Consumption Behaviors and Factors Influencing Preferences for Instant Noodles: The Case of Türkiye

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Abstract

This study aims to examine the instant noodle consumption preferences, packaging expectations, and purchasing tendencies of consumers living in Türkiye, where convenience foods are increasingly popular. The research targeted 3,134 individuals aged between 18 and 44 from socio-economic groups including A, B, C1, and C2, reaching a sample of 700 participants who had purchased instant noodles within 2023. Data were collected through structured and detailed surveys, which were deepened with face-to-face interviews, and analyzed using frequency analysis, cross-tabulations, and other quantitative techniques with SPSS. The findings indicate that most participants prefer instant noodles for their convenience and affordability, with cup noodles being popular for ease of use. Vegetable, barbecue, and seafood flavors rank among the top choices, while there is a growing interest in low-sodium and high-nutrient noodle options. These results both enrich the academic literature and provide valuable insights for manufacturers to tailor product development strategies aligned with market demands.

Keywords: Noodles, Consumption Preferences, Flavor Trends, Market Analysis, Consumer Behavior.

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1. Introduction

Noodles have emerged as a practical and widely consumed food product, appealing to a broad range of consumers worldwide. Traditionally a staple in countries like Japan, South Korea, and China, noodles have rapidly gained popularity in global markets due to their variety of flavors and packaging options (Kim & Park, 2019). In Türkiye, interest in noodles has grown significantly in recent years, particularly among younger consumers (Anderson & Anderson, 2020). The increasing preference for convenient and economical food solutions among individuals with fast-paced lifestyles explains this rising interest (Wang & Chen, 2020).

Packaging types play a crucial role in consumer preferences for instant noodles. Park and Yoo's (2021) study highlighted that convenient packaging, such as cup noodles, significantly enhances consumption frequency. In Türkiye, the high preference for cup noodle packaging reflects the impact of convenience on consumption habits. Moreover, economic factors lead to the preference for single-pack noodles, illustrating

the influence of packaging options across different socio-economic groups (Solomon, 2018).

In recent years, the rising trend of healthy living has influenced consumer choices, particularly among young adults who increasingly seek nutritious and functional food products. Growing health awareness has driven demand for low-sodium, nutrient-rich noodle options (Cheng, 2021). In Türkiye, the proliferation of health-conscious attitudes has steered consumers toward healthier products, compelling the food industry to innovate and develop healthier offerings (Yılmaz & Demir, 2021).

Flavor diversity also plays a pivotal role in consumer preferences for noodles. In Türkiye, flavors such as vegetable, barbecue, and seafood resonate with traditional Turkish palates, indicating a preference for familiar taste profiles (Kara & Gürbüz, 2019). Thus, offering diverse flavors that cater to varying taste preferences is a key factor influencing noodle consumption across different consumer groups.

The objective of this study is to provide a comprehensive analysis of the consumption preferences for instant noodles among individuals aged between 18 and 44 in Türkiye, focusing on packaging

and flavor choices as well as interest in healthier products. Additionally, the study examines how these preferences are shaped by demographic factors such as socio-economic status, age, and gender. Based on data gathered from a large-scale survey of 3.134 individuals, a sample group of 700 respondents who had consumed instant noodles in the past year was identified. Data were collected through face-to-face interviews using a structured questionnaire and analyzed using frequency analysis, cross-tabulations, and correlation methods (Hair et al., 2018; Pallant, 2020). This research aims to provide valuable insights into Türkiye's rapidly growing noodle market and the underlying dynamics of consumer preferences, offering significant contributions to the food industry.

2. Methods

This study is a quantitative research based on a survey model aimed at examining the instant noodle consumption preferences, packaging expectations, and purchasing tendencies of consumers in Türkiye across socio-economic groups. To derive meaningful insights into consumer preferences in Türkiye's rapidly growing instant noodle market, data were collected from participants aged 18-44 in the A, B, C1, and C2 socioeconomic groups. The sampling process prioritized reaching these key groups, identified using data from the Turkish Statistical Institute (TÜİK). A total of 3,134 individuals were screened, and a sample of 700 participants who had consumed instant noodles within the past year was selected. The final sampling rate was determined to be 22.3% (Hair et al., 2018). A maximum variation sampling method was employed to ensure an equitable distribution of socio-economic groups (Bryman, 2016).

The scale used in this research was developed based on an extensive literature review of consumer behavior studies. It includes items related to noodle consumption, packaging preferences, flavor preferences, and purchase motivations. The scale items were adapted from examples in previous studies and tailored to reflect the characteristics of Turkish consumers (DeVellis, 2016). Questions were designed in both open- and closed-ended formats to capture diverse aspects of consumer behavior, such as demographic characteristics, consumption purchase frequencies, packaging preferences, and favorite noodle varieties (Chan & Tan, 2019). Content validity was ensured through expert reviews from researchers specializing in consumer behavior and packaging preferences, and the scale was revised accordingly (Pallant, 2020).

The data collection process was conducted through face-to-face interviews. Participants were selected on a voluntary basis, and anonymity was maintained. To evaluate the reliability of the scale, Cronbach's Alpha was calculated and found to be 0.85, indicating a high level of reliability (Tavakol & Dennick, 2011). A small pilot study was conducted to assess the clarity and applicability of the scale items, and necessary adjustments were made based on the feedback received.

Data analysis was performed using SPSS software. Descriptive analyses, including frequency percentage distributions, conducted were summarize demographic variables (Pallant, 2020). Relationships between packaging preferences and variables such as age and gender were examined using cross-tabulations and chi-square tests. Correlational analyses were conducted to explore relationships between variables such as consumption frequency, flavor preference, and packaging choice (Hair et al., 2018). Regression analyses were applied to identify factors influencing purchasing frequency (Park & Yoo, 2021). ANOVA tests were used to determine differences between groups, and non-parametric tests were employed in cases where data did not exhibit normal distribution. The findings reveal significant variations in consumer behavior based on socio-economic status, age, and gender (Bryman, 2016; Solomon, 2018).

3. Results

A total of 3,134 individuals were screened to identify 700 participants who had purchased instant noodles. This corresponds to a consumption penetration rate of 22.3% among the 18 and 44 age group in the A, B, C1, and C2 socio-economic categories. Eight out of ten respondents reported purchasing instant noodles within the past year. In terms of packaging preferences, cup noodles emerged as the most favored type among consumers, with 45% of respondents selecting this option. Single-pack noodles followed at 30%, while the proportion of consumers purchasing both cup and single-pack noodles significantly exceeded the 15% preference rate for 5- or 10-pack noodles (p < 0.05). These findings suggest that individual serving sizes are more popular among consumers. When categorized by gender, male consumers predominantly preferred cup noodles, whereas female consumers tended to favor both cup and single-pack noodles. Detailed packaging preferences by gender are presented in Table 1. Analyzing packaging preferences by socio-economic status revealed differences between groups. Consumers in the AB group were more likely to choose cup and

single-pack noodles, while those in the C1, C2 group showed a stronger preference for cup noodles. Additional socio-economic-based preferences are detailed in Table 1. Age-based categorization highlighted that consumers aged 18–29 predominantly preferred cup noodles, those aged 30–39 favored both cup and single-pack noodles, and those aged 40–44 leaned toward 5- or 10-pack formats. Detailed packaging preferences by age group are also presented in Table 1.

An analysis of the frequency of purchasing and consuming cup noodles revealed that the majority of consumers purchase and consume cup noodles once a week. Detailed frequencies of purchasing and consumption behaviors are provided in Table 2. Additionally, when respondents were asked how many packages of cup noodles they typically purchase per shopping trip, the majority indicated that they buy one package. For single-pack noodles, a similar trend was observed, with the majority of consumers purchasing and consuming single-pack noodles once a week. Detailed frequencies for single-pack noodles are presented in Table 3. When asked about the average number of single-pack noodles purchased per shopping trip, most consumers reported buying two packages. The analysis of purchasing days revealed that the vast majority of consumers buy instant noodles during weekdays. Among weekdays, Wednesday was

Table 1. Noodle Packaging Preferences by Participant Categories

	Cup (%)	Single Pack (%)	Both Cup and Single Pack (%)	5-Pack or 10-Pack (%)
Gender				
Male	43.1	23.4	18.3	15.1
Female	39.7	25.4	16.3	18.6
Socio-Economic Status				
AB	38.8	25.6	17.1	18.6
C1C2	42	24.2	17.3	16.5
Age				
18-29	44.7	24	14.8	16.5
30-39	39.1	24	19.4	17.6
40-44	33.3	28.6	17.5	20.6

Table 2. Frequency of Noodle Purchase and Consumption by Participants

	Once every 3 months or less frequently (%)	Once every 2 months (%)	Once a month (%)	Once every 15 days (%)	Once a week (%)	More than once a week (%)
Noodle Purchase						
Frequency						
Cup	9.6	13.6	24.3	19.7	27.3	6.1
Single Pack	14.2	9.3	22.5	22.8	27.3	3.8
Noodle Consumption						
Frequency						
Cup	8.0	12.7	23.6	19.5	29.2	7.1
Single Pack	12.5	10.4	21.1	26.0	26.0	4.2

Table 3. Quantity of Noodles Purchased by Participants in a Single Shopping Trip

	6 or more packs (%)	5 packs (%)	4 packs (%)	3 packs (%)	2 packs (%)	1 pack (%)
Cup	10.0	10.9	11.2	18.5	19.7	29.7
Single Pack	10.7	20.4	12.1	24.9	22.1	9.7

identified as the most common day for purchasing noodles. Detailed purchasing trends by day are illustrated in Figure 1.

An analysis of the consumption and preference for instant noodle varieties revealed that vegetable-flavored noodles were the most frequently consumed and the most liked by consumers. Among the most frequently consumed varieties, vegetable-flavored noodles ranked first, accounting for 19.1% of consumption. This was followed by chicken flavored

noodles at 14.0%, and curry-flavored and spicy tomatoflavored noodles, both at 9.6%.

Similarly, in terms of the most liked varieties, vegetable-flavored noodles were ranked highest, with 21.0% of respondents favoring this flavor. Chicken-flavored noodles followed at 16.7%, and curry-flavored noodles ranked third at 12.1%. These results align with the consumption trends observed, as illustrated in Figure 2.

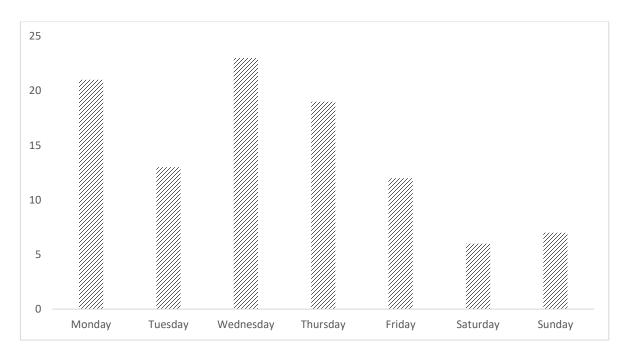


Figure 1. Preferred days for noodle purchases by participants

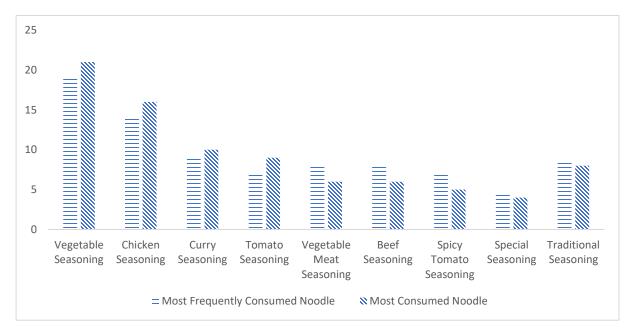


Figure 2. Consumption and preference trends for noodle varieties

Table 4. Most Frequently Consumed Noodle Varieties

	Vegetable Seasoning (%)	Chicken Seasoning (%)	Curry Seasoning (%)	Tomato Seasoning (%)	Vegetable- Meat Seasoning (%)	Beef Seasoning (%)	Spicy Tomato Seasoning (%)	Special Seasoning (%)
Gender								_
Male	16.6	12.9	9.1	4.9	6.3	5.7	10.3	4.0
Female	16.6	11.4	7.4	8.6	6.9	8.3	6.3	8.3
Age								_
18-29	21.8	12.5	10.0	8.1	5.0	6.9	10.6	7.8
30-39	13.7	14.6	10.7	6.0	10.7	10.3	9.9	7.3
40-44	26.9	21.2	1.9	13.5	6.9	5.8	1.9	1.9

Table 5. Most Preferred Instant Noodle Varieties

	Vegetable Seasoning (%)	Chicken Seasoning (%)	Curry Seasoning (%)	Tomato Seasoning (%)	Vegetable- Meat Seasoning (%)	Beef Seasoning (%)	Spicy Tomato Seasoning (%)	Special Seasoning (%)
Gender								
Male	16.6	14.3	10.9	7.4	4.9	6.3	6.3	4.6
Female	19.7	14.6	7.1	9.1	6.0	5.4	5.1	5.1
Age								_
18-29	22.2	14.7	11.3	9.7	6.9	5.3	6.3	5.9
30-39	18.5	18.9	10.3	7.3	6.4	9.0	7.3	6.4
40-44	25.0	19.2	5.8	19.2	1.9	5.8	5.8	0.3

An analysis of the most frequently consumed instant noodle varieties by gender revealed similar preferences among men and women. Vegetableflavored noodles were the most frequently consumed variety for both genders. Detailed proportions of other noodle preferences by gender are presented in Table 4. When categorized by age, preferences showed distinct patterns. Consumers aged 18-29 predominantly favored vegetable-flavored noodles, those aged between 30 and 39 preferred chicken-flavored noodles, and those aged 40-44 returned to vegetable-flavored noodles as their top choice. Detailed age-based preferences are also presented in Table 4. In terms of the most liked instant noodle varieties by gender, vegetable-flavored noodles remained the most popular choice among both men and women. Male consumers ranked chicken, curry, tomato, and beef-flavored noodles as their subsequent preferences, while female consumers favored chicken, tomato, curry, and vegetable-meat-flavored noodles after vegetableflavored noodles. Detailed proportions of these preferences are outlined in Table 5. When analyzed by age, similar trends emerged for the most liked varieties. Vegetable-flavored noodles were the most liked among consumers aged between 18 and 29, chicken-flavored

noodles ranked highest for those aged 30–39, and vegetable-flavored noodles were again most popular among the 40–44 age group. Detailed age-based proportions for noodle preferences are provided in Table 5.

An analysis of the consumption patterns of instant noodles revealed that a significant proportion of consumers enhanced their noodles by adding additional ingredients. The most commonly added ingredient was cooked minced meat, followed by white cheese, chicken, mayonnaise, ketchup, tomatoes, eggs, and mustard sauce. Detailed proportions of these additions are presented in Figure 3A. When examining the meal contexts, one in three consumers reported consuming instant noodles as a main meal. Noodles were also frequently consumed between lunch and dinner, as well as during lunch. Other meal preferences are detailed in Figure 3B. In terms of situational contexts, the majority of consumers reported eating instant noodles when they were hungry at work or when no food was available at home, or there was insufficient time to prepare a meal. Other common situations included snacking during the day, staying late at work or the office, and watching TV. Detailed situational preferences are provided in Figure 3C.

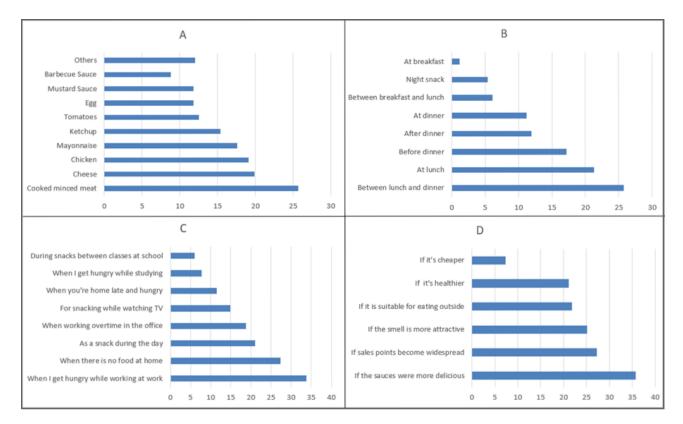


Figure 3. Noodle Consumption Preferences

When asked about conditions that would encourage increased consumption, most consumers indicated that improving the taste of sauces would make them more likely to buy instant noodles. Additional factors included increasing the availability of noodles at retail outlets, enhancing their aroma, and making them more suitable for eating outside the home. Detailed responses are shown in Figure 3D.

Consumers were also asked whether they would purchase healthier functional noodles enriched with protein, vitamins, and reduced calorie content (225 kcal per serving) while retaining the familiar noodle taste. Four out of ten consumers indicated that they would buy such products. Gender-based responses showed that 49.4% of men expressed willingness to purchase healthier noodles, compared to 44% of women. Age-based analysis revealed that 46.1% of consumers aged 18–29, 46.2% of those aged 30–39, and 52.4% of those aged 40–44 would consider purchasing these healthier options. Detailed responses by demographic categories are presented in Table 6.

4. Discussion

This study contributes to the literature by examining the key motivations and packaging preferences behind

Table 6. Willingness to Purchase Healthier Functional Noodles by Demographics

	Would Purchase	Would Not Purchase		
	(%)	(%)		
Gender				
Male	49.4	50.6		
Female	44.4	56.0		
Age				
18-29	46.1	53.9		
30-39	46.2	53.8		
40-44	52.4	47,6		

instant noodle consumption in Türkiye. The findings highlight the growing importance of fast-moving consumer goods in the Turkish market. The observation that the majority of participants choose instant noodles for their convenience and affordability aligns with Wang and Chen's (2020) findings, which indicate that individuals with fast-paced lifestyles often prefer ready-to-eat foods. This demonstrates that the global trend toward practical food solutions driven by busy lifestyles is also prevalent in Türkiye.

Our study found that cup noodle packaging was the most preferred type due to its ease of use. This finding is consistent with the work of Park and Yoo (2021), which emphasizes the decisive role of food packaging

in consumer preferences. A similar trend was identified in a study conducted in the United States, where practical packaging increased consumption frequency (Kim & Lee, 2020). Thus, this study provides evidence that practical packaging is a significant factor for Turkish consumers, adding to the existing body of knowledge on the topic.

The research also shows a notable increase in demand for healthy noodle options, particularly among young adults and women. This finding aligns with Cheng's (2021) study, which highlights the rising demand for functional foods in response to increasing health-consciousness. Solomon (2018) similarly noted the prevalence of health-conscious lifestyles, particularly among young people and women. By emphasizing the interest in low-sodium and nutrient-rich noodles, our research demonstrates that Turkish consumer behavior is in harmony with global health trends (Öztürk, 2021).

Our findings on flavor preferences indicate that Turkish consumers favor traditional taste profiles. Flavors such as vegetable, barbecue, and seafood are among the most popular, while spicy and vegetable-based noodle varieties are particularly favored. These preferences are consistent with Kara and Gürbüz's (2019) findings on noodle consumption in the Turkish market. Additionally, Yılmaz and Demir (2021) highlighted young consumers' willingness to try new flavors, and our study corroborates this trend, showing that young consumers are inclined to diversify their taste experiences.

One of the unique findings of this study is the variation in packaging preferences based on socio-economic status. Consumers in the A and B socio-economic groups prefer cup noodles, suggesting that higher-income groups gravitate toward convenient solutions, a pattern supported by Bryman's (2016) research. Conversely, more affordable single-pack noodles are favored by C1 and C2 groups, highlighting the role of economic factors in packaging preferences. These findings enrich the literature by shedding light on the relationship between packaging preferences and economic status.

The study also provides insights into noodle consumption frequency. Most participants reported consuming noodles at least once a week, with consumption primarily concentrated during weekday lunch or dinner hours. This aligns with Kim and Park's (2019) findings, which emphasize young adults' preference for fast and convenient foods. In Türkiye, young adults' inclination toward quick-to-prepare

meals reflects the appeal of instant noodle products as an attractive option for the younger generation.

The rising demand for healthy noodle options, particularly among young adults, underscores the need for the food industry to respond to this trend. The growing popularity of healthy and low-calorie products among Turkish consumers provides valuable data for future product development efforts. This trend, as highlighted by Yılmaz and Demir (2021), points to increasing health awareness among consumers. Manufacturers must adjust their product development strategies to cater to these demands and adapt to market shifts.

Overall, this study provides valuable insights into instant noodle consumption behaviors and preferences in Türkiye, aligning strongly with similar research in the literature. Future studies are recommended to conduct more detailed analyses of preferences across different geographic regions and socio-economic groups. Furthermore, in-depth investigations into the growing demand for healthy noodle options in Türkiye will be crucial for the food industry to meet changing consumer needs effectively.

5. Conclusion

The results of this study indicate that instant noodle consumption is widespread among the A, B, C1, and C2 socio-economic groups aged 18-44. Young and middleaged individuals are drawn to these convenient foods due to their fast-paced lifestyles. Cup noodles are preferred for their practicality, while single-pack noodles are favored for their affordability. Most consumers eat noodles once a week, typically choosing them for weekday meals, particularly between lunch and dinner. Vegetable-flavored noodles stand out as the most popular variety, followed by barbecue, seafood, and mushroom-flavored options, which also attract significant attention. The growing trend toward healthy eating has increased demand for low-sodium and nutrient-rich noodles. Young adults and women, in particular, are showing a marked interest in healthier products, emphasizing the need for manufacturers to diversify their product portfolios to align with these preferences.

Producers should develop marketing strategies tailored to young adults and middle-aged consumers. The practicality of cup noodles should be highlighted, and portable packaging options should be expanded. To appeal to budget-conscious consumers, single-pack noodles could be offered in a variety of packaging formats. Meeting the demands of health-conscious

individuals requires the introduction of low-sodium and organic noodle options. Vegetable-flavored noodles could serve as an entry point for addressing this demand. Additionally, introducing new flavors to cater to diverse preferences, particularly those of A and B socio-economic groups, could broaden the product appeal.

To support weekday consumption patterns, practical and flavorful products should be emphasized, and campaigns encouraging regular weekly consumption should be organized. Informational campaigns highlighting the benefits of healthier noodle options can play a significant role in increasing consumer awareness and interest. Furthermore, gathering consumer feedback and integrating it into product development processes is crucial for aligning products with market demands and enhancing customer satisfaction.

This study contributes to the understanding of consumer behaviors and preferences in the instant noodle market, providing valuable insights for producers to refine marketing strategies and guide product development. Data on the consumption habits of young and middle-aged groups can serve as a foundation for defining target markets and shaping product portfolios. The rising demand for healthier options indicates that new product development should focus on addressing consumer needs for nutritional foods. This research not only enriches the academic literature but also offers practical perspectives for the food industry. By emphasizing the importance of consumer feedback in product development, the findings shed light on strategies to enhance customer satisfaction and build a loyal customer base. Ultimately, this study provides significant benefits in both academic and industrial contexts.

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Declaration of Competing Interest

The authors declare that they have no financial or non-financial competing interests.

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