

Consumers Preference Towards Pack Size in Spices and the Masala Products

Dr. P. Pathamuthu¹, Mr. S. Sanjay Balan²

¹Dr. P. Pathamuthu, Assistant Professor, Mepco School of Management Studies, Sivakasi

²Mr. S. Sanjay Balan, Mepco School of Management Studies, Sivakasi

Abstract - This study examines consumer preferences for the packaging and pack sizes of spices and masala powders, focusing on whole, blended, and ready-made spice powders. Factors such as freshness, shelf life, and brand influence purchasing decisions, while price sensitivity restricts consumer willingness to pay premiums for innovative or sustainable packaging. The preference for smaller pack sizes, including trial-size options, reflects a demographic trend towards younger age groups and lower-income families. The study underscores the importance of balancing quality, practicality, and affordability in packaging strategies to align with evolving consumer needs and market dynamics.

Keywords: Consumer preferences, Pack Size, Spices, Ready-made Spice Powders, Packaging.

1. INTRODUCTION

The fast-paced lifestyle of modern consumers has significantly influenced their purchasing habits and preferences, especially in the food sector, where the demand for convenience has reshaped market dynamics. Traditional bulk packs, once popular for their cost-effectiveness, are witnessing a decline in sales as consumers prefer ready-to-use and single-use sachets driven by the rise of nuclear families, working professionals, and changing cooking practices. This shift has created opportunities and challenges for businesses, with convenience-focused packaging, such as pre-measured sachets and resealable designs, becoming essential to meet consumer expectations. However, gaps in packaging innovation persist due to inadequate market research, high development costs, technological barriers, complex regulations, and limited collaboration between designers and manufacturers. Additionally, the growing focus on health and wellness, sustainability, and digital shopping has further reshaped consumer behavior, driving demand for organic, additive-free, and ethically sourced staple products. This study explores the impact of convenience on staple product formats, the decline in traditional bulk packaging, and the root causes behind

the lack of ready-to-use or single-use staple sachets, aiming to provide insights for businesses to align with evolving consumer needs and remain competitive in a dynamic market.

2. BODY OF PAPER

Review of Literature

Ramadani et al., 2024 – This study examines the impact of product quality and innovation on consumer decisions using PT: Carsurindo Siperkasa Medan as a case study. Product quality, defined by durability, reliability, and compliance with ISPM No. 15 standards, significantly influences purchasing behavior by ensuring product protection and meeting customer expectations. Product innovation, through process and market adaptations, builds consumer trust and satisfaction. Empirical results show that product quality and innovation explain 61.9% of the variance in consumer decision-making, highlighting their combined importance for maintaining competitiveness and customer loyalty.

Abatan et al., 2024 – This study explores sustainable packaging innovations and their impact on HSE (Health, Safety, and Environment) practices in the FMCG industry. Innovations like recyclable materials, biodegradable options, and lightweight designs reduce waste, carbon emissions, and operational costs while improving safety. Regulatory focus on sustainable practices and growing consumer demand drives these changes, although technical and financial barriers hinder widespread adoption. The study emphasizes the need for ongoing investment in research and collaboration among stakeholders to promote sustainable packaging solutions.

D'Almeida & Albuquerque, 2024 – This review discusses innovations in food packaging, focusing on bio-based materials (e.g., starch, cellulose) and smart packaging systems. Bio-based materials offer biodegradability and reduced environmental impact but face high production costs and scalability challenges. Smart packaging technologies (e.g., sensors for real-time food monitoring) enhance food safety and reduce waste. Regulatory and technological barriers limit broader

adoption, but future opportunities exist in developing cost-effective and scalable packaging solutions aligned with global sustainability goals.

Objective of the Study

- To identify consumers' preferred pack sizes for whole spices, blended spices, and ready-made spice powders.
- To determine the relative importance of price, convenience, freshness, sustainability, and brand influencing consumer pack size choices
- To assess consumer willingness to pay for improved masala packaging and larger/smaller sizes.

Methodology

This study will employ a descriptive research design and quantitative methods to understand consumer preferences toward pack sizes of whole spices, blended spices, and ready-made spice powders. Primary data will be collected through structured questionnaires via physical surveys using convenience sampling. The questionnaire will include demographic questions and 5-point Likert scale questions covering convenience, freshness, price sensitivity, sustainability, and brand influence. Secondary data will be obtained from research papers, industry reports, and market analysis. Data analysis will involve descriptive statistics to summarize responses, factor analysis to identify key influencing factors, and correlation analysis to assess the relationship between product attributes and consumer choices.

Table 1. Demographic Details of the Respondents

Variables	Categories	Frequency
Location	Rural	127
	Urban	157
	Semi-Urban	168
Gender	Male	228
	Female	224
Age	18-24	269
	25-34	62
	35-44	67
	45-54	36
	More than 55	18
Income	Below ₹25,000	238
	₹25,000-₹49,999	157
	₹50,000-₹74,999	43
	₹75,000-₹99,999	8
	₹1,00,000 and above	6
Educational Qualification	Schooling	87
	Diploma	31
	Under Graduate	312
	Post Graduate	19
	Doctorate	3
Nature of Living	Nuclear Family	400
	Joint Family	50
	Old Age People	2

Table 2. Method of Buying

Lifestyle Variances	Frequency
Buy Whole Spices	66 (15%)
Buy ready-made Powders	204 (45%)
Equally, buy ready-made products and Whole Spices	182 (40%)

Mostly Consumers are willing to by ready-made masala powder in this modern era.

Table 3. Influencing Factors

Influencing Factors	Frequency
Price	51
Convenience	140
Brand	229
Shelf Life	32

While coming to ready made masala powders consumer may thing about the Brand value which the product having on it.

Table 4. SKUs of Masala and Whole Spices

Product Variety	<50g	50g	100g	500g
Sambar Masala	124	79	141	14
Turmeric Powder	38	213	138	13
Chilli Powder	29	75	217	36
Garam Masala	125	149	96	16
Raw Chilli	78	64	87	90
Pepper Seeds	64	157	147	19
Cumin Seeds	55	183	136	27
Mustard Seeds	59	169	134	21
Raw Turmeric	76	100	118	46

Majority of consumers prefers 100 Gram pack size for Sambar Masala, Chilli Powder and Raw Turmeric, some number of peoples prefers 50 Gram pack size for Turmeric Powder, Garam Masala, Pepper Seeds, Cumin Seeds and Mustard Seeds and majority of the respondents prefers 500 Gram pack size for Raw Chilli.

Table 5. Correlation of Influencing Factors

Influencing Factors	Value
Packaging & Convenience	0.957468759
Price & Value	0.993913505
Specific Pack Sizes & Usage	0.99211958
Freshness and Shelf Life	0.919854958
Environmental Concerns	0.92864673

Highly correlated: Indicating that consumers place very high importance on price and perceived value when making purchasing decisions. Products that are seen as offering good value for the price are likely to be more appealing.

Strongly correlated: It suggests that consumers are highly influenced by the size and usability of the packaging. This could imply consumers prefer packaging that fits their needs, whether for convenience, portion control, or storage.

Highly correlated: Indicating that the convenience of packaging plays a significant role in consumer choices. Easy-to-use and convenient packaging can enhance the appeal of a product.

Strongly correlated as well, suggesting that consumers are increasingly considering the environmental impact of their purchases. Products that are eco-friendly or have sustainable packaging may attract more consumers.

Lowest correlation among the listed factors, it still shows a strong correlation. This indicates that the freshness of a product and its shelf life are important considerations for consumers.

Findings

Demographic Profile of the Respondents

- The majority of respondents are from semi-urban (168); the majority of respondents are male (228) and most of the respondents are undergraduate (312).

- The Highest age group among respondents is 18-24 years (269); most of the respondents earn Below ₹25,000 (238) and most of the respondents belong to Nuclear Family (400).

Objective 01: To identify consumers' preferred pack sizes for whole spices, blended spices, and ready-made spice powders.

- Majority of the Consumers are preferring 100-gram pack size for ready-made spices powders like Veg Mix Masala powders and Non-Veg Mix Masala.
- 164 (37%) Consumers prefer a 100-gram pack size for whole spices like Turmeric, Chilli, Mustard, Cumin, Fennel, etc.
- 235 (52%) Consumers prefer a 100-gram pack size for blended spices like sambar Masala, Pulli Kulambu Masala, Biriyanis Mix Masala, etc.

Objective 02: To determine the relative importance of price, convenience, freshness, sustainability, and brand influencing consumer pack size choices.

- The freshness of a product and its shelf life are important considerations for consumers' preferences regarding masala powders and whole spices.
- Price is an important factor for purchasing whole spices and ready to cook masala and blended spices consumer are not ready to pay premium for packaging.
- Convenience is very important for consumers to prefer packaging that fits their needs, portion control, or storage.
- Mostly of consumers are not that much interested in these sustainable packages which are made by the masala industries.
- Brand is the most influencing factor for purchasing of masala powder like blended

spices, veg mix masala, non-veg mix masala and soon.

- As a part of environment concerns consumers may prefer their pack size based on their nature of living and their income which are earned.

Objective 03: To assess consumer willingness to pay for improved masala packaging and larger/smaller sizes.

- Price is the influencing factor while considering the importance of pack size for the masala powders.
- Consumers are ready to pay slightly higher price for best quality masala products which are available in current market condition.
- At the same time, they are not ready to pay premium for innovative packages which are offered by the companies.
- Small pack size is mostly preferable in this marketing conditions because their nature of living is mostly nuclear family.

3. Conclusion

The study reveals that 100-gram pack sizes are the most popular choice among consumers for whole spices, blended spices, and ready-made spice powders, driven by their need for portion control and convenience. Smaller packs help maintain the freshness of spices, reducing wastage and preserving aroma and flavor. This preference is particularly aligned with the growing prevalence of nuclear families and households in lower income brackets, where smaller quantities are both practical and economical. Key factors influencing consumer decisions include freshness, price sensitivity, and brand trust. While consumers are willing to pay slightly higher prices for high-quality masalas, they are less inclined to spend extra for innovative or

premium packaging, indicating a focus on functionality over aesthetics. Notably, sustainability considerations such as eco-friendly packaging are currently less prioritized by consumers, reflecting a stronger emphasis on practical value, affordability, and everyday usability over environmental concerns.

References

1. Abatan, A., Lottu, O. A., Ugwuanyi, E. D., Jacks, B. S., Sodiya, E. O., Daraojimba, A. I., & Obaigbena, A. (2024). "Sustainable packaging innovations and their impact on HSE practices in the FMCG". *Magna Scientia Advanced Research and Reviews*, 10(01), 379–391.
2. Ailyn, D. (July 2024). "Open innovation ecosystems and collaborative green". *International Journal of Health Sciences*, 7-14.
3. Aymen Frija. (2024). "A system readiness approach to support the packaging and scaling of innovation bundles for farming systems transformation". *Agricultural Systems*, 104148.B.
4. Chetti, M., G. T. Deepa, T. Antony, R., C. Khetagoudar, M., S. Uppar, D., & M. Navalgatti, C. (2012). "Influence of vacuum packaging and long-term storage on quality of the whole chili". *J Food Sci Technol*, DOI 10.1007/s13197-012-0763-3.
5. Barutcu, S., & Gokkaya, H. (2023). "Innovation in Packaging Design and the Relationship between Consumer Attitude towards Upcycled Packaging Products and Purchase Intention". *Journal of Research in Entrepreneurship*, 7(14): 126-143.
6. D'Almeida, A. P., & Albuquerque, T. L. (2024). "Innovations in Food Packaging: From Bio-Based Materials to". *Processes MDPI*, 12, 208 1-26.
7. Dr. R. Krishnakumar, M. R. (2017). "A study on consumer satisfaction of aachi masala products in Cuddalore district". *International Journal of Research in Social Sciences*, Vol. 7 Issue 8, August 2017, 467-483.
8. Drago, E., Campardelli, R., Pettinato, M., & Perego, P. (2020). Innovations in Smart Packaging Concepts for Food: An Extensive Review. *Foods* 2020, 1-42.
9. G. T. Deepa, B. Chetti, M., C. Khetagoudar, M., & M. Adavirao, G. (2011). "Influence of vacuum packaging on seed quality and mineral contents in chili". *J Food Sci Technol*, DOI 10.1007/s13197-011-0241-3.
10. Hassan, B. (2024). "Green product innovation and its impact on customer loyalty and retention". *International Journal of Research in Social Sciences*, 24-29.
11. Hu, S. (2024). "Exploration of Agricultural Product Packaging Design Innovation in the Context of Deep Learning". *Applied Mathematics and Nonlinear Sciences*, 1-9.
12. Hussein Hamad, O. A., & Al-Ghabban, B. Q. (2022). "Packaging in industrial

- products”. *International Journal*, 6(S1), 7676–7692.
13. Lal, G., S. L., N. C., S. S., M. C., & N. S. (2022). “Development of garam masala powder using organic seed spices and its storability under different packaging materials”. *Journal of agriculture and ecology*, 77-83.
14. Masamba, M. (2024). “Impact of Food Packaging Materials on the Shelf-Life and Quality of Packaged Food Products”. *International Journal of Food Sciences*, Vol. 5, Issue No. 2, pp 15 - 28.
15. Ploska, R., Malinowska, E., Bralkowska, M. S., & Chmielewski, M. (November 2024). “The Importance of Sustainable Packaging Features of Food Products in the Process of Consumers’ Purchasing Decisions”. *Scientific Papers of Silesian University of Technology Organization and Management Series*, 493-513.
16. Ramadani, A. F., Nasution, U. H., Rahim, R., Rangkuti, S., & Nasution, S. (2024). “The Effect of Product Quality and Product Innovation on Consumer Decisions Using Wood Packaging Material Services. Ekonomis” *Journal of Economics and Business*, 94-100.
17. Riyadi, S., Ady, r. U., E. H., Soesilo, R., Dwi Hartanti, R., & Lisfitriani , A. (2024). “Exploration of the plastic packaging product industry towards green manufacturing, efforts to consolidate environmental impact versus productivity issues”. *Journal of Infrastructure, Policy and Development*, 8(14), 9858 1-9.
18. Tu Ling, & Mustaffa Halabi, K. N. (2024). “Exploring the Impact of Packaging Design on Consumer Purchase Behavior for Northeastern Cereal Agricultural Products”. *International Journal of Global Optimization and Its Application*, 30-36.
19. Tyle, P., & Tiwari, P. (2019). “Packaging and Its Significance in Marketing: An Analysis”. *Journal of Advances and Scholarly Researches in Allied Education*, 2305-2308.