



Research Article

FACTORS INFLUENCING THE CONSUMERS TO PURCHASE A SELECTED CARBONATED DAIRY DRINK IN ANAND CITY, GUJARAT

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Abstract: This study is intended to identify the factors influencing consumer purchases of selected carbonated dairy drinks in Anand city, Gujarat. In order to analyze the information collected from 100 consumers in Anand city, Gujarat, a Garret ranking analysis was used. It was found that taste, brand, and quality were the most influential factors influencing the consumer's decision to purchase a particular carbonated milk drink. Aside from these factors, consumers were also influenced by flavor, price, packaging, and availability when purchasing the same product. A wide variety of substitutes and new products are available on the market, resulting in regular changes in consumer preferences. In order to continue improving the product, the company should monitor the needs and preferences of consumers on a regular basis.

Keywords: Garrett Rank analysis, Likert Scale analysis

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Introduction

Whey is a by-product of the cheese industry in the world, with production of around 200 million tons/year [3]. Carbonated beverage is the product with a great consumer acceptability, and whey can be one of the raw materials used in the manufacture these products [4]. The carbonation process is safe, inexpensive, and supposedly has no negative effect on dairy products. Moreover, its functionality is enhanced using probiotics in whey-based products [5]. The development of dairy products containing probiotic bacteria is a major focus of the industrial sector, and the production of food containing probiotic strains that maintain an adequate concentration of viable cells during shelf life is generally a technological challenge [6]. With the growing health concerns, there is increasing demand for healthier beverages rather than soft drinks [7]. This demand can be met by whey based carbonated beverages.

Globally, India is one of the fastest developing nations. During the past decade, the food sector in the country has grown threefold over the next 10 years and it is expected to follow the same trend [8]. Functional food and beverages have gained immense popularity among the health-conscious population of India [9]. In particular, products containing whey protein have gained importance due to the health benefits they offer. In the region, the demand for personal care products containing whey protein has also been increased. The demand for whey protein powder among the bodybuilding groups has been increasing as the Indian youth are highly fitness conscious. The Indian whey protein market is expected to register a CAGR of 11 percent, during the forecasted period (2019-2024) [10].

India Whey Protein Ingredients Market size is estimated to be \$860 million in 2019 and is projected to be growing at CAGR of 37.64 percent during the forecast period 2020-2025[11]. The growing trend of fitness activities and growing population are the major factors increasing demand for whey protein ingredients in India. The rise in an active lifestyle and increased health consciousness have increased the consumption of high nutrient food and beverages [12]. Whey protein ingredients possess high nutritional value and are protein rich, which increase their use in various food and beverage applications.

The most consumed whey protein ingredient end-products in India are chocolate protein powder, protein supplements, protein smoothies, gym supplements, protein bars, electrolyte supplements, and fitness supplements.

The Indian whey protein market is extremely fragmented due to the widespread presence, prevalence and rampancy of a largely unorganized sector. Sundry small and international players are involved in the manufacturing, supply, marketing and distribution of whey protein ingredients in the country [13]. Glanbia PLC, Fonterra Co-operative Group, Arla Foods AMBA and Agropur US are some of the dominant players in the market [14]. The increased consumption of dairy beverages and the benefits of carbonation upon these beverages means that there are opportunities to develop widely accepted and popular carbonated dairy beverages. Carbonated dairy beverages have become increasingly popular in recent years, and innovations in this area could help drive increased consumption of these beverages [15].

Materials and Methods

The primary data was collected from the consumers with the help of structured schedule. The sampling method used was non-probability sampling method under which convenience sampling method was used to collect the information from the consumers. To satisfy the objective, the data was collected from 100 consumers of Anand city. Out of 100 consumers, information of 20 consumers were collected from Winner traders (near bus stand), information of 25 consumers were collected from Santram traders (near Kunj Market), information of 30 consumers were collected from Chandini traders (near Ganesh chokdi) and the information of the remaining 25 consumers were collected from Shakti traders (Anand-Vidyanagar road). The secondary data regarding the study was collected from different magazines, literature reviews, govt. and private publications, research papers and books, government websites like Directorate of Animal Husbandry, Govt. of Gujarat, National Dairy Development Board (NDDB), United Nations FAO, Agriculture and Processed Food Products Export Development Authority.

Table-1 Reason for Buying selected carbonated dairy drink

Reason	Number of Respondents	Percentage (%)
Taste	13	26
Brand	11	2
Flavour	8	16
Price	4	8
Packaging	3	6
Quality	9	18
Availability	2	4
Total	50	100

Table-2 Ranking of Factors Influencing the Purchasing of selected carbonated dairy drink

Factors	1	2	3	4	5	6	7	Total Score	Final Rank
Taste	13	11	10	9	5	1	1	261	I
Brand	11	12	9	8	4	2	4	246	II
Quality	9	9	12	7	6	4	3	234	III
Flavour	8	7	7	11	7	7	3	215	IV
Price	4	3	5	6	13	7	12	160	V
Packaging	3	5	4	5	8	15	10	155	VI
Availability	2	3	3	4	7	14	17	129	VII

Table-3 Ranking of Factors Influencing the Purchasing of selected carbonated dairy drink using Garrett Ranking Method

Factors	1(78)	2(66)	3(57)	4(50)	5(43)	6(34)	7(22)	Total Score (TS)	TS/No. of Res.	Final Rank
Taste	13	11	10	9	5	1	1	3031	60.62	I
Brand	11	12	9	8	4	2	4	2891	57.82	II
Quality	9	9	12	7	6	4	3	2790	55.80	III
Flavour	8	7	7	11	7	7	3	2640	52.80	IV
Price	4	3	5	6	13	7	12	2156	43.12	V
Packaging	3	5	4	5	8	15	10	2116	42.32	VI
Availability	2	3	3	4	7	14	17	1876	37.52	VII

Garrett Rank analysis

Garrett rank technique is used to rank the preference indicated by the respondents on different factors. As per the Garrett ranking method, respondents have been asked to assign the ranks for all the factors influencing the buying of the product and the outcomes of the ranking have been converted into score value with the help of following formula (Henry Garrett, 1926).

$$\text{Percent position} = 100(R_{ij} - 0.5) / N_j$$

R_{ij} = Rank given for the i^{th} variable by j^{th} respondents,

N_j = Number of variables ranked by j^{th} respondents

The percent position estimated is converted into scores with the help of Garrett's Table. The scores of each individual are added for each factor, and then total value of scores and mean values of score is calculated. The most important factor is considered to be the factors having the highest mean value.

Likert Scale analysis

A likert scale is a type of psychometric response scale used to measure attitudes. It is a 5- or 7-point ordinal scale used by respondents to rate the degree to which they agree or disagree with a statement. It usually measures a response to a closed-ended question on a rating scale of how much you agree or disagree, often with a neutral option in-between. A typical five-point scale may include answers: strongly disagree, disagree, neutral, agree, strongly agree (Rensis Likert, 1932).

$$\text{Likert scale} = \sum (fx / \text{Total no. of respondents})$$

Result and Discussion

Every consumer will have their own preferences before purchasing any product from the market. From the above [Table-1], the results showed that out of the 50 consumers who consumed the product, 26 percent of the respondents purchased the selected carbonated dairy drink because of its taste, 22 percent of the respondents preferred it because of the brand it has established in the minds of customers, 18 percent respondents preferred the product because of its quality, 16 percent of the respondents purchased it because of its flavour. 8 percent of the respondents purchased selected carbonated dairy drink because of its price, 6 percent of the respondents purchased the product because of the packaging and only 4 percent of the respondents purchased selected carbonated dairy drink because of its availability.

From the data represented in the above [Table-2], it is interpreted that the

respondents consuming selected carbonated dairy drink gave 1st rank for the taste, 2nd rank for the brand, followed by quality, flavour, price packaging and availability of the product respectively.

From the data represented in the above [Table-3], it is interpreted that the respondents consuming selected carbonated dairy drink gave 1st rank for the taste, 2nd rank for the brand, followed by quality, flavour, price packaging and availability of the product respectively.

Conclusion

Taste is the foremost preference of the consumers for any consumable product. Other than taste, consumers considered brand, quality, flavour, price, package and availability. The preference of the consumers has been changing regularly due to presence of the lot of substitutes as well as new market arrivals. The company should monitor the need and preference of the consumers regularly for further improvement of the product.

Application of research: Companies introduced innovative and healthy beverage product, which is a blend of fruit juice, dairy and fizz in the market. This product contains fizz, real fruit juices, goodness of dairy and has the sugar content 3 percent less compared to the other brand soft drinks. This study helps to understand the market of carbonated dairy drink product and suggest ways in improving the sales of this healthy carbonated beverage.

Research Category: Agribusiness Management

Abbreviations: CB-carbonated beverages

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Cultivar / Variety / Breed name: Nil

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