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Gender, age, education degree, income level and willingness to pay more for natural and healthy fruit juices: a regional study in Algeria

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Abstract:
This study aims to investigate consumers' willingness to pay for healthy and natural fruit juices in Algeria. A quantitative approach was adopted, using a structured questionnaire administered through both online and face-to-face surveys. The sample consisted of 147 participants from Algiers and Tizi-Ouzou (Algeria), and data were collected between February 3 and February 11, 2025. The Chi-square test was used to examine the relationship between demographic characteristics and willingness to pay for natural fruit juices.
The results show that a large proportion of respondents (79.59%) are willing to pay more for organic or natural fruit juices. However, the Chi-square analysis indicates no statistically significant association between willingness to pay and demographic variables, including gender ($p = 0.238$), age ($p = 0.507$), educational level ($p = 0.614$), and income ($p = 0.296$). These findings suggest that demographic factors are not the primary determinants of willingness to pay for healthier beverages. Instead, psychographic factors – such as health consciousness, environmental concern, perceived product quality, and personal values – appear to play a more important role in shaping consumer attitudes toward natural juices.
This research contributes to the growing literature on consumer behavior and willingness to pay for healthier food products by providing empirical evidence

from the Algerian context. It highlights the importance of health awareness in encouraging consumers to choose natural fruit juices despite their higher price and shorter shelf life.

Keywords: *Natural juices, Organic foods, Consumer behaviour, Willingness to pay, Chi-square test, Algeria*

Résumé :
Cette étude vise à examiner la disposition des consommateurs à payer pour des jus de fruits naturels et sains en Algérie. Une approche quantitative a été adoptée à l'aide d'un questionnaire structuré administré à la fois en ligne et en face-à-face. L'échantillon se compose de 147 participants issus d'Alger et de Tizi-Ouzou (Algérie), et les données ont été collectées entre le 3 et le 11 février 2025. Le test du Chi carré a été utilisé afin d'examiner la relation entre les caractéristiques démographiques et la disposition à payer pour des jus de fruits naturels.
Les résultats montrent qu'une proportion importante des répondants (79,59 %) est prête à payer davantage pour des jus de fruits naturels ou biologiques. Toutefois, l'analyse du Chi carré indique l'absence de relation statistiquement significative entre la disposition à payer et les variables démographiques, notamment le genre (p = 0,238), l'âge (p = 0,507), le niveau d'éducation (p = 0,614) et le niveau de revenu (p = 0,296). Ces résultats suggèrent que les facteurs démographiques ne constituent pas les principaux déterminants de la disposition à payer pour des boissons plus saines. En revanche, des facteurs psychographiques tels que la conscience de la santé, la préoccupation environnementale, la qualité perçue du produit et les valeurs personnelles jouent un rôle plus important dans la formation des attitudes des consommateurs envers les jus naturels.
Cette recherche contribue à la littérature croissante sur le comportement du consommateur et la disposition à payer pour des produits alimentaires plus sains en apportant des preuves empiriques dans le contexte algérien. Elle met en évidence l'importance de la sensibilisation à la santé pour encourager les consommateurs à choisir des jus de fruits naturels malgré leur prix plus élevé et leur durée de conservation plus courte.

Mots-clés : *Jus naturels, aliments biologiques, comportement du consommateur, disposition à payer, test du Chi carré, Algérie.*

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Introduction

For a long time, the quality of a food product has been associated primarily with its taste, which is one of the most important factors influencing purchase decisions; it is an experience attribute that consumers can evaluate for themselves (Nelson, 1974). However, beyond taste, there are other attributes that can be difficult for consumers to verify, such as health and environmental factors. The pursuit of ever-improving flavors, coupled with the cultivation of brands in a competitive market, often leads to the use of chemicals that may be harmful to health.

Faced with an increasing number of health risks, particularly those associated with the consumption of highly processed foods, consumers have become more attentive to aspects of quality beyond taste. They are increasingly concerned with the health and social dimensions of product quality. Risk related to consumption is defined as "the perception of uncertainty regarding the negative consequences of a choice" (Aurier and Sirieix, 2004). This risk is particularly pronounced in food choices driven by health and environmental considerations, especially given that very few consumers fully understand the information provided on product labels.

The various types of fruit juices available on the market provide an interesting case for study from both health and environmental perspectives, as juice consumption is often perceived as healthy. However, in reality, not all fruit juices have the same effects on health and the environment—some can even have negative impacts. The processing methods

used to extend the shelf life of many juices often alter the natural fruit flavor and reduce nutrient content. While juices made from fruit nectar are generally more nutrient-dense, they frequently contain added sugar and, in some cases, food additives that may be harmful to health.

There are also 100% pure juices on the market with no preservatives or added sugar, but the origin of the fruit can raise other health and environmental concerns. Typically, producers of these juices use lower-quality fruit rejected by sellers, often grown non-organically, which may not be entirely beneficial for health or the environment. Finally, to differentiate themselves in the market, some brands have launched "fresh organic" fruit juices that are considerably better in terms of quality, though significantly more expensive.

Producing pure juices from organic fruit is necessary to satisfy consumers' health and environmental expectations. However, this presents major challenges for businesses in terms of profitability. Producing such juices requires large quantities of organic fruit, which is more costly, and necessitates production without preservatives, limiting batch sizes due to short shelf life. Under these conditions, achieving economies of scale and high productivity becomes difficult. It is therefore natural that healthier fruit juices cost more, but the question remains whether consumers are willing or able to bear the price difference, particularly when considering socio-demographic factors in developing countries.

Regarding barriers to organic food consumption, the generally high price is the most significant factor inhibiting purchase behavior (Dangi et al., 2020; Gallar Hernández et al., 2019; Gundala and Singh, 2021; Rodríguez-Bermúdez et al., 2020; Soroka and Wojciechowska-Solis, 2019; Vehapi and

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Mitić, 2021; Vega-Zamora et al., 2014; Kushwah et al., 2019). Especially in regions commonly referred to as the Global South, organic products maintain a relatively small market share and are considered niche products (Wu and Takács-György, 2022).

In developing countries, incomes are relatively low, health awareness is limited, and organic products are uncommon. At the same time, these countries face numerous health issues associated with poor diets and limited access to healthcare, which makes purchasing decisions even more challenging.

Despite the growing interest in healthy and organic food consumption, limited research has examined consumers' willingness to pay for healthier fruit juices in developing countries. In particular, empirical evidence from North African countries such as Algeria remains scarce. Understanding the determinants of consumers' willingness to pay for healthier beverages is essential for both researchers and practitioners. Based on the literature review, the following hypotheses are proposed:

- **H1:** Consumers have a positive attitude toward healthier fruit juices.
- **H2:** High prices negatively influence consumers' willingness to purchase healthier fruit juices.
- **H3:** Sociodemographic factors significantly influence willingness to pay a premium for healthier fruit juices.

To test these hypotheses, a questionnaire survey was conducted and administered both online and face-to-face among 147 Algerian consumers, categorized by gender, age, education level, and income. After data collection and sorting, the results were analyzed using SPSS software, version 26.

1. Literature Review

1.1. Consumer Attitudes toward Healthy Organic Food

Although some studies have separated the health and environmental dimensions of food quality (Ouillet, 2006), these dimensions often overlap (Parashar et al., 2023; Nagaraj, 2021). A healthy food is defined as "any food that communicates about its health and/or nutritional properties" (Ouillet, 2006), while organic food "includes natural foods, free from artificial chemicals such as fertilizers, herbicides, pesticides, antibiotics, and genetically modified organisms" (Rana and Paul, 2017).

Pesticide residues in food can seriously impair consumers' health, highlighting that organic, pesticide-free foods are also beneficial to health. Moreover, the prohibition of pesticides and insecticides can help preserve essential insects, such as bees, thereby maintaining ecological balance and supporting consumer health. In the context of fruit juices, health and environmental concerns are prominent and depend on the composition and production conditions of the juice. These characteristics, in turn, influence consumer attitudes.

According to the theory of planned behavior (Ajzen, 2016), many studies have documented positive attitudes toward organic food, particularly due to its health benefits. For instance, Baydas et al. (2021) found that an Indian study population exhibited a universally positive attitude toward organic food. This attitude is reinforced by perceptions that organic foods are of higher quality than processed alternatives, and by growing awareness of environmental and health concerns. Communication technologies, especially social media and other web-based platforms, play an important role in shaping consumer awareness and attitudes. Consumers often have limited trust in conventional foods,

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which are frequently perceived as potential sources of disease.

Canova, Bobbio, and Manganelli (2020) demonstrated this in a study of 227 Italian participants, which revealed an increase in trust toward organic foods. Attitudes toward food products can be utilitarian or hedonistic; however, in the case of organic food, utilitarian attitudes are more prevalent. Lee and Yun (2015) showed that utilitarian attitudes, based on favorable perceptions of nutritional content and ecological characteristics, are primary drivers of the intention to purchase organic food. Accordingly, motivating consumers to buy organic foods should emphasize health benefits and nutrient intake rather than hedonistic motivations such as sensory stimuli (taste, smell, texture).

Price is another significant factor influencing purchasing behavior, contributing to the development of utilitarian attitudes toward food products. A substantial price difference between organic and conventional foods can therefore be a significant barrier to organic consumption. Several studies have confirmed this (Carrión Bósquez et al., 2023; Zheng et al., 2021; Katt and Meixner, 2020). For example, Katt and Meixner (2020), in their literature review, concluded that high prices are a major obstacle to the consumption of organic products.

1.2. Fruit Juices and Price

Fruit juices are classified as health foods and are often perceived as standard foods with added nutritional benefits. They are particularly interesting from a health perspective because they naturally provide essential nutrients (Ouillet, 2006). For example, orange juice is a significant source of

vitamin C, which is vital for proper bodily functions. Furthermore, more natural and organic juices are generally better for health. However, preserving the inherent qualities of fruit juice in a highly industrialized environment is challenging. Producing juices without chemical additives and pesticides entails sacrifices in terms of economies of scale and productivity. This can create a significant cost advantage for juices made from lower-quality concentrates, and the resulting cost difference is reflected in retail prices.

In a recent study on orange juice conducted in Egypt, Tunisia, and Algeria, Yusuf et al. (2024) found that price was the most important attribute for choosing probiotic orange juices across all three countries.

Even though quality varies considerably among fruit juices, microeconomic theory suggests that consumers may consider substitute products when the price difference is substantial. Indeed, consumers may compromise health features if prices are perceived as too high (Rödiger and Hamm, 2015). Consequently, there is a threshold of price tolerance beyond which consumers may forgo healthier juices, particularly in developing countries with low purchasing power.

Studies on consumers' willingness to pay (WTP) for organic food products show varying results across countries and products. Wee et al. (2014) reported that, in North America and Europe, consumers were willing to pay a premium of 10–40% for organic products. In Iran, Haghjou et al. (2013) conducted interviews with 423 participants using a regression model and found that, of the 95% willing to pay extra for organic products, 55% were willing to pay 5–24% more, while 10% were willing to pay over 35% more. Konuk (2019) emphasized that while the high price of organic

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products can be justified, it must be reasonable and clearly explained to consumers to gain their trust. These studies indicate a global trend toward accepting higher prices for healthy organic foods, although the degree of acceptance varies by country and product.

Regarding specific products, Millock and Hansen (2002) found that Danish consumers were willing to pay a 40% premium for organic potatoes and 19% more for organic minced meat. However, some studies have reported resistance to paying higher prices for healthier products. For example, Angulo et al. (2003) found that 72.5% of Spanish respondents were unwilling to pay more for certified beef with a traceability certificate. Despite such exceptions, the overall trend indicates willingness to pay more for organic products, though the additional cost remains a concern.

1.3. Socio-Demographic Determinants of Willingness to Pay

Although willingness to pay more for organic products is generally confirmed by several studies (Vapa-Tankosić et al., 2018; Ali and Ali, 2020; Wee et al., 2014; Boboli et al., 2023), sociodemographic factors can influence acceptance rates. Research findings in this area are mixed, ranging from no significant impact (Ogundijo et al., 2022; Hallak et al., 2022) to confirmed effects (Wee et al., 2014; Boboli et al., 2023; Vapa-Tankosić et al., 2018; Ali and Ali, 2020). Most studies have focused on variables such as age, gender, education, marital status, income, household size, nationality, and place of residence. In the present study, the observed variables are limited to age, gender, education level, and income, as these are the most commonly studied.

Age is an important determinant because older individuals tend to have higher health concerns and pay greater attention to diet. Several studies have shown that healthy eating behavior is linked to age. Older age has been identified as a key factor influencing WTP for organic products in Serbia (Vapa-Tankosić et al., 2018). Petersen (2013) highlighted that the frequency of organic food consumption among pregnant women (ages <20 to ≥40) was significantly associated with age, with older groups consuming organic foods more frequently. Gutiérrez-Villar et al. (2022) found that Spanish households with buyers aged 64+ purchased more organic food than predicted, while younger households (under 49) purchased less. Similarly, Hallak et al. (2022) found that older people consume fewer soft drinks than younger individuals, and Luckow and Delahunty (2004) reported that older consumers were more receptive to probiotic juices. However, this relationship is not always consistent, particularly when considering ecological concerns, which are often more prominent among younger consumers (Krystallis and Chryssohoidis, 2005).

Gender is another widely studied variable in explaining healthy purchasing behavior, though results remain mixed. In Brazil, a sample of 1,230 participants showed that women exhibited greater interest in organic food consumption than men (Martins et al., 2019), a trend confirmed by recent studies (Fatha & Ayoubi, 2023; Jánská et al., 2020). However, a favorable attitude does not always translate into willingness to pay higher prices. For instance, Ureña et al. (2008) found that men were more willing to pay a premium for organic foods than women. Research on healthy juice consumption in Australia and New Zealand, however, reported no significant gender differences in WTP (Hallak et al., 2022). Similarly,

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evidence from Algeria suggests that purchase frequency of nutritional supplements does not significantly differ between men and women (Belmedani & Boukhedimi, 2026).

1.4. Education and Income as Determinants of Willingness to Pay

Education is an important factor in explaining consumers' willingness to pay for organic products. Individuals with higher education levels are generally better able to recognize the health benefits of organic foods and are therefore more willing to pay a premium. Several studies have confirmed a positive relationship between education level and organic consumption (Gundala & Singh, 2021; Xie et al., 2015; Dimitri and Dettmann, 2012; Vapa-Tankosić et al., 2018). However, other research has failed to establish a significant link between these variables (Vapa-Tankosić et al., 2018; Hallak et al., 2022; Santhi & Jerinabi, 2011; Gil et al., 2000; Teng & Wang, 2015; Hoang et al., 2020). For example, Hoang et al. (2020) found no association between education level and intention to purchase organic products among 420 Vietnamese consumers. Similarly, Hallak et al. (2022) reported no link between education level and the consumption of healthy beverages.

Income is also a key determinant of organic food consumption. In a study of 450 Chinese consumers, Zheng et al. (2023) found a positive correlation between income and purchase intention for organic products. Similarly, Turan et al. (2022) reported that, among 477 Turkish participants, willingness to pay a premium for organic milk varied by income: low-income respondents were willing to pay 5–10% more, middle-income respondents 10–30% more, and high-income respondents over 30% more. These findings are

consistent with other studies, particularly in developing countries (Katt & Meixner, 2020; Wee et al., 2014). Regarding healthy juices, Hallak et al. (2022) noted that higher income is an important factor in selecting juice brands. However, macroeconomic growth does not always translate into increased organic consumption. For instance, Kim and Kim (2024) found that in South Korea, economic growth often prioritizes financial considerations over health and environmental concerns.

2.Materials and Methods

This study employed a quantitative research design using a structured questionnaire. A convenience sampling technique was adopted due to accessibility constraints. Data were collected from 147 consumers in Algiers and Tizi-Ouzou, Algeria, using both online and face-to-face surveys during February 3–11, 2025. According to the Central Limit Theorem (CLT), the sample is valid for generalization once the number of participants exceeds 30 (Chang et al., 2006; Polya, 1920; Johnson, 2004; Urdan, 2005; Berenson et al., 2012; Kwak & Kim, 2017; Allende-Alonso et al., 2019; Jenkins & Quintana-Ascencio, 2020; Elsherif, 2021; Nair et al., 2022; Zhang et al., 2023; Sriram, 2023; Fukuda, 2024).

3. Results

3.1. Reliability Test

To assess the internal consistency of the measurement scale, Cronbach's alpha was calculated. The reliability analysis produced a value of 0.62 for nine items, which is considered acceptable for exploratory research (Wahyudi, 2016; Zaigham, 2021).

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3.2. Profile of Respondents

The survey included 147 participants. Men represented 53.7% of the sample, while women accounted for 46.3%. Most respondents were aged 18–25 years (38.8%), followed by 26–35 years (28.6%), 36–45 years (17%), and 46 years and older (15.6%). Regarding income, 64.6% belonged to the lower class, 21.8% to the middle class, and 13.6% to the upper class. Education levels were 63.9% undergraduate and 36.1% graduate. Finally, 53.1% of respondents lived in urban areas, while 46.9% were from rural areas.

3.3. Key Survey Findings

Q1. Attention to juice storage conditions

78.9% of respondents pay attention to how juices are displayed in stores, including sunlight exposure and cleanliness.

Q2. Health awareness when purchasing food products

Only 9.52% of respondents were unaware of their health when purchasing juice, 32% were aware, and 58.48% were moderately aware.

Q3. Changes in consumption habits for health reasons

78.23% of respondents reported having adjusted their juice consumption for health reasons.

Q4. Reading juice labels

35.37% of respondents sometimes read labels, 34.69% always read labels, 14.29% occasionally read them, and 15.65% do not pay attention.

Q5. Awareness of the effects of processed juices

89.1% of respondents were aware of the health impact of processed juices.

Q6. Sensitivity to environmental impact of products

41.5% of respondents were not aware of environmental impacts, 30.61% were aware, and 27.89% were moderately aware.

Q7. Consideration of product packaging (recyclable/biodegradable)

46.3% sometimes consider packaging, 25.9% never do, 15.6% rarely consider it, and 12.2% always consider packaging features.

Q8. Willingness to pay more for certified organic or sustainable juices

79.59% of respondents were willing to pay more, while 20.41% were not.

Q9. Willingness to pay more for environmentally friendly products

61.2% of respondents were willing to pay more for environmentally friendly products.

Q10. Most important factor when choosing a fruit juice brand

According to the survey responses, the most important criteria when purchasing juices were nutritional value (n = 70; 53.85%) and price (n = 28; 21.54%). Fewer participants considered awareness-related factors, such as the ecological impact of products, as a primary driver for juice purchasing.

Table 1.The most important criteria when buying fruit juice

The most important criteria when buying fruit juice	
Price	28
ISO certifications	9
Sensory perception	7
Brand attractiveness	8
Availability at markets	5

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Ecological impact	3
Nutritional value	70
Total	**130**
Missed responses	**17**
Response rate	**88.45%**

Source: Survey data

3.4. Hypotheses Testing

Based on responses to Question 5, the positive attitude of the study sample toward healthier fruit juices is confirmed, supporting **Hypothesis 1**. The results of Question 8, however, allow us to reject **Hypothesis 2**, indicating that high prices do not significantly deter willingness to pay for organic or sustainable juices within this sample.

To test **Hypothesis 3**, a Chi-square test was conducted to examine the relationship between demographic factors and willingness to pay for natural fruit juices. The results (Table X) indicate no statistically significant associations between willingness to pay and gender ($p = 0.238$), age group ($p = 0.507$), educational level ($p = 0.614$), or income level ($p = 0.296$). Since all p-values exceed 0.05, the null hypothesis cannot be rejected, suggesting that these demographic factors are independent of willingness to pay. In other words, no significant effect of gender, age, education, or income on willingness to pay was observed.

Table 2.Hypothesises results

Study hypothesises	Variables	Results
H1	**Positive attitude**	Confirmed
H2	**Premium price is an handicap**	Infirmed
H3	**Gender**	Infirmed
	Age	Infirmed
	Educational level	Infirmed
	Income level	Infirmed

Source: Survey data

4. Discussion

The cross-tabulation analysis provides a comprehensive understanding of the Chi-square test results. It is evident that most men (n = 60/79) and women (n = 57/68) were willing to pay for organic juices. Similarly, the majority of participants aged 18–25 years (n = 43/57) expressed willingness to pay, as did respondents aged 26–35 years (n = 36/42) and those aged 36 years and above (n = 38/48).

Regarding education, 80.85% of undergraduates and 77.36% of graduates were willing to pay a premium for organic juices. Willingness to pay was also high across income levels: 75.79% of lower-income participants, 87.5% of middle-income participants, and 85% of upper-income participants reported willingness to pay extra.

These results indicate that a positive attitude toward healthy and organic food is not only observed in developed countries but is also shared by consumers in developing countries, particularly Algeria. Responses to Questions 1–5,

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along with the confirmation of **Hypothesis 1**, support this trend and align with previous studies, such as Baydas et al. (2021) on Indian consumers and Canova et al. (2020) on Italian consumers. Furthermore, the attention given to the conditions of juice display in stores and label reading suggests that consumers prioritize nutritional content and health claims developed by brands. According to Lee and Yun (2015), these utilitarian attitudes are the main drivers of intention to purchase organic food.

However, responses to Questions 6 and 7 revealed that 69% of respondents were not sensitive to the ecological impact of their consumption, and only 12% regularly considered packaging characteristics such as recyclability or biodegradability. This indicates that participants' perception of food quality remains largely restricted to health considerations, rather than encompassing environmental dimensions (Ouillet, 2006). Several authors (Parashar et al., 2023; Nagaraj, 2021) have emphasized the interrelationship between health and ecological dimensions in food consumption.

Unlike some previous studies (Dangi et al., 2020; Gallar Hernández et al., 2019; Gundala & Singh, 2021; Rodríguez-Bermúdez et al., 2020; Soroka & Wojciechowska-Solis, 2019; Vehapi & Mitić, 2021; Vega-Zamora et al., 2014; Kushwah et al., 2019), high prices did not appear to be a major obstacle for the consumers surveyed, leading to the rejection of **Hypothesis 2**. This differs from findings by Yusuf et al. (2024) in Algeria, Tunisia, and Egypt, where price was the most important factor in selecting probiotic orange juices. In the current study, price was ranked second after nutritional value, consistent with global trends toward willingness to

pay more for healthier products (Wee et al., 2014) and with similar findings in Iran (Haghjou et al., 2013). Nevertheless, the price factor cannot be ignored: if the price gap between healthy and less healthy juices becomes too large, consumers may prioritize cost over health considerations (Rödiger & Hamm, 2015). Konuk (2019) also emphasizes that while high prices for organic products may be justified, they must remain reasonable and acceptable to consumers.

The survey further revealed that willingness to pay varied by motivation: 79.59% were willing to pay more for health reasons, whereas 61.2% were motivated by ecological concerns. This indicates that health awareness is stronger than ecological awareness among Algerian consumers.

The rejection of **Hypothesis 3** reflects the ongoing debate regarding the impact of sociodemographic variables on willingness to pay for healthier and more environmentally friendly products. Contrary to studies suggesting older adults consume fewer soft drinks for health reasons (Hallak et al., 2022) or that younger consumers are more likely to pay for organic products due to environmental awareness (Krystallis et al., 2005), our results showed no significant differences across age groups. Similarly, while some studies suggest that women are more interested in organic products (Martins et al., 2019) and others that men are more willing to pay premiums (Ureña et al., 2008), our findings revealed no significant gender differences, consistent with Boukhedimi (2025).

No significant effect of education level was observed, supporting the findings of Teng & Wang (2015), Hallak et al. (2022), Hoang et al. (2020), Santhi (2011), and Li et al. (2007). This may be explained by the ease of accessing information today, particularly via social media, allowing consumers to

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make informed choices about health and environmental impact regardless of formal education.

Regarding income, our findings contrast with the typical positive correlation between income and willingness to pay reported in previous studies (Bhavsar et al., 2018; Hallak et al., 2022; Zheng et al., 2023). This may be specific to fruit juices, which low-income consumers can prepare at home in a healthy and environmentally friendly manner, reducing the need to pay higher prices in stores.

Rejecting **Hypothesis 3** does not imply that sociodemographic variables have no influence on willingness to pay for healthier juices. Rather, it highlights the variability of their impact, which can differ across product types, countries, and consumer groups. For instance, gender and age effects may vary depending on contextual factors, explaining the inconsistent results in the literature.

Conclusion

The increasing prevalence of health problems related to diet has significantly influenced the eating behavior of contemporary consumers. Across both developed and developing countries, concern for a healthy and sustainable diet remains highly relevant. This study examined consumer behavior toward natural fruit juices, focusing on their willingness to pay a premium for vitamin-rich beverages with minimal or no chemical additives. Notably, the price difference between natural and conventional juices can exceed four times, or approximately $4 per liter. Additionally,

natural juices have a shorter shelf life and lower production yields, making them less available and more expensive.

Our study, conducted among Algerian consumers, demonstrates that participants generally have a positive attitude toward products that promote health and environmental sustainability and express a clear willingness to pay more for such products. This occurs despite low purchasing power and the limited availability of healthy and organic foods. Furthermore, no significant differences were observed between social categories in willingness to pay, suggesting potential opportunities for local brands operating in this market. Younger consumers, who are more numerous, educated, and aware of diet-related health issues, also demonstrate strong willingness to pay, representing a key target group for future market development. Brands that anticipate these evolving consumer behaviors can gain a competitive advantage in this rapidly growing market.

Overall, this study contributes to the growing literature on willingness to pay for organic foods by providing empirical evidence from Algeria. The findings indicate that willingness to pay for organic products is prevalent regardless of gender, age, education level, or income. While demographic factors may exert some influence, they are rarely the primary determinants of consumer behavior. Instead, psychographic factors—such as health consciousness, environmental concern, perceived product quality, and personal values—play a more substantial role.

For marketers and policymakers seeking to promote organic food consumption, strategies that emphasize these psychographic characteristics are likely to be more effective than approaches based solely on demographic segmentation.

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