Scientific Works. Series C. Veterinary Medicine. Vol. LXXI (2), 2025
ISSN 2065-1295; ISSN 2343-9394 (CD-ROM); ISSN 2067-3663 (Online); ISSN-L 2065-1295

A BRIEF SURVEY REGARDING CONSUMERS´ PERCEPTIONS ABOUT NATURAL JUICES AND SOFT DRINKS

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Abstract

The consumption of juices has increased dramatically over the past few decades, mostly among children and teenagers. The aim of the study was to analyse how consumers perceive natural juices and soft drinks, considering multiple aspects such as the quality of ingredients, nutritional aspects, health impact and personal preferences. For this study, a survey with based on a Google form questionnaire was fulfilled by 279 adults from the general population of Romania. This questionnaire was answered by 232 women and 47 men. Out of the 279 people, 249 responded that they used to consume soft drinks, while 30 were not drinking at all. Regarding the type of juices consumed, the opinions were divided almost equally, with 50,5% choosing natural juices, and 49,5% chooses soft beverages. Also, 71,7% of people noticed changes in their consumption of these beverages, with 156 people being influenced by the health impact and 44 due to the price. For most people, the health effects, price and taste of a drink are important and are less affected by packaging or advertising.

Key words: *consumers, perceptions, natural juices, soft drinks.*

INTRODUCTION

In the last decades, the consumption of different types of soft drinks has increased dramatically due to the very wide range of ingredients and flavours used. The greatest increase in soft drink consumption has been registered in children and teenagers (Tahmassebi & BaniHani, 2020). However, it is observed that, recently, the consumer perceptions have changed, with an emphasis on responsible juice consumption and a preference for natural ones (Manandhar, 2024). Also, this behaviour was encouraged, in many countries, by legislative initiatives to reduce the potential harmful effects of sugar-containing soft drinks on general health by restricting soft drinks advertising, modifying the composition of soft drinks and introducing tax on sugar-containing soft drinks.

The global natural food and drinks market size was calculated at USD 152.54 billion in 2024 and is projected to surpass around USD 453.05 billion by 2034. In 2024, North America holds the largest revenue share in the natural food and beverages market, accounting for 40%. This dominance is driven by several key factors. A strong culture of health and wellness encourages consumers to choose natural and wholesome products (Caswell, 2009). Strict food safety regulations and labelling standards further boost consumer confidence in natural products. Additionally, rising demand for organic and non-GMO products supports the market's growth. The region's well-developed distribution networks and the presence of leading industry players also play a crucial role in establishing North America as a central hub for the natural food and drinks sector. Asia Pacific is projected to experience the fastest growth in the natural food and beverages market. This region's significant expansion is driven by its large and diverse consumer base, which includes health-conscious individuals as well as those who value traditional and natural dietary practices. These factors collectively fuel strong demand for natural food and drink products across the region. Europe is projected to experience significant growth in the coming period, driven by increasing consumer awareness around health, sustainability and transparency. The European Union's Green Deal aims to allocate 25% of agricultural land to organic farming by 2030, promoting environmentally friendly practices. Consumers are increasingly favouring products with clean labels, free from artificial additives. The rise of flexitarian diets and the growing demand for plant-based proteins are shaping product innovation. Consumer interest in plant-based diets is growing rapidly, driving increased demand for meat and dairy substitutes. This shift is largely driven by concerns about health, environmental sustainability and animal welfare. There is a rising trend in foods and drinks that offer benefits beyond basic nutrition, such as products with probiotics, prebiotics, and other functional ingredients are becoming increasingly popular (https://www.precedenceresearch.com/natural-food-and-drinks-market).

In the last period, surveys regarding different aspects of consumers perceptions of a large range of products were done (Kowalska et al., 2023; Martins et al., 2019; Duffett, 2017; Ramirez et al., 2022; Zidar et al., 2025). It was concluded that research methods such as surveys an provide valuable insights into consumers` attitudes and purchasing habits.

The aim of the study was to analyse how Romanian consumers perceive natural juices and soft drinks, considering multiple aspects such as the quality of ingredients, nutritional aspects, health impact and personal preferences.

MATERIALS AND METHODS

The survey using a Google form questionnaire with 11 questions regarding demographic characteristics and assessment of general perception related to natural juices and soft drinks was fulfilled by 279 adults from the general population of Romania. This survey was completed during March-May 2024, with an average time of 10 minutes to complete. For this study, we used 2 demographical parameters and 9 questions related to consumption of natural juices and soft drinks (Table 1). The statistical analysis was done by using the MedCalc® Statistical Software version 22.023. The Chi-squared test was used to determine whether the difference between the observed and expected values were statistically significant. If the calculated P-value is less than 0.05, then there was a statistically significant relationship between the two classifications.

Table 1. Demographic parameters and perceptionsregarding natural juices and soft drinks

Demographic parameters	
Age (years)	18-29
	30-49
	> 50
Gender	Male
	Female
Questions regarding consumption of natural juices and soft drinks	
Do you drink soft drinks? (Q1)	Yes
	No
How often do you consume soft drinks? (Q2)	Every day
	1-2 times/ week
	1-2 times/ month
	Never
When do you prefer to consume a soft drink? (Q3)	In the morning
	At the afternoon
	In the evening
Do you prefer natural juices or soft drinks? (Q4)	Natural juices
	Soft drinks
What attributes are most important to you when choosing between these products? (Q5)	Taste
	Sugar content
	Fruit content
	Additives and preservatives
	Impact on health
Which are the factors that influence your decision to buy natural juices or soft drinks? (Q6)	Price
	Taste
	Quality
	Packing
	Ingredients
	Advertising
Would you be willing to pay a higher price for a product that you consider healthier or more natural? (Q7)	Yes
	No
Have you noticed a change in your preferences regarding the consumption of natural fruit juices and carbonated soft drinks in recent years? If so, what do you think is the reason for this change? (Q8)	I did not notice
	I noticed, the reason being the price
	I noticed, the reason being the impact on health
To what extent do you consider the environmental impact when choosing between natural fruit juices and carbonated soft drinks? (e.g. recyclable packaging, organic ingredients, etc.) (Q9)	Always
	Sometimes
	Never

RESULTS AND DISCUSSIONS

Assessing consumer age - perceptions regarding natural juices and soft drinks

The distribution of the 279 respondents by age was the following: 18-29 years - N=147

(52.68%), 30-49 years - N=86 (30.82%), and ≥50 years - N=46 (16.50%). The first correlations were made between the age of the consumers and the nine questions regarding the perceptions, attitudes and purchase decisions of natural juices and soft drinks in Romania. By applying the statistical analyses, the P value was < 0,0001, meaning that statistically significant differences between all the groups taken into consideration were observed.

For Q1, the answers were distributed as following: 249 persons (89.2%) from all ages responded that they consume soft drinks, meanwhile 30 (10.8%) from the group over 50 years answered negatively. The negative response was predictable for that age group.

For the second question, the results are presented in Table 2.

Table 2. Results for age- consumption frequency relation

Frequency	Age category (years)				
	18-29	30-49	> 50	N	%
Every day	61	0	0	61	21.9
1-2 times/ week	70	23	0	93	33.3
1-2 times/ month	0	79	16	95	34.1
Never	0	0	30	30	10.7

Considering the data, it can be seen that the most used frequency is 1-2 times/month, with a slight difference for 1-2 times/week.

The assessment of consumer age - moment of the day (Q3) for consuming a soft drink showed that 57% of the total respondents preferred at the afternoon, followed by in the evening (33.3%) (Table 3).

Table 3. Results for age - moment of the day consumption

Moment of the day	Age category (years)				
	18-29	30-49	> 50	N	%
In the morning	27	0	0	27	9.7
At the afternoon	120	39	0	159	57
In the evening	0	47	46	97	33.3

Regarding the type of juices consumed (Q4), the opinions were divided almost equally, with 49.8% choosing natural juices, all from the group 18-29 years and 50.2% chooses soft beverages, with distribution in all age groups. The results are presented in Table 4.

Table 4. Results for age - type of juice relation

Type of juice	Age category (years)				
	18-29	30-49	> 50	N	%
Natural juices	139	0	0	139	49.8
Soft drinks	8	86	46	140	50.2

For question 5, the answers can be found in Table 5. It can be seen that for most of the respondents (53.8%), the taste is the important attribute when purchasing a beverage, followed by 18.6% and 13.6% which are influenced by type and quantity of additives and fruit content, respectively.

Table 5. Results for age - attribute of juice relation

Attribute	Age category (years)				
	18-29	30-49	> 50	N	%
Taste	147	3	0	150	53.8
Sugar content	0	28	0	28	10.0
Fruit content	0	38	0	38	13.6
Additives	0	17	35	52	18.6
Impact on health	0	0	11	11	3.9

For question 6, it can be seen that also that the taste is the main factor that influence the decision of buying natural juices versus soft drinks (42.7%), followed by overall quality (28%) and ingredients (17.6%).

For the question *Would you be willing to pay a higher price for a product that you consider healthier or more natural?* the responses were mostly affirmative (78.1%) (Table 6).

Table 6. Results for age - higher price for a better product

Answer	Age category (years)				
	18-29	30-49	> 50	N	%
Yes	147	71	0	218	78.1
No	0	15	46	61	21.9

Also, 71.7% of people noticed changes in their consumption of these beverages, with 156 people being influenced by the health impact and 44 due to the price (Q8).

For the last corelation, it was seen that 48.6 % of interviewed persons answered that sometimes are influenced by the environmental issues like recyclable packaging, organic ingredients, when buying natural juices and soft drinks.

Assessing consumer gender - perceptions regarding natural juices and soft drinks

The distribution of the 279 respondents by gender was the following: female - N=232 (83.15%), male - N=47 (16.85%). By applying the statistical analyses, the P value was < 0,0001, meaning that statistically significant differences between all the groups taken into consideration were observed.

For Q1, the answers were distributed as following: 249 persons (89.2%) from both genders responded that they consume soft drinks, meanwhile 30 (10.8%) from the female group answered negatively. The negative response was predictable for the females, as they are more concern about health issues (Table 7).

Table 7. Results for gender - soft drink consumption

Answer	Gender			
	Male	female	N	%
Yes	17	232	249	89.2%
No	30	0	30	10.8%

For the second corelation, the results are presented in Table 8.

Table 8. Results for gender - consumption frequency relation

Frequency	Gender			
	male	female	N	%
Every day	0	61	61	21.9
1-2 times/ week	0	109	109	39.1
1-2 times/ month	33	62	95	34.1
Never	14	0	14	5

Considering the data, it can be seen that the most used frequency is 1-2 times/month, with a slight difference for 1-2 times/week.

The assessment of consumer gender - moment of the day (Q3) for consuming a soft drink showed that 57% of the total respondents preferred at the afternoon, followed by in the evening (33.3%). The males preferred to drink only in the afternoon.

Regarding the type of juices consumed (Q4), the opinions were divided almost equally, with 50.2% choosing natural juices (139 females), and 49.8% soft drinks (47 males and 93 females).

For the question 5 *What attributes are most important to you when choosing between these products,* the results are comparable with those from the previous assessment corelated with the age.

For question 6, it can be seen that also that the taste is the main factor that influence the decision of buying natural juices versus soft drinks with 119 females giving this answer, followed by overall quality (78 females) and ingredients (45 males and 4 females). The males' responses were divided between ingredients (45 persons) and advertising (2 persons).

A total number of 218 females responded that they would pay more for a better quality, meanwhile the negative answer was given by 14 females and 47 males.

For question 8, the answers are presented in Table 9.

Table 9. Results for gender - changing the preferences relation

Answer	Gender			
	male	female	N	%
I did not notice	0	79	79	28.3
I noticed, the reason being the price	0	43	43	15.4
I noticed, the reason being the impact on health	47	110	157	56.3

It can be seen that 56.3% of the respondents both male and female changed their habit due to the negative health impact of soft drinks.

For the last question, the large majority of female (48.7%) answered that sometimes consider the environmental impact when choosing between natural fruit juices and carbonated soft drinks, meanwhile male never taught about this aspect.

The survey results provide valuable insights into consumer perceptions and preferences regarding natural juices and soft drinks. A significant portion of respondents expressed a preference for natural juices over soft drinks, primarily due to health-related concerns. This is consistent with the growing trend toward health consciousness observed in multiple consumer behaviour studies (Popkin & Hawkes, 2016; Siegrist & Hartman, 2020). The perception that natural juices are healthier, less processed, and free from artificial additives appears to influence consumer choice strongly.

Interestingly, while natural juices are perceived more favourably in terms of health benefits, some consumers remain concerned about their sugar content, especially in commercial juice products. This finding aligns with research indicating that even 100% fruit juices can contribute significantly to daily sugar intake, which may pose health risks if consumed in excess (Basu et al., 2013). Thus, the perception of "natural" as inherently "healthy" may sometimes overlook nutritional details, revealing a gap between perception and nutritional literacy (Roe et al., 1999).

Soft drinks, on the other hand, are largely associated with negative health implications, such as obesity, diabetes, and tooth decay. This aligns with extensive literature that identifies sugar-sweetened beverages as a leading contributor to global health burdens (Malik et al., 2010). However, some consumers reported continuing to consume soft drinks due to taste preference, habit, and availability, factors that have been well-documented as barriers to dietary change (Gupta et al., 2019).

Brand loyalty and marketing also play a role in shaping consumer attitudes. Soft drink companies have long invested in branding strategies that associate their products with lifestyle, pleasure, and youth culture (Harris et al., 2009). Meanwhile, natural juice brands are increasingly employing "clean label" and "organic" positioning to appeal to health-conscious consumers, reflecting a shift in market dynamics (Aschemann-Witzel & Zielke, 2017).

The results also reveal demographic differences. Younger participants tended to consume more soft drinks, possibly due to peer influence and advertising exposure, while older participants preferred natural juices, citing health and wellness as primary motivators. These age-related trends are consistent with prior findings (Wardle et al., 2004), suggesting that tailored health communication strategies may be necessary for different demographic groups.

Despite positive perceptions of natural juices, price and convenience emerged as significant barriers to increased consumption. This is a notable finding, as previous studies have also identified cost and accessibility as obstacles to healthy eating (Drewnowski & Specter, 2004). Thus, promoting affordable and accessible healthy beverage options remains an essential public health objective.

CONCLUSIONS

This study is limited by its sample size and geographic focus, which may not be generalizable across broader populations. Future research could explore longitudinal trends in beverage consumption and investigate how labelling, packaging, and nutritional education influence consumer behaviour more deeply.

The survey results reveal a clear distinction in consumer perceptions between natural juices and soft drinks. Overall, natural juices are perceived as healthier, more natural, and more suitable for daily consumption. In contrast, soft drinks are often associated with high sugar content, artificial ingredients, and negative health impacts, particularly among health-conscious consumers.

Despite this, soft drinks remain popular due to their affordability, widespread availability, and strong brand presence. Younger consumers, in particular, tend to prioritize taste and convenience over health, contributing to the continued demand for soft drinks.

The findings highlight a growing trend toward healthier beverage choices, with many consumers expressing a preference for products with natural ingredients, no added sugars, and clear labelling. This suggests opportunities for manufacturers to reformulate products or introduce new alternatives that align with health and wellness trends.

In conclusion, while soft drinks maintain a strong market presence, the increasing consumer preference for natural, healthy options indicates a shift that brands must consider to remain competitive in the evolving beverage industry.

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