

Research Article

Exploring Consumers' Preferences Towards Preserved Food Products

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Abstract: This project aims to find out how the consumer prefers preserved foods and their perception of that. This project is also meant to identify the factors influencing the consumer perception towards preserved food products and how they are aware of those food products. A total sample of 150 is taken from the consumer. Through Structured Questionnaire and Google Forms, data have been collected. The customers have been enquired about their demographic profile, why they prefer this, and their level of consumption, taste and quality. For the purpose of analysis, statistical tools and techniques like frequency, weighted average, and regression were used.

Keywords: Consumer, Preserved Foods, Frozen.

I. INTRODUCTION

The popularity of preserved food products has surged in recent years due to the fast-paced lifestyles of modern consumers and their increasing need for convenient meal options. These products, canned, frozen, and dehydrated items, offer extended shelf life, convenient storage, and easy preparation, all of which make them a sound choice for busy homemakers, working professionals, and students. However, among consumers of this segment, preference may vary with multiple factors: convenience, taste, nutritional value, packaging, and brand perception. Health-conscious consumers look for food products with fewer additives, organic content, or, more importantly, high nutritional requirements. Packaging will play a tremendous role in ensuring that the qualities of the product are better preserved, and shelf appeal enhances the possibility of purchasing more. More attractive and sustainably packaged food items will induce consumers to buy them from a certain brand. Once again, trust in such a brand is due in large part to reputation; consumers favor brands that concentrate on safety and ingredient standards. These dynamics help businesses adapt their products according to the change in consumer expectations, so the preserved food products they provide to consumers should match their expectations about quality, variety, and value. Modern consumers' demand for convenience and ease of use explains the rising popularity of preserved food products. These products come in different forms, such as canned, frozen, and dehydrated items. They offer longer shelf life, easy storage, and quick preparation, making them convenient for busy households, working professionals, and students. Though convenience is a prime driver, other factors like taste, nutritional value, packaging, and brand perception also play a vital role in influencing consumer preferences. Health-conscious consumers will prefer preserved foods with the minimum number of additives and organic ingredients or those that retain the highest nutritional level. Moreover, attractive, functional, and sustainable packaging helps to keep the quality of a product when stored and greatly impacts purchase decisions.

II. LITERATURE REVIEW

As people care about their health and increasingly want food products processed in a non-thermal manner because it retains the majority of the natural antioxidants and nutrients in the preserved product, this makes them lean toward food preservation using more sophisticated techniques like high-pressure and microwaves that do not only help preserve foodstuffs for longer but also retain most of the nutrients and the fresh feel and look of fruits and vegetables. Now, the main contributors to consumer preferences are taste and texture, and positive health perceptions from the fortification can enhance purchase willingness, thereby underpinning the importance of open labelling and clear messages about the nutritional benefits of fortified preserved foods. Region-wise preferences for canned and frozen items are higher among urban-based consumers than among rural customers in terms of variations in local taste preferences. In terms of safety, consumers prefer the traditional methods of heat treatment but have some reservations about irradiation and microwaves. In this respect, the acceptability of preserved food products is highly dependent on safety and familiarity with the preservation method. Consumers also tend to prefer meat from butchers rather than supermarkets due to perceptions of freshness and quality. However, there is still a concern regarding hygiene, and trust is therefore paramount in food products. The green self-identity and influence of social norms among environmentally conscious consumers with a higher awareness of sustainable living practices make them more likely to have a



positive attitude toward preserved organic foods. They associate mechanical methods of weed control, like hoeing machines, as more sustainable measures than the use of herbicides. This implies that awareness of sustainability can improve acceptance of preserved products. Furthermore, consumers are more inclined to accept minimally processed high-moisture fruit products (HMFP) produced through innovative technologies, as these methods provide extended shelf life without relying on continuous refrigeration, catering to their preference for high-quality preserved foods. Lastly, clean-label products that are seen as less processed and free from undesired ingredients are associated with benefits such as healthiness, social responsibility, and sensory appeal, further shaping consumer preferences in the market for preserved food products.

III. OBJECTIVES OF THE STUDY

1. To Study Consumers’ Awareness towards Preserved Food Products.
2. Analyzing Factors Influencing Consumers’ Perception towards Preserved Food Products.
3. To find the reasons to prefer the preserved food products by the customers.

IV. RESEARCH METHODOLOGY

This study has a descriptive approach. This study aims to know about the perception of respondents about preserved food products. Sample Size equals to 150. Primary and secondary data are the types of data used. The primary data could be obtained by a structured questionnaire.

V. ANALYSIS AND DISCUSSIONS

A) Consumers Awareness towards Preserved Food Products

Table 1: Showing Awareness level of Consumers

Awareness Level	Frequency
Very Clear Understanding	55
Clear Understanding	55
Some Understanding	33
Never Understanding	7
Total	150

B) Variables Analysis Using Regression

Multiple regressions are a statistical technique that can be used to analyze the relationship between a single dependent variable and several independent variables. Multiple regression test is used to show the association of overall preference and other related factors.

a. Relation between the factors influencing consumer perception and Overall Preferences of Preserved food products

Table 2: Relationship Between the factors influence the consumer perception and Overall preferences of Preserved food products

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.545	.383		-1.423	.157
	QUALITY	.126	.110	.083	1.143	.255
	NUTRI	.291	.075	.266	3.865	.000
	PRICE	.211	.110	.144	1.922	.057
	PACKA	.538	.098	.405	5.474	.000

In this analysis, the regression results are

$$Y = -.545 + 0.291X_2 + 0.538X_4$$

Where X1= Quality, X2= Nutrition, X3= Price, X4=Packaging and Y= Overall preferences of preserved food products.

From the above table, it is inferred that the significant relationship between overall preferences and Quality has a significant value of (p=0.255), which is > 0.05, so the null hypothesis is accepted. Therefore, it does not have a relationship with overall preferences.

From the above table, it is inferred that the significant relationship between overall preferences and Nutritional value has a significant value of (p=0.000), which is < 0.05, so the null hypothesis is rejected. There is a relationship between the overall preferences.

From the above table, it is inferred that the significant relationship between overall preferences and Price has a significant value of ($p=0.057$), which is > 0.05 , so the null hypothesis is accepted. Therefore, it does not have a relationship with overall preferences.

From the above table, it is inferred that the significant relationship between overall preferences and packaging has a significant value of ($p=0.000$), which is < 0.05 , so the null hypothesis is rejected. It is positively having a relationship with overall preferences.

C) Variable Analysis Using Correlation

a. Correlation between Convenient about preserved food products and overall preferences for preserved food products:

Table 3: Correlation between Convenient about preserved food products and overall preferences for preserved food products

		Convenient	Overall Preferences
Convenient	Pearson Correlation	1	-.103
	Sig. (2-tailed)		.209
	N	150	150
Overall Preferences	Pearson Correlation	-.103	1
	Sig. (2-tailed)	.209	
	N	150	150

The Pearson correlation analysis between convenience and overall preferences shows a weak negative correlation of -0.103 , indicating little to no meaningful relationship between these variables. The p -value of 0.209 suggests that this result is not statistically significant, meaning the weak correlation could have occurred by chance. Therefore, we cannot conclude that convenience significantly influences overall preferences based on this analysis.

b. Correlation between Long shelter and overall preferences for preserved food products:

Table 4: Correlation between Long shelter and overall preferences for preserved food products

		Over Preferences	Long shelter
Over Preferences	Pearson Correlation	1	-.156
	Sig. (2-tailed)		.057
	N	150	150
Long shelter	Pearson Correlation	-.156	1
	Sig. (2-tailed)	.057	
	N	150	150

The Pearson correlation analysis between overall preference for preserved food products and longer shelf life shows a correlation coefficient of -0.156 , indicating a weak negative relationship between the two variables. The p -value is 0.057 , which is slightly above the typical significance threshold of 0.05 . Therefore, we cannot conclude that Long Shelter significantly influences Overall Preferences based on this analysis.

VI. FINDINGS

- **To Study Consumers’ Awareness towards Preserved Food Products:** Most Consumers have a very clear awareness about preserved food products.
- **Analyzing Factors Influencing Consumers’ Perception towards Preserved Food Products:** Among four factors, Quality, Nutritional value, Price and Packaging, the most influencing factors are nutritional value and packaging towards preserved food products.
- **To find the reasons to prefer preserved food products by the customers:** Convenience and Longer Shelf Life are not significant reasons why customers prefer preserved food products. This suggests that other factors may be more influential in shaping customer preferences, and further research could focus on identifying those factors.

VII. SUGGESTIONS

To enhance the understanding of consumer preferences for preserved food products, it is essential to explore specific areas of consumer awareness. More extensive research may determine what the knowledge gaps or misconceptions are about the products. The study on how Nutritional Value and Packaging can be perceived to be improved may be useful for businesses to customize their products according to the consumer’s expectations. Research into other factors that may affect preferences, such as taste, brand loyalty, or marketing strategies, will help understand consumer motivations more profoundly. Other factors

to be considered by future studies include health trends with respect to preserved foods and demographic differences influencing the behavior of buying. Preserved food products can also be boosted through nutritional promotion and appealing packaging. More attention should be paid to the nutritional aspects and appealing designs of the preserved food package.

VIII. CONCLUSION

In conclusion, this consumer perception study of preserved food products finds that, although most consumers are thoroughly aware of these products, the determinants of their preferences are complex. Here, it was found that Nutritional Value and Packaging were the prime factors that determined the consumers' choice, whereas Convenience and Longer Shelf Life seem to have little effect. This would thus mean that health and aesthetics are growing as bases for selecting preserved foods, trending toward wellness and thoughtful consumption. Such understanding helps businesses market preserved food products well. Companies should concentrate on improving the nutritional benefits and appealing packaging that is compatible with the health-conscious consumer. Additionally, labeling, which is simple and informative, helps build trust in the minds of consumers, making decisions much easier. Further, this study indicates the scope for further research into other determinants of consumer perception that culture, taste, and price sensitivity may influence. More insights into the motivations and concerns of the target audience can be gathered through qualitative research, including focus groups and interviews. Aligning marketing strategies and product development with consumer perceptions will ultimately enable businesses to meet their customers' needs better and strengthen their competitive advantage in the preserved food market. This research is foundational in understanding the complexities of consumer perception, opening doors for future studies aimed at uncovering additional insights into this evolving market.

IX. REFERENCES

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