

A Comparative Study on Consumer Preference towards Carbonated and Dairy Beverages in the City of Lucknow

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ABSTRACT

The food and beverage industry are one of the many fastest-growing sectors in India. Rise in Income level and urbanization has led to a changed lifestyle and there has increased the demand for carbonated beverages across all ages and socio-economic groups of India. However, there is an increasing consciousness towards health, post-Covid. As a result, it has been observed that despite the overall increase in carbonated beverage demand, the preference is shifting towards natural drinks that include fruit juices and dairy-based beverages. Thus, this paper is an attempt to find out consumer preferences for carbonated and dairy-based beverages among the youth of Lucknow. This paper also tries to determine the factors that influence the consumption of carbonated or dairy-based beverages. The sample included 141 active respondents in the age group of 15 to 29. The consumer preferences were identified by a structured questionnaire and captured in 16 factors of preferences. This research found that people are accepting the negative effect of carbohydrate beverages on health, and they are shifting their choice to dairy-based Beverages.

Keywords: Consumer preferences, Carbonated beverages, Dairy-based beverages, Youth

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INTRODUCTION

The global beverage market is projected to rise at a compound annual growth rate (CAGR) of 4.33% to reach a market valuation of US\$2,213.306 billion by 2029, from US\$1,645.083 billion in 2022. The Indian carbonated soft drinks market had total revenues of \$18.25 billion in 2022, representing a compound annual growth rate (CAGR) of 19.8% between 2017 and 2022. Market consumption volume increased with a CAGR of 10.2% between 2017 and 2022, to reach a total of 9.29 billion liters in 2022 (Ltd, n.d.). According to a study conducted by Market Research (Food & Beverage Market Research Reports & Food & Beverage Industry Analysis | MarketResearch.com, n.d.), the carbonated soft drinks market in India in 2015 was worth 173.00 million USD (at retail prices). The drinks market in India is expected to reach 402.43 million USD (in retail prices) by 2025, rising at a CAGR of 7.60 percent per year between 2020 and 2025. This decreases the 10.19 percent annual growth rate recorded from 2015 to 2019 (Nguyen, 2022). By value, sales of soft drinks in India were Rs 35,803 crore in 2022, which was 12% below the pre-COVID level of Rs 41,001 crore in 2019 (Figure 1) (Carbonated Drinks Market yet to Recover From COVID Blues, 2022)

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The beverage market is expected to experience moderate growth over the forecast period, driven by changing consumer preferences towards ready-to-drink beverages, especially in developing and emerging markets.

Moreover, consumers are increasingly opting for healthier beverage choices due to rising awareness of lifestyle diseases, heightened health consciousness, and growing disposable income levels. For instance, according to the U.S. Bureau of Economic Analysis, personal disposable income rose from US\$57,577 in 2022 to US\$61,242 in 2023.

A carbonated soft drink is a drink that bubbles and fizzes with carbon dioxide gas. The process by which the gas dissolves in the drink is known as carbonation. This process can occur naturally, such as in naturally

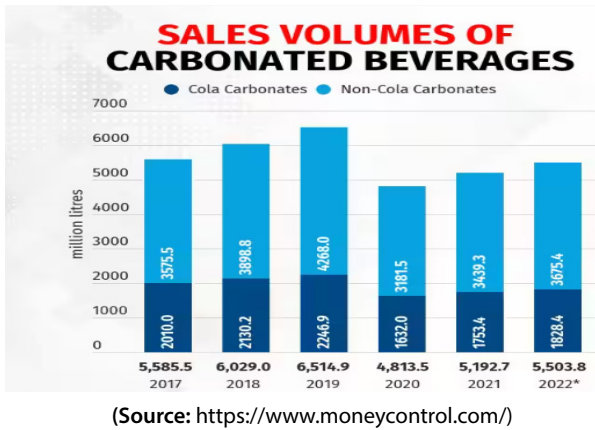


Figure 1: Sales volume of carbonated beverage market size

carbonated mineral water that absorbs carbon dioxide from the ground, or by man-made processes, as is the case in most soft drinks and soda waters (TechQu, 2022)

Non-carbonated beverages, on the other hand, do not contain carbon dioxide or have a fizzy flavor. Non-carbonated drinks lack that particular zing because the carbonation process is not used. A wide variety of beverages are included in this group, such as juice, tea, coffee, smoothies, water, etc.

It has been observed after various studies that consumers are willing to pay more for premium and artisanal non-alcoholic beverages that offer unique flavors, ingredients, and packaging. This trend has led to the rise of specialty and craft beer brands. Markets have seen an increase in low-alcohol as well as alcohol-free drinks that cater to those who want the flavor and enjoyment of alcohol-based drinks, but without alcohol.

Non-alcoholic beverage companies are increasingly adopting sustainable packaging practices, such as recyclable materials and reduced plastic usage. Eco-friendly packaging is also becoming a key differentiator and a response to consumer environmental concerns.

Consumers are drawn to non-alcoholic beverages featuring local and authentic ingredients, reflecting a desire for transparency and connection to the source. Brands that highlight their ingredient origins and production methods are gaining traction in the market (Non-Alcoholic Beverages Market Size | CAGR of 6.1%, 2024) (Figure 2).

Additionally, the growth of this market has also been influenced by the branding and marketing strategies employed by the beverage industry. Marketing campaigns that are successful and emphasize the health benefits and natural characteristics of non-alcoholic drinks, along with targeted advertisements targeted at particular segments of the population, are crucial in

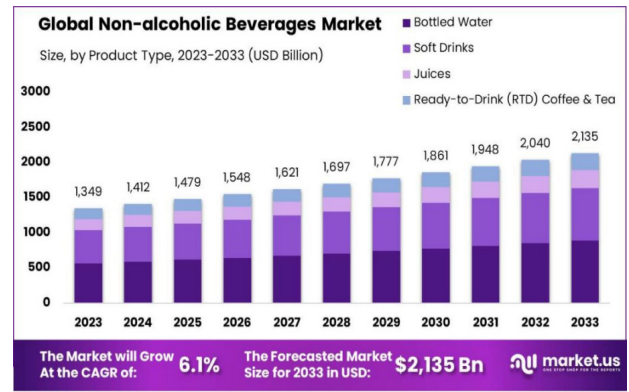


Figure 2: Global Non-alcoholic beverage market

creating brand awareness and encouraging consumer involvement.

Key participants in the non-alcoholic beverages market comprise major multinational corporations, regional entities, and specialized beverage brands. The market exhibits high competitiveness, with companies such as Coca-Cola Co, PepsiCo Inc, Monster Beverage Corp, and more.

LITERATURE REVIEW

Consumer preferences are defined as the subjective (individual) tastes, as measured by utility, of various bundles of goods. The ability to purchase goods does not determine a consumer's likes or dislikes. Consumer preferences are the judgments and evaluations consumers make about the products and services available to them based on factors such as quality, price, convenience, and personal tastes (Sachin, n.d.)

Various theoretical frameworks, including Utility theory, Behavioral economics models and Maslow's theory, have attempted to explain Consumer preferences. Consumer preference refers to the subjective choices, inclinations, and tendencies of individuals or groups regarding specific products, services, or experiences (Paracha, A. M. J., et al., 2012). It reflects the relative value or desirability consumers assign to different options when making purchasing decisions.

According to a study (Abdullah & Asngari, 2010), the most important physiological need of consuming a drink is thirst. But once this is satisfied, human beings strive for psychological and physiological well-being, which might include any satisfaction of non-basic needs or even consumption for prestige reasons. His study revealed that soft drink products are one of the main popular beverages that are easily available in today's market. Somehow, it is quite ambiguous to reason out

what factors influenced the popularity of the products. The results showed that the consumers' preferences were characterized by four factors such as branding, validation and price, packaging, and taste.

Shukla pointed out that consumer habits have changed drastically. They are looking for healthier options and nutritional value in the food they buy today.

A Norwegian study that took an ecological approach and assessed personal and environmental factors, in addition to demographic factors, found that taste preferences, accessibility of soft drinks at home, modeling of the behavior by family/ friends and positive attitudes towards soft drinks, along with being male and dieting, were the strongest determinants of soft drink consumption (Bere et al., 2008). An understanding of factors related to soft drink consumption is important to enable interventions to be targeted where they are likely to have the most impact.

In this paper author has attempted to conduct a comparative study on consumer preferences towards carbonated and dairy beverages to analyze the differences and similarities in consumer behavior, attitudes, and choices within these two beverage categories in the geographical limit of the city of Lucknow.

RESEARCH METHODOLOGY

For the study, a 5-point Likert scale was developed to collect primary data from youth respondents in the city of Lucknow. According to National Youth Policy 2014, youth refers to all those between the ages of 15 to 29 years¹². The study was conducted on 141 respondents based on convenience sampling.

Findings

Before the conduct of statistical test reliability of the questionnaire was checked for reliability through Cronbach's Alpha, which was found to be 0.819, which meant the scale was good to go for any further analysis. The data sufficiency was also checked using KMO and Bartlett's Test, which came to be 0.781. Further, the scale was tested for multi-collinearity, which showed values between 1.71 to 2.98, which is as per the acceptable standards of multi-collinearity (Sulaiman et al., 2019).

For analysis the preference level was analyzed using means. From the given Table 1, it can be interpreted that the mean value of stmt. 1, is higher than that of stmt. 2, which means that the preference is higher for dairy beverages. The higher mean value of stmt. is also supporting this statement. Stmt. 3, which concludes that since respondents were aware of the negative effect of

Table 1: Mean of factors contributing to preference

Stmt. No.	Statements	Mean
1	I prefer consuming carbonated beverages regularly (At least once a week).	2.76
2	I prefer consuming dairy based beverages regularly (At least once a week).	3.50
3	I am aware of the negative effect of carbonated beverages on health.	4.09
4	I like the taste of carbonated beverage.	3.29
5	I feel the price of carbonated beverages are quite affordable.	3.54
6	The carbonated beverages are easily available.	4.13
7	Carbonated beverages have attractive packaging.	3.75
8	Carbonated beverages are more popular among youth.	4.16
9	Carbonated beverages add a sense of status to me (matches to my status).	2.63
10	Carbonated beverages are refreshing and adds zing to the life."	3.10
11	Carbonated beverages are symbolic to youth.	3.34
12	Dairy based beverages seem to be meant for children & elderly people.	2.91
13	Dairy based beverages are healthy and nutritious.	3.67
14	Dairy based beverages are refreshing and filling.	3.66
15	Though dairy based beverages are a bit expensive, but I consume them only.	3.09
16	Given a choice between carbonated beverages and dairy based beverages, I would consume carbonated beverage.	2.51

Table 2: One sample T-test

	t	dt	Sig(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
tota_carb	60.134	140	0.000	3.32057	3.2114	3.4297
tota_dair	55.999	140	0.000	3.48818	3.365	3.6113

carbonated beverages on health, their preference was higher for dairy-based beverages. Though stmt. 5–8 and 11 reflect a positive perception towards carbonated drinks, but a result of the T-test to analyze the overall preference of both the beverages (Table 2) clearly shows that despite of positive perception related to few factors contributing to preference towards carbonated drinks,



there is a significant difference (.000) in the preference towards both the beverages.

CONCLUSION

The objective of this study was to investigate the Consumer preferences with respect to carbonated and dairy-based beverages in Lucknow among the youth population. The findings of the study conclude that though carbonated beverages are popular and create a buzz among youth, when it is a matter of regular consumption, then the youth prefer to consume dairy-based beverages over carbonated drinks. The youth of Lucknow accept the fact that carbonated beverages are easily available and priced economically. As a result tend to be sold more, but given a choice, they would prefer to consume non-carbonated drinks as they are aware of the negative effects of carbonated drinks. These findings can be considered by organizations dealing in carbonated drinks that there is immense scope for non-carbonated beverages by increasing the availability or reach of non-carbonated drinks. However, there is scope to conduct a similar study across other geographical and demographic segments of India in order to get a holistic picture of preference towards carbonated drinks.

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