complex, and D-Mart in Gandhinagar) and AMUL outlets. A store intercept survey method was used where researchers asked the individuals for their voluntary participation and assured them regarding total confidentiality of the information collected from them. They were also informed that data collected will be used for research purpose only. Few of the respondents were not aware about camel milk and its health benefits before filling up the questionnaire, so therefore knowledge imparted to the respondents.

A set of structured questionnaires were filled by the participants on a seven-point Likert scale. The perception of brand image was measured by four items adopted from [39], [43] and purchase intention was measured with four items combined from [44–46]. The questionnaire was categorized into three sections. The first section is about perception regarding AMUL brand, followed by opinion towards purchase decision of the AMUL's flavoured camel milk and demographic details.

Data analysis

The data of the study were analyzed using R software. The linear regression assesses the role of brand in the purchase decision and to determine whether the pre-and post-purchase intention occurs, the McNemar test was performed. The authors have measured the internal reliability of the questionnaire using Cronbach's alpha, which is 0.754. It indicates that the reliability of the questionnaire is acceptable as the value is more than 0.7; therefore, a questionnaire has a relatively high internal reliability. The validity of the instrument checked and the statements prepared after discussions with shopkeepers and experts' suggestions. The Standard scale derived from the past works of literature and modified according to the study objective. Questionnaire item was measured on a scale of 1 to 7 with anchors "Strongly Disagree" to "Strongly Agree" for the construct measures. The face validity of the scale development carried out with 30 respondents during the pilot testing in July. The suggestions and changes were taken into consideration for the final data collection.

RESULTS AND DISCUSSION

In the study, 84.2 per cent of participants were male and 15.8 were female; 55.6 per cent of participants came from 21 to 35 age groups, and only 14.6 per cent were from 50 to 65. Forty per cent of the study participants have completed their graduation. The significant mix of service and business group has contributed around 30 percentage in sample survey and 39.4 per cent of participants lies into Rs 2 to 5 Lakh bracket and in Rs 5 to 10 bracket 29.2 per cent sample. From the demographic information (Table 1), the authors can state that the average age, qualification and income of participant are good enough to understand the aim of the research and the significance of the study theme.

Regression analysis

To study the relationships between brand (B) and purchase decision (PD) simple linear regression analysis was

performed. The B ($\beta=0.466$, $p<0.001$), is significantly and positively related to PI. From the result, it shows that the hypothesis is accepted and significant. Past studies also claims that there is a significant relationship between brand and purchase decision of consumers. Kim *et al.* [47] found that brand plays a fundamental role in developing consumers desire and positive perception towards the product. As the product is associated with brand, the prestige and image of the product develops and reduces risk of tampering the brand image [48]. Brand always creates a differentiated position in the mind of consumers so that they can pay more [49]. Eze, Tan, and Yeo (n.d) researched that brand has positive influence on the consumer's purchase intention. Hence, with the support of literatures, it can be said that selection of brand is major constitute in consumer buying decision of any product.

Table 1 Demographic profile of participants

Particulars	Frequency	Percentage	
Gender	Male	329	84.20
	Female	59	15.80
Age (in years)	21 to 35	216	55.60
	35 to 50	105	27.06
	50 to 65	67	14.6
Education qualification	Upto SSC (10 th)	78	20.1
	HSC (12 th)	75	19.3
	Graduation	155	39.9
	Post-graduation	53	13.7
	Ph. D.	27	7.0
Occupation	Home-maker	35	09
	Students	79	20.3
	Service	110	28.35
	Business	114	29.38
	Professionals	50	12.88
Annual family income (in Rs)	Upto 2 Lakhs	78	20.1
	2 Lakhs – 5 Lakhs	153	39.4
	5 – 10 Lakhs	113	29.1
	Above 10 Lakhs	44	11.3
Total		388	100

Consumer's perception towards AMUL brand

AMUL, a brand of dairy cooperative primary Gujarat Cooperative Milk Marketing Federation Ltd (GCMMF) has received the most trusted brand of India by TRA's (formerly Trust Research Advisory) Brand Trust Report, India study 2019 (<https://www.indiancooperative.com>). In 2014, AMUL won World Dairy Innovation Award. In mid-2019, AMUL was listed as one of India's top FMCG brands after Parle (<https://www.indiancooperative.com>). In 2019-20, AMUL reported milk intake of 10.3 billion kg annual (BusinessLine, 01 December 2020). In 2020, AMUL was ranked as the world's 8th largest milk processor by International Farm Comparison Network (IFCN). The AMUL brand had crossed a remarkable 52,000 turnover in the same year and quadrupled the farmers' income in the past seven years (amul.com). There are millions of consumers who purchase AMUL products daily. As a result, AMUL has made its way to become the biggest milk processor in India with the largest market share [50].

Zeithaml *et al.* [51] suggested that there is a positive relationship between buying intention and brand. The image of the brand, trust in brand, quality perceived by consumers of brand products, and brand identification from other competing brands are important to understand the crucial role of brand in marketing camel milk in the country.

The current study findings in (Table 2) show that eighty-three percentage of the participants could identify AMUL among other competing brands very quickly. More than four-

fifths of the total participants strongly agreed on the high standard of quality products delivered by AMUL. The research findings indicate that quality of milk was one of the most important factors considered by the consumers [52]. Similar to the AMUL's tag line which states "the taste of India", the result of this study also favoured the same. It depicts that AMUL has built a high-level of trust in their products which is also justified

by 84 per cent of the study participants who strongly believe in the same. AMUL should have high brand awareness towards flavoured camel milk to augment the consumer purchase intention to encash the profit as a brand. The fact that 77 per cent of participants purchase AMUL products very frequently for consumption in their day-to-day lives also conveys that the consumers buying AMUL products are highly satisfied [53].

Table 2 Perception towards AMUL brand

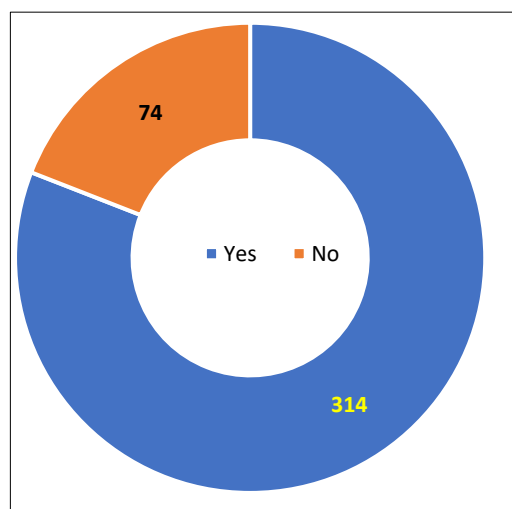
	Frequency	Percent	Mean	Standard deviation
<i>Can you Identify AMUL among other competing brands</i>				
Easy (4)	66	17.0	4.83	0.376
Very easy (5)	322	83.0		
<i>AMUL products have a high standard of quality</i>				
Moderately agree (6)	56	14.4	6.86	0.352
Strongly agree (7)	332	85.6		
<i>Your Trust level on AMUL products is high</i>				
Moderately agree (6)	61	15.7	6.84	0.364
Strongly agree (7)	327	84.3		
<i>How regularly you buy any product of AMUL in day-today life</i>				
Frequently (4)	86	22.2	5.78	0.416
Very frequently (5)	302	77.8		
Total	388	100		

All the Likert options are not shown in the table as the frequency is zero/null

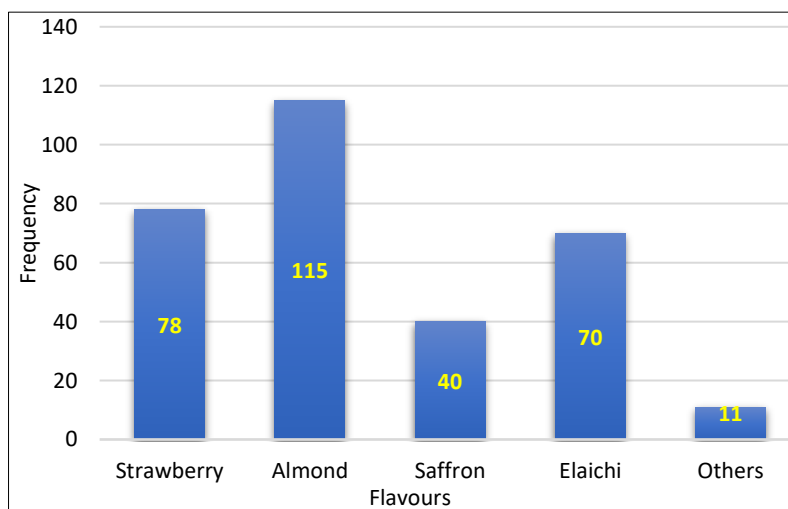
Purchase intention towards AMUL's flavoured camel milk

The study has measured the impact of brand on purchase intention and the results were found to be significant. Moreover, the introduction of AMUL brand's effect on the consumer's purchase decision for the flavoured camel milk could be measured through statistical tests. AMUL is a well-established

brand in the country and has captured a significant share market [54]. Kamins and Marks [55] claims that a familiar brand has a higher purchase intention among consumers. Additionally, Hsu [56] has emphasized that a well-known brand is associated with higher purchase intention compared to a less well-known brand. The results of the study also reveal similar findings.



Graph 1 Willingness to buy Amul flavoured camel milk



Graph 2 Most preferred Falvour milk

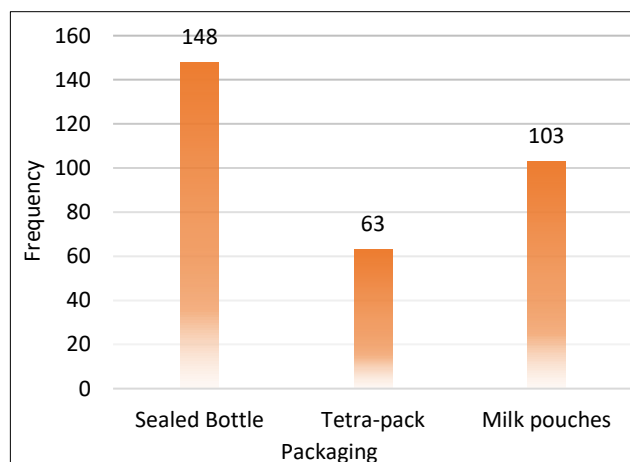
Furthermore, the study participants were asked about the past experience of camel milk and the results conveyed that only 20 per cent consumed it. They revealed that due to various misconceptions and lack of awareness regarding camel milk they did not consume it. Once they were provided with appropriate awareness regarding the camel milk, knowledge of health benefits and its therapeutic uses 75 per cent of the total participants agreed to consume camel milk. Therefore, to measure the purchase intention before and after introducing the AMUL brand, the McNemar test static was applied. The McNemar test can be used to determine the differences in a dichotomous outcome between two repeated measures [57]. For performing McNemar's test, all assumptions were fulfilled. An exact McNemar's test determined that there was a statistically significant difference in the number of participants pre-and

post-purchase intention of AMUL's camel milk, $p=.000$. Therefore, it can be interpreted that after the brand was launched, the participants' willingness to purchase the AMUL camel milk products increased significantly.

Goldsmith *et al.* [58] revealed that brand provides quality, value, safety, assurance and increases emotional and social value by repetitive purchases which also increases brand recognition. Moreover, if the brand is widespread and the product has high brand awareness, it will be easier to capture the market share, thereby also associating the products' quality with the brand [45]. According to Wang and Kan [59], purchase intention of the product will increase as the consumer develops a positive feeling towards a brand. From the previous studies, it was inferred that the AMUL brand has developed a positive connection with the Indian customers and had occupied 26 per

cent of the market share in the packaged milk segment (amul.com). Therefore, experiential marketing will be helpful in the launching of AMUL's camel product into the market. To realize the future success of AMUL camel milk, preferences were asked of participants before launching the flavoured milk product.

Moreover, AMUL milk has different product range viz. UHT (Harmonized toned) milk, lactose-free milk, and camel milk in tetra pack and pet bottles (amul.com). From the (Graph 1), it could be comprehended that 314 participants, i.e., eighty



Graph 3 Packaging options

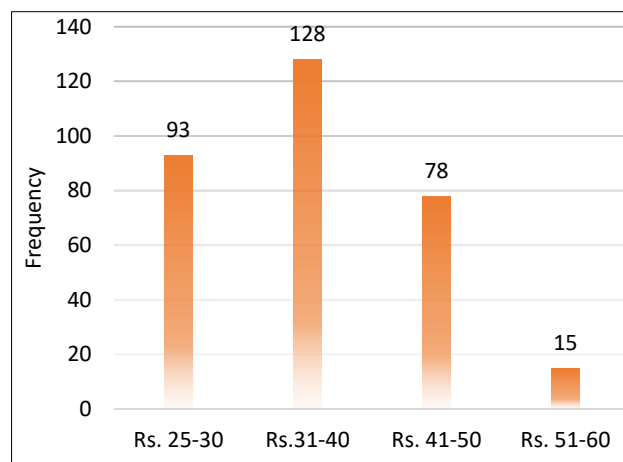
Furthermore, price plays a vital role in consumer purchase intention [61]. The respondents were asked about the purchasing price for the 500ml flavoured camel milk and the graph 3 shows that the majority of them i.e., 128 participants selected Rs 31 to 40 column, only 15 per cent of participants have selected Rs 51 to 60 column. Mostafa and Elseidi [62] reported that consumers are price conscious and seek value for money. Additionally, the study participants were asked for the packaging type for the flavoured milk, for which half of the participants indicated their preference for sealed bottle and one-fourth of them preferred tetra pack shown in (Graph 4). Akweya *et al.* [63] has emphasized that packaging is the most crucial criterion in the purchase intention of camel pasteurized milk. Packaging acts as an extrinsic cue that affects the consumer evaluation in the purchase decision of the product [64]. Therefore, the study findings conclude that consumers are crucial to the success of any business since their decision to purchase offered products ultimately affect a company's identity and future profitability. AMUL brand has significantly affected the purchase intention and to flourish the flavoured camel milk market, AMUL would have to create awareness and market it well. The result of the study helps in shaping the complete picture for launching the flavoured camel milk. An individual's awareness of the brand will significantly increase the chances of recommending the same brand to others [65]. If a brand decides to pursue valuable partnerships, it must first build satisfied and loyal customers by getting to know and understand its customers' needs.

Managerial implication

The market for flavoured camel milk in India is entirely untouched and untapped. To create a camel milk market, awareness should be spread among the customers about health benefits, therapeutic uses and the nature of camel milk. This study has found a significant correlation between awareness, health benefits, and therapeutic uses to purchase camel milk. The study also found that the purchase decision towards AMUL

percentage of the study participants showed willingness to buy AMUL flavoured camel milk. Only twenty per cent of participants denied purchasing the flavoured milk.

In 2017, AMUL had launched flavoured camel milk with chocolate flavour as a pilot testing [60]. However, the product could not perform well, so the study participants were also asked for various flavours that they would like to experience in the future. (Graph 2) shows the most preferred flavour was almond; more than one-third of the total participants have chosen this flavour and saffron was the least preferred flavour.



Graph 4 Maximum price likely to be paid for 500ml of AMUL's flavoured camel milk

products is favourable, and therefore, it could be assumed that with more available flavoured choices people would be more attracted towards AMUL's flavoured camel milk.

AMUL has advertised camel milk as a health benefit and therapeutic use product in the market with the slogan "source of natural insulin and protein" in 500 ml PET bottles at Rs 50 (amul.com). Focusing on the health benefits, flavour, taste, nutrients, mineral content and therapeutic properties of camel milk, the consumers' interest in the next couple of years could gradually increase. Initially, healthy people who are not afflicted from any diseases were reluctant to consume as it has sour taste and is marketed for medicinal purposes. The consumption of AMUL camel milk depends upon the consumer demands and it will be stimulated through awareness campaigns and advertisements. Thus, it is a consumer-oriented approach, and marketing AMUL camel milk will help understand market dynamics in India. Branded products lead to educate the consumer regarding quality information and knowledge about the FSSAI (Food Safety and Standards Authority of India) and Food Safety Standards. In decreasing consumer risk, brands play a vital role since they ensure quality and certain characteristics, such as taste and nutrition [58]. Some of the respondents reported that awareness about camel milk and its health benefits are unknown before filling up the questionnaire. Furthermore, it shows that people realize that camel milk should be costlier than cow milk as it has many medicinal properties for infant to old age person. The study's findings reveal that the AMUL brand may succeed in the full-fledged launching of AMUL's flavoured camel milk throughout the state.

CONCLUSION

Although this study concentrates on the purchase intention of AMUL's flavoured camel milk and the consumer perception about the camel milk and AMUL brand, it does not include consumers' attitude and behaviour buying pattern

towards AMUL's camel milk or flavoured milk. The customer's perception also depends on the experience and knowledge about the product included in the study. The study can be extended or replicated with other bovines or milk brands

to know the perception and willingness of the buyer. This study was conducted in only one of three cities where AMUL has launched camel milk and thus a comparison study with the other two cities could be investigated in future.

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