

EXTRINSIC ATTRIBUTES AND BRAND POSITIONING IN CONSUMER PREFERENCE FOR INSTANT SOUP MIXES IN URBAN INDIA

Samyukhtha J¹, K. Mahendran¹, S.Moghana Lavanya¹, P. Meenakshisundaram², G. Vanitha³

¹Department of Agricultural and Rural Management, Tamil Nadu Agricultural University, Coimbatore 641003, Tamil Nadu, India

²Department of Biotechnology, Agriculture College & Research Institute, Tamil Nadu Agricultural University, Madurai - 625104, Tamil Nadu, India

³Department of Physical science and Information Technology, Tamil Nadu Agricultural University, Coimbatore 641003, Tamil Nadu, India

ABSTRACT

The ready-to-prepare (RTP) instant soup mix is one of the fast-growing categories in the Indian convenience food market, but there is very little empirical research about the perception and preference of consumers towards the RTP instant soup mix segment. The present study aims to investigate the awareness level, consumption pattern, brand preference, perceptual positioning and factors affecting brand preference of urban consumers in Coimbatore, Tamil Nadu, on RTP instant soup mixes. A structured interview schedule was used for collecting primary data with the number of respondents as 120, through purposive sampling. Data analysis techniques used include percentage analysis, perceptual mapping, the Friedman rank test and principal component analysis (PCA). The results indicated a high level of consumer awareness (93%) on instant soup mixes, and Knorr was the most preferred brand (56.9%). The most preferred flavors were corn and mixed vegetables; consumption was mostly occasional and was related to the time of the day and cold or rainy weather. Taste was the top purchase motivator, while convenience and product availability were the next. The perceptual mapping showed the clear differentiation of the brands, Keera Kadai as a premium health-oriented brand and Knorr as a mainstream taste-oriented brand. The Friedman test indicated that there were significant differences among the brands ($p < 0.001$). The three factors that emerged from the factor analysis were: Extrinsic Product Attributes, Sensory Appeal and Therapeutic Usage and accounted for 69.06% of the total variance. This study offers insight to the manufacturers and the marketers, which can help them make their products better positioned and market the instant soup mixes in India.

KEYWORDS: Instant soup mix, Consumer preference, Consumer behaviour, Convenience food, Perceptual mapping, Principal component analysis

1. INTRODUCTION

Over the last three decades, the global food system has experienced a significant structural change, thanks to the exponential growth of urbanisation, the drop in the number of nuclear families, increased labor force participation among women, and decreased per-capita cooking time. The Food and Agriculture Organization and the World Health Organization (WHO) regularly report that the modern timescale has increased reliance on convenience foods, which are processed industrially (Food and Agriculture Organization, 2019), (World Health Organization, 2020). Among the more specific trends, ready-to-prepare (RTP) instant soup mixes are commercially processed, dehydrated products that are ready to be rehydrated with hot water and consumed. These products offer sensory comfort, extended shelf life, affordable prices and convenience (Sugumar and Guha, 2020).

The global instant soup market size was estimated at USD 7.79 billion in 2024 and is expected to grow to USD 13.51 billion by 2035 with a compound annual growth rate (CAGR) of 5.1% (MetatechInsights, 2024). Urbanisation, the growing demand for convenient food formats, product innovation from multinational and regional food giants, and the development of cold-chain and retail infrastructure are all key growth factors. Shelf stable soups represent the largest product type in the market (44.76%) globally, followed by vegetarian soups (53.59%) and pouches (48.51%) is the most common packaging format. The distribution of the product is mainly organised with supermarkets and hypermarkets accounting for 52.58% of the value, and online channels being the fastest growing distribution channel (CAGR 2.89%). In India, the instant soup market is estimated to be worth USD 250 million in 2024 and is expected to reach USD 403 million in 2035 at a CAGR of 4.36% (MetatechInsights, 2024). The growth is attributed to increasing disposable income, the growth of organised retail and quick-commerce, regional flavours, health-related flavours and the robust seasonal demand with the tie-in to cold weather and recovery from illness.

Though the instant soup market is gaining ground, there is not much empirical evidence in a systematic way on consumer perception, purchase behaviour and preference of instant soups, especially from the Indian urban consumer perspective. Most Indian consumer food studies have studied packaged snacks, instant noodles or ready-to-eat foods as a single category, but have not broken-down instant soup mixes as a separate category. High awareness level of consumers about instant food products, as quality, advertising, and convenience were the major considerations for buying the products in Kanchipuram, Tamil Nadu (Srinivasan and Nirmala, 2013). Taste and convenience were also found to be the most important factors in the preference for instant foods (Samundeeswari and Janani, 2025). Flavour and taste are the most important factors in determining the acceptability of soup mix products (Jackson and Viehoff, 2016), and Consumers who

had not been familiar with dried soup powders were very willing to use them for their taste, convenience, and nutritional value at the product level (Kyere et al., 2025).

Despite these contributions, there has been no published study that used perceptual mapping along with the Friedman rank test and principal component analysis to systematically evaluate the brand-level consumer preference within the instant soup market in India.

2.Objectives

The present research was therefore undertaken to:

- (i) Explore the consumer perception of the healthiness, taste, convenience and cost of instant soups among urban consumers of Coimbatore.
- (ii) Profile the consumption behaviour and purchase pattern of customers on instant soups.
- (iii) Compare the preference of the consumers of various leading instant soup brands by using Friedman rank test.
- (iv) Identify the latent factors influencing the consumer preference using principal component analysis.

3.MATERIALS AND METHODS

3.1 Study area and sampling

The study was carried out in Coimbatore city, a tier-1 urban city of South India, and one of the fastest-growing cities as per the Planning Commission. The city has a population of about 2.15 million, with a good number of salaried professionals, students, and service sector people. Coimbatore is an aspirational middle-income urban consumer segment that has been exposed to packaged and convenience food products and, therefore, is suitable for the study of instant soup mix consumption patterns.

Purposive sampling technique was used, and a sample size of 120 respondents who are the regular buyers or consumers of the commercially packaged food products was selected. This method was selected because the study called for participants to have some knowledge of the instant soup mix category and to be able to make meaningful comparisons between brands. The data were gathered in the month of April 2025 in the city using structured interview schedules in person at retail outlets, academic institutions, corporate offices and residential localities.

3.2 Survey instrument

There were four sections in the structured interview schedule. Socio-economic information such as age, sex, education, occupation, family type, household size, food preference and monthly income of the household was collected in section I. In Section II, consumption behaviour was examined, including brand preference, variant type preference, place of purchase, frequency of purchase, use-case scenarios and distribution of households' consumption. Seven factors (taste, convenience, availability, price, brand name, nutritional content and packaging) were used to elicit purchase influence factors by employing a seven-point Likert scale (1 = least important; 7 = most important). Brand-level preference ratings of the corn and mixed vegetable variants of three brands (Knorr, Keya, and Ching's Secret) were collected for the attributes of taste and colour on a three-point ordinal scale (1 = most preferred; 3 = least preferred), in Section IV.

3.3 Statistical analysis

IBM SPSS Statistics (Version 26.0) was used for the analysis of all data. Socio-economic profile and consumption behaviour of the respondents were described using frequency distribution and percentage analysis. The perceptual map was created based on the mean Likert scores of the two pairs of dimensions: (i) taste versus healthiness and (ii) price affordability versus packaging quality. Friedman test, a non-parametric rank-based test for comparing three or more related groups on ordinal data, was used to see if there was a statistically significant difference in the consumers' preference between the different brands for the two most preferred flavors (corn and mixed vegetable) for the attributes (taste and colour). The lower the mean rank scores, the higher the preference of the consumer. A total of 17 attitudinal variables were subjected to principal component analysis (PCA) with varimax rotation. To check the suitability of the dataset, the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity were used before the extraction. Eigenvalues greater than 1.0 were kept for interpretation.

4.RESULTS AND DISCUSSION

4.1 Socio-economic profile of respondents

Table 1 gives the socio-economic characteristics of the 120 respondents. The respondents largely represented young adults with higher educational qualifications and stable income levels, indicating that instant soup mixes are more commonly adopted by urban consumers leading busy lifestyles. The higher participation of individuals aged 25–44 years and salaried employees reflects the increasing preference for foods that require minimal preparation while fitting into demanding work schedules. The predominance of nuclear families further supports this trend, as smaller households often rely on convenient packaged foods for quick meal preparation.

Although female respondents constituted a slightly larger share of the sample, the difference was marginal, suggesting that purchasing decisions for packaged foods are increasingly shared across genders. Most respondents belonged to the middle-income category, implying that consumers seek products offering acceptable quality at a reasonable price. Despite the majority identifying as non-vegetarians, later findings revealed a stronger preference for vegetarian soup variants, indicating that product choice is influenced more by consumption occasion and perceived lightness than by habitual dietary preference.

Table 1. Socio-economic characteristics of respondents (n = 120)

Parameter	Category	Frequency	Percentage (%)
Age	18–24	22	18.3
	25–34	54	45.0
	35–44	36	30.0
	45–54	8	6.7
Gender	Male	55	45.8
	Female	65	54.2
Education	Secondary education	1	0.8
	Graduate	79	65.8
	Postgraduate and above	40	33.3
Occupation	Student	32	26.7
	Homemaker	15	12.5
	Salaried	61	50.8
	Business	12	10.0
Family type	Nuclear	106	88.3
	Joint	14	11.7
Monthly income (₹)	20,000–40,000	23	19.2
	40,001–60,000	51	42.5
	60,001–80,000	26	21.7
	Above 80,000	20	16.7
Food preference	Non-vegetarian	102	85.0
	Vegetarian	13	10.8
	Eggetarian	5	4.2

4.2 Consumption behaviour and purchase patterns

The consumption pattern highlights that brand familiarity, convenience, and product accessibility play a significant role in shaping consumer preferences for instant soup mixes. The clear dominance of Knorr over competing brands reflects its strong market presence, wider retail distribution, and established consumer trust developed through consistent product quality and brand visibility. In contrast, the lower preference for regional and niche brands suggests that limited awareness and availability may restrict their market penetration despite offering differentiated products.

Consumer preference was concentrated on traditional flavours such as corn and mixed vegetable, indicating a greater acceptance of familiar taste profiles over relatively novel variants. Likewise, the higher preference for vegetarian soups, despite most respondents identifying as non-vegetarians, suggests that soup is often perceived as a light, comforting food consumed during specific occasions rather than as a substitute for regular meals. The overwhelming preference for supermarkets as the primary purchase channel further demonstrates the importance of organised retail in influencing product visibility and purchase decisions through wider product assortments and promotional activities.

The predominance of occasional purchases indicates that instant soup is largely consumed as a situational convenience food, particularly during snack time, cold weather, or illness recovery. This pattern highlights its complementary role in household diets rather than being a staple food product. The greater consumption among young adults also reflects changing lifestyles, increasing demand for convenience foods, and growing acceptance of packaged food products among younger consumers.

Table 2. Consumption behaviour and brand preference (n = 120)

Parameter	Category	Frequency	Percentage (%)
Brand preferred	Knorr	69	56.9
	Ching's Secret	16	13.1
	Keya	11	9.2
	Keera Kadai	9	7.2

Parameter	Category	Frequency	Percentage (%)
	Kwality Foods	9	7.2
	MTR	5	3.9
	Other	3	2.6
Type preferred	Vegetarian	82	68.3
	Both	25	20.8
	Non-vegetarian	13	10.8
Place of purchase	Supermarket	98	81.7
	Online	15	12.5
	Kirana store	5	4.2
	Q-commerce	2	1.7
Purchase frequency	Occasionally	62	51.7
	Rarely	47	39.2
	Weekly	11	9.2

4.3 Purchase influence factors

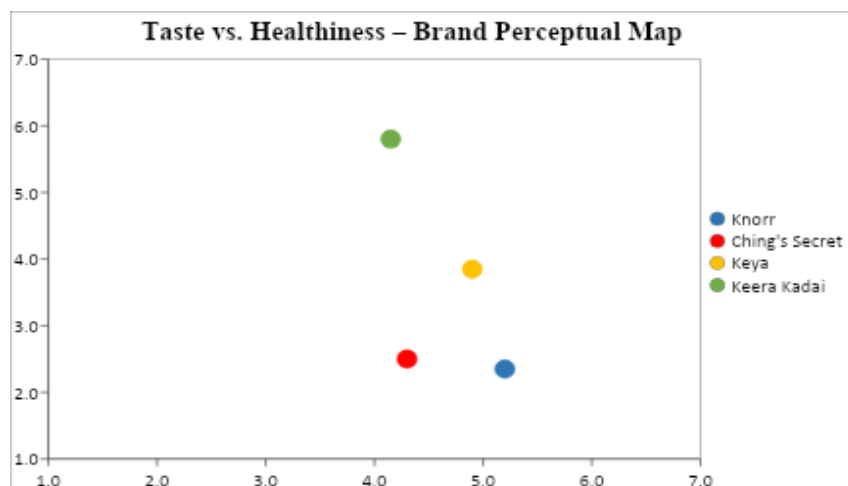
Taste emerged as the most influential factor affecting consumers' purchase decisions, followed by convenience and product availability, indicating that sensory satisfaction and ease of use remain the primary drivers of instant soup consumption. These findings are consistent with those of (Sugumar and Guha, 2020). (Samundeeswari and Janani, 2025), who reported taste as the key determinant of consumer preference for instant soup products. The importance of convenience reflects changing lifestyles, where consumers increasingly seek products that require minimal preparation without compromising eating experience. Although price and brand reputation also influenced purchasing decisions, they were secondary to product performance. Interestingly, nutritional content received comparatively fewer responses, suggesting that consumers continue to associate instant soups more with comfort and convenience than with health benefits. This finding highlights an opportunity for manufacturers to strengthen consumer awareness of nutritional value through effective product communication and health-oriented marketing strategies.

4.4 Perceptual mapping of brand positioning

The perceptual map demonstrates clear differentiation among brands based on consumers' perceptions of taste, healthiness, packaging quality, and price affordability. Knorr was strongly associated with superior taste and affordability, reinforcing its position as a mainstream brand with broad consumer acceptance. In contrast, Keera Kadai was perceived as the healthiest brand and received the highest rating for packaging quality, although consumers also viewed it as less affordable. This indicates that consumers often associate premium packaging and health-focused products with higher prices. Keya occupied a balanced middle position across most attributes, while Ching's Secret was perceived primarily as a taste-oriented brand. These findings illustrate the trade-off consumers make between taste, health, and price, emphasizing that successful brand positioning depends on creating a distinctive value proposition rather than competing on a single product attribute.

Table 3. Mean perceptual map scores for instant soup mix brands on four positioning dimensions (7-point Likert scale; n = 120)

Brand	Taste	Healthiness	Price Affordability	Packaging Quality
Knorr	5.20	2.35	6.40	5.05
Ching's Secret	4.30	2.50	6.10	4.75
Keya	4.90	3.85	4.45	5.05
Keera Kadai	4.15	5.80	2.80	6.00



Note: Price Affordability, a higher score indicates more affordable (lower price). Scores are means of seven-point Likert ratings.

Fig. 1. Perceptual map of brand positioning on taste–healthiness dimensions.



Fig. 2. Perceptual map of brand positioning on price affordability–packaging quality dimensions.

4.5 Friedman rank test: consumer preference across brands

The Friedman rank test confirmed significant differences in consumer preference among the evaluated brands for both taste and colour attributes across corn and mixed vegetable soup variants. Knorr consistently achieved the highest preference in most attribute–flavour combinations, reflecting its strong product acceptance and reinforcing its leading market position. Its favourable performance is likely attributable to consistent sensory quality, well-established brand reputation, and familiarity among consumers. Although Keya outperformed the other brands for the taste of the mixed vegetable variant, its lower ranking for colour suggests that improvements in visual appeal could further enhance consumer acceptance. In contrast, Ching's Secret received comparatively lower preference scores across most attributes, indicating that its current sensory profile may not fully align with consumer expectations for instant soups. These findings highlight the importance of optimizing both taste and appearance, as sensory attributes strongly influence consumer satisfaction and repeat purchase intentions.

Table 4. Friedman rank test results for consumer preference across brands, corn and mixed vegetable flavours (n = 120)

Flavour	Attribute	χ^2	df	p-value	Knorr Mean rank	Keya Mean rank	Ching's Mean rank	Winner
Corn	Taste	13.33	2	0.001**	1.33	2.00	2.67	Knorr
Corn	Colour	12.93	2	0.002**	1.27	2.20	2.53	Knorr
Mixed Veg	Taste	14.25	2	0.001**	2.17	1.27	2.57	Keya

Flavour	Attribute	χ^2	df	p-value	Knorr Mean rank	Keya Mean rank	Ching's Mean rank	Winner
Mixed Veg	Colour	20.93	2	<0.001***	1.93	2.87	2.17	Knorr

** p < 0.01; *** p < 0.001. A lower mean rank indicates stronger consumer preference.

4.6 Factor analysis determinants of consumer preference

The KMO value and significant Bartlett's test confirmed the suitability of the dataset for principal component analysis, while the three extracted factors explained a substantial proportion of the total variance, indicating that consumer preference is influenced by multiple interconnected dimensions. The dominance of extrinsic Product Attributes suggests that consumers rely heavily on external quality cues, such as packaging, price, health claims, nutritional information, and brand trust, during purchase decisions. Sensory Appeal emerged as the second most influential factor, emphasizing that taste and flavour remain essential for product acceptance after the initial purchase decision. The third factor, therapeutic Usage, reflects the traditional perception of soup as a comforting food consumed during illness or cold weather. Together, these findings demonstrate that successful marketing strategies should combine strong branding and informative packaging with desirable sensory characteristics and wellness-oriented positioning to strengthen consumer preference.

Table 5. Total variance explained principal component analysis (n = 120)

Component	Eigenvalue	% Variance	Cumulative %	Factor label
1	7.402	43.543	43.543	Extrinsic Product Attributes
2	2.986	17.567	61.110	Sensory Appeal
3	1.352	7.950	69.061	Therapeutic Usage

Table 6. Rotated factor structure key variables loading on each component

Factor	Label	Key variables loading on a factor
1	Extrinsic Product Attributes	Packaging design; Price; Health claims on label; Nutritional label information; Brand trust
2	Sensory Appeal	Taste; Aroma; Flavour variety; Soup thickness; Salt balance
3	Therapeutic Usage	Use during illness; Use during cold weather; Preference for clean/natural ingredients.

The extracted factors indicate that consumers evaluate instant soup mixes using both functional and experiential attributes. The dominance of Extrinsic Product Attributes suggests that packaging, brand credibility, price, and health-related information strongly influence purchase decisions, supporting earlier findings (Maehle et al., 2015) and Olugbuyi et al. (Olugbuyi et al., 2025). Although Sensory Appeal remained important for product acceptance, Therapeutic Usage highlights that consumers also perceive instant soup as a comforting and wellness-oriented food, creating opportunities for brands to strengthen their health-focused positioning.

5. CONCLUSION

This research delivers insights into the consumers' behaviour about RTP instant soup mixes in urban India. The study's major discovery was the discrepancy between consumer awareness (93%) and purchase frequency – only occasional use, which is a typical pattern for emerging product categories in developing countries (Srinivasan and Nirmala, 2013). Indeed, the frequency analysis revealed that in India, soups were mostly used for snacking and seasonal consumption, while in mature markets like the UK, Korea, and Japan, they were staples (Zhang and Gallardo, 2022). Brand preference mirrored the overall patterns. Despite a strong presence (56.9% preference), Knorr's dominance was due to its availability and extensive marketing, not unique qualities; it scored the best in three out of four Friedman tests. In contrast, Keya's weakness (MR = 1.27) was not fatal, as the vegetarian soup segment ranked first in global sales (53.59%) .

Perhaps, the most unexpected finding was that extrinsic attributes explained the largest (43.54%) portion of preference, overtaking taste/smell (17.57%). This implies that for non-established products like instant soup mixes, the battle is not for the product quality but for the packaging and perceived health benefits. Indeed, the study found that clean-label and therapeutic use were critical to the consumer. Moreover, the factor loadings suggested that illness/cold season was the most significant second value for Indian consumers, which aligns with the use of soups for convalescence (Olugbuyi et al., 2025). This is vital information, as illnesses are the second reason for soup consumption, and the value could be leveraged by Keera Kadai, which had the best healthiness score (5.80).

Furthermore, there was an unanticipated discovery about retail networks. Supermarkets dominated the sales (81.7%), while kiranas and quick-commerce chains only accounted for 4.2% and 1.7%. Meanwhile, the latter two were supposed to be the most significant distribution channels due to the rise of digital retailing (MetatechInsights, 2024). One should note that 58% of respondents were occasional buyers, suggesting that there is room for growth for both quick-commerce

and kiranas by encouraging more frequent purchases. Thus, the overall conclusion is that established producers like Nestle should focus on dominating quick commerce and big retail by providing single-serve packs, while small and regional manufacturers go after the kirana store owners by promoting their soups as convenient and healthy. Notably, because extrinsic attributes were more critical than taste, investments in wrapping and labeling would yield more significant returns than R&D for small manufacturers. Additionally, it might be useful to promote 6th sense packs and seasonal subscriptions to build loyalty among occasional customers.

This research's findings may help manufacturers navigate the complex and competitive instant soup mix market and identify opportunities for growth. In particular, the study's results suggest that producers should consider the discrepancies between established and emerging markets when positioning their products as snacks or staples. While the former were used in daily meals, the latter were associated with illnesses and cold seasons. This implies that to differentiate their offerings, manufacturers should invest in building the product's image as healthy and convenient. It is especially essential for emerging producers to highlight their clean-label status and utilize the perceived value of soup consumption during the cold season and illnesses. Notably, manufacturers could benefit from targeting kiranas and promoting single-serve packs at a higher price point than supermarkets. Overall, with healthy positioning and access to new distribution channels, manufacturers of instant soup mixes could capitalize on the growing market and increase sales.

FUNDING

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict of Interest Statement

The authors declare that there are no conflicts of interest regarding the publication of this manuscript.

Authorship contribution statement

Ms. Samyukththa J: Conceptualisation, methodology, data collection, analysis, interpretation, manuscript preparation.

Dr. K Mahendran: Conceptual development, supervision, project administration, critical revision.

Dr. S. Moghana Lavanya: Methodological guidance, manuscript revision.

Dr. P. Meenakshisundaram: Validation, manuscript review.

Er. G. Vanitha: Statistical analysis, data interpretation, manuscript review.

Data Availability Statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

Ethical considerations

Prior to participation, all of the respondents were informed about the purpose of the study and gave their informed consent verbally. The participation was voluntary, and there was no attempt to record any personal data that might be considered sensitive. Ethical guidelines set by the Department of Agricultural Business Management, Tamil Nadu Agricultural University, were followed in conducting the study.

REFERENCES

1. Food and Agriculture Organization. The state of food and agriculture 2019: moving forward on food loss and waste reduction. Rome: FAO; 2019.
2. Friedman M. The use of ranks to avoid the assumption of normality implicit in the analysis of variance. *J Am Stat Assoc.* 1937;32(200):675–701. <https://doi.org/10.1080/01621459.1937.10503522>
3. Jackson P, Viehoff V. Reframing convenience food. *Appetite.* 2016;98:1–11. <https://doi.org/10.1016/j.appet.2015.11.006>
4. Kaiser HF. An index of factorial simplicity. *Psychometrika.* 1974;39(1):31–6. <https://doi.org/10.1007/BF02291575>
5. Kyere G, De-Souza L, Alemawor F, Yankey S, Amankwah EA. Consumer knowledge, preference, and possible patronage of dried soup powders in Ghana. *Food Sci Nutr.* 2025;13(2):e70004. <https://doi.org/10.1002/fsn3.70004>
6. Maehle N, Iversen N, Hem L, Otnes C. Exploring consumer preferences for hedonic and utilitarian food attributes. *Br Food J.* 2015;117(12):3039–63. <https://doi.org/10.1108/BFJ-04-2015-0148>
7. MetatechInsights. Global and India instant soup market report 2024–2035. New Delhi: MetatechInsights; 2024. Available from: <https://www.metatechinsights.com>
8. Olugbuyi AO, Oyinloye AM, Adaramoye TO, Adepeju AB, Ojo KJ. Analysis of nutritional properties, sensory attributes and perceived consumption frequency of some selected Nigeria indigenous soup. *J Food Sci Technol.* 2025. <https://doi.org/10.1007/s44187-025-00453-z>
9. Samundeeswari S, Janani K. A study on consumer preference towards instant food products. *Int J Manag Bus Stud.* 2025;15(1):45–52. <https://doi.org/10.70333/ijeks-04-01-s-003>
10. Srinivasan K, Nirmala R. A study on consumer behavior towards instant food products (with special references to Kanchipuram Town). *IOSR J Bus Manag.* 2013;14(3):56–62
11. Sugumar JK, Guha P. Comparative study on the hedonic and fuzzy logic based sensory analysis of formulated soup mix. *J Food Sci Technol.* 2020;57(5):1901–10. <https://doi.org/10.1016/j.fufo.2022.100115>
12. World Health Organization. Healthy diet fact sheet. Geneva: WHO; 2020. Available from: <https://www.who.int/news-room/fact-sheets/detail/healthy-diet>
13. Zhang Q, Gallardo RK. Measuring consumers' demand for nutrition attributes: an application to ready-to-heat meals. *Agric Resour Econ Rev.* 2022;51:542–57. <https://doi.org/10.1017/age.2022.14>
- 14.