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# Sustainable Consumption from a Domestic Food Purchasing Perspective Among Hungarian Generation Z

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### ABSTRACT

The relevance of the study is the global consumer trend towards sustainability. Sustainable consumption has positive environmental, social, and economic impacts, which makes it a key issue in the context of food consumption. Preference for regional, and domestic products can significantly support sustainable consumption. The study focused on the demographically and economically important Generation Z from the perspective of sustainable consumption. The main research objective of the study is to analyze the Hungarian food purchasing habits of Generation Z and to segment Generation Z according to the Hungarian food consumption criteria to characterize potential target groups. During the research, qualitative and quantitative data collection was carried out. The study focuses on the presentation of the results of the latter. In the quantitative survey, we conducted a pre-tested standardized questionnaire online survey. Subject recruitment was carried out using a snowball sampling method, resulting in 518 evaluable questionnaires. In a quantitative study, distinct segments of Hungarian food consumers were characterized according to their food consumption preferences. The research also demonstrated that the groups of Generation Z according to Hungarian food consumption preferences differ significantly from each other in terms of their perception of Hungarian food. The research concludes that Generation Z is a group of domestic food consumers with specific characteristics, who could be the main base for sustainable consumption. For those who have not yet developed this motivation, the main reasons are an unsophisticated preference system and a lack of education. Systematic marketing activities aimed at the first component of attitudes are therefore most needed to attract these segments.

#### 1. Introduction

Sustainability' encompasses principles and practices that aim to meet the needs of present generations without compromising the ability of future generations to meet their own needs. Sustainable consumption is an approach that focuses on ensuring that consumers consider environmental, social, and economic impacts in their everyday purchases. This type of consumption

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seeks to minimize the negative impacts that the production, sale and use of products and services can have on the environment and society.

The principles of sustainable consumption include:

- i. Awareness and responsibility: consumers recognize and understand the impacts behind their purchases. This includes the origin of products, their production processes, the working conditions used and the means of transport.
- Quality and durability: the drive for sustainable consumption includes a preference for durable and quality products that last longer and generate less waste.
- iii. Reduced consumption: Consumers who follow sustainable consumption principles strive to be rational and minimize unnecessary consumption. They are guided by the principle of "less is better".
- iv. Recycling and reuse: Sustainable consumers promote recycling and reuse to reduce waste. To encourage sustainable consumption and reduce waste, consumers encourage recycling and reuse.
- v. Local and eco-friendly products: Sustainable consumption promotes local products, which can reduce transport costs and environmental footprint.
- vi. Regarding socially responsible considerations: sustainable consumption involves respectful and ethical business practices, including respect for human rights and fair working conditions.

Sustainable consumption is a positive trend that encourages people to be more conscious in their purchases and helps reduce environmental and social challenges.

Members of Generation Z (their birth year usually covers those born immediately after 2000) are often closely associated with the values of sustainability and environmental protection. Generation Z has grown up in the digital age, has easy access to global information and can reach issues such as the environment and sustainability. Young people are more inclined to get involved and activist on social and environmental issues. Their interest in climate change, plastic pollution, animal welfare and other environmental issues can lead to more active participation in sustainability initiatives. Generation Z members are also more conscious in their purchases. They prefer sustainable and ethical products, pay attention to companies' social and environmental commitments, and value technology and innovation in achieving sustainability goals. They are interested in solutions that help the environment and sustainable development.

Generation Z values a sense of community and collaboration. For them, community participation and reliance on each other in sustainability initiatives is natural and important. These trends show that Generation Z is integrating sustainability more into their lifestyle and values. Members of this generation often work to make a positive impact on the environment and society.

## 2. Literature Review

#### 2.1 Sustainability in Consumer Behavior - Conscious Consumer Behavior

Today's food production and consumption is not considered sustainable and raises problems with a wide range of actors involved. In addition, demographic changes and the growth of the world population are likely to make the sustainability problems arising from food systems even more serious in the future. For example, agricultural production will have to cope with the impacts of climate change, increasingly challenging land use conflicts, and rising health and social costs at both individual and societal levels [1,2].

At the individual level, food habits and preferences are shaped by cultural traditions, standards, fashion, and physiological needs, as well as personal food experiences and exposure to the

consumption environment (i.e. availability and accessibility of food). These preferences and tastes, together with finances, time, and other constraints (e.g. labor methods, household decisions) do influence food consumption. Price is a particularly important decision criterion, but food preferences also vary significantly by household characteristics such as age, income, education, family type and labor market status. Moreover, food styles and demand vary widely across EU Member States, and this diversity has led researchers to classify consumers into groups representing different 'dietary styles' or 'food styles' to target them with 'right food' messages in social marketing [3-5].

Sustainability, responsible consumption, and related lifestyles have long been present in society. Dagevos and Van Gaasbeek [6] analyzed the characteristics of a "responsible consumer" as early as 2001. This group is environmentally oriented, prefers ethical products in their purchases and is also interested in transparent communication by the company.

For consumers, the origin of the product, the manufacturer, the production process, the ingredients, the social and environmental impact of the production process, as well as its ethical aspects are also important considerations. The number of conscious and responsible consumers is growing at different rates and to different degrees in different countries. Manufacturers are also becoming more aware of them and are trying to meet their growing expectations [7].

Dudás [8] distinguishes two groups of conscious consumption: self-conscious consumption, which prioritizes self-interest (e.g. health-consciousness, brand-consciousness), and responsible consumption, which prioritizes the interests of others (socially responsible consumption, environmentally conscious consumption, ethical purchasing). Whichever aspect is prioritized in the individual purchasing decision process, active information seeking has an impact on all areas of consciousness.

Sustainability in food consumption is also a prominent trend today. Research shows that food is increasingly becoming a way of life and an expression of value, as well as having symbolic meaning for people [9].

Lehota *et al.*, [10] investigated the information-seeking behavior of conscious consumer groups, especially the segment committed to sustainable consumption, when purchasing food. They focused on exploring the perceptions of the physiological impact of food labelling on food packaging. The results of national and international research showed that conscious consumer groups are characterized by a meticulous information seeking process, in which the trust factor plays a prominent role. Their research results have demonstrated that this type of behavior is also associated with a domestic consumer group committed to sustainability.

As sustainability is an important part of the information-seeking process for consumers, companies also need to communicate more strongly to consumers the message of green production [11-13].

Related studies have examined the complexity of the decision-making process of ethical consumers. A group of consumers who consider it important to buy products made from recycled materials or with environmentally friendly packaging are more likely to pay more for sustainably produced products and may even act as opinion leaders in promoting these products [14-16].

The focus on conscious consumption and the promotion of local businesses and products was particularly strong during the COVID-19 epidemic, when consumers put their trust in local products and favored sustainable consumption [17,18].

International research has also confirmed that awareness of the social, environmental, and economic consequences of consumption influences frugal behavior, is linked to the notion of personal consumption as a perspective that prioritizes economic independence, and the

consideration of distant future consequences has been identified as a key component of the relationship between the temporal dimension and frugality [19].

The antecedents of environmentally and socially responsible sustainable consumption tend to have a similar effect on consumer behavior, with personal norms, concerns and ethical ideologies having the strongest influence on conscious consumer behavior. When comparing the two types of behavior, socially responsible behavior is more influenced by perceived behavioral control and possibly social norms than environmentally conscious behavior, while information availability plays a role in both behaviors [20].

Experiential attitudes, behavioral intentions and perceived norms in the environment are closely related to whether individuals eat healthily: as income increases, knowledge and information play an increasingly important role [21].

Further research has shown that Hungarian consumers value and expect responsible behavior from companies, but do not necessarily take this into account in their purchases. Companies are strengthening sustainability in their CSR activities, both by targeting a responsible consumer niche and by exploiting the competitive advantage of CSR communication [22].

Simor-Szőke [23] examined consumer attitudes towards responsible companies from a generational perspective. According to the quantitative research, it was found that Generation X is not very concerned about financial considerations in their purchasing decisions, while Generation Y is. The young people of Generation Z are open to issues concerning social responsibility but have little information. Through targeted communication and education campaigns, companies can raise awareness among young people in this area.

This conclusion is supported by further research, which shows that the basic concept of value-based consumer behavior models also applies to the members of Generation Z that we have studied [24].

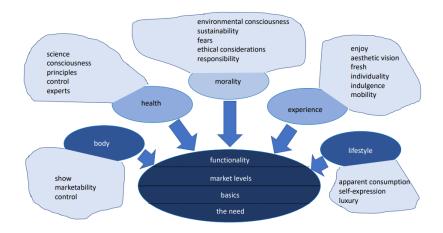
Research by Papp-Váry and Lukács [25] shows that in the pandemic situation, consumers have formulated multi-level expectations of brands: to support their employees, to present stability and predictability in their internal and external communication, and to support local and global causes through stronger CSR activities.

Consumer behavior is constantly changing, with new trends and directions emerging that are very difficult to describe and observe [26].

Nowadays, we can observe that traditional values are being pushed into the background and that consumer aspirations are directed towards self-expression and self-fulfillment. Further research shows that consumer behavior towards sustainability is also reflected in food consumption behavior and that many consumers accept sustainability as a value [27-33].

In addition to price, food quality, convenience and safety, and a healthy lifestyle, sustainability also plays a key role in consumers' choices.

According to Törőcsik [34], the symbolic content of food consumption is coming to the fore and different and new food trends are emerging because of the accelerated pace of life and consumers' changing expectations and lifestyles. These novelties are accepted or rejected by consumers in different ways, resulting in the emergence of distinctive consumer groups (Figure 1).



**Fig. 1.** Trend correlations that influence food choice Source: Trend correlations influencing food choice [24]

Research shows that conscious consumption is emerging at the individual and corporate level, where sustainability is a shared responsibility of both sides [35].

Conscious consumption is closely linked to sustainability. Consumers who care about protecting the environment and aim to pass on a livable planet to posterity by reducing their ecological footprint are clearly conscious consumers [36].

According to international research abroad, awareness is most evident in environmental protection, whereas in our country, the need for social responsibility is an important factor for consumers and companies alike [37].

Research has shown that a preference for regional and local food products and a positive attitude towards domestic, Hungarian products also prevails among a good proportion of consumers. They are perceived as more reliable and, according to consumer ethnocentrism, it is more ethical to buy domestic products as they contribute to the development of the economy and it is important that consumers know the origin of the products, which gives them confidence [38,39].

Another study looked at the environmental impact of food consumption and trends in Europe and at home. The study suggests that changes in eating habits and patterns could be key in the future, as they could reduce environmental pressures more than increasing the efficiency of agricultural technologies. But drastic changes in diet are needed to reduce the environmental burden of meat consumption, for example. Recognizing the environmental impacts of resource use from food consumption and the need for lifestyle changes is essential [40,41].

An international team of researchers used a scenario development process to analyze four food consumption alternatives for 2030 in terms of sustainable food consumption. Their objectives included presenting some possible outcomes for the future of food consumption from the perspective of consumers and generating new information on different sustainability aspects through innovative evaluation of food consumption scenarios. One of the conclusions of the study was that consumers' perceptions of a sustainable future were not sufficiently addressed in policy recommendations [42].

Growing awareness and concern about global climate change has stimulated the identification of local food consumption, as the focus has shifted to increasing local food consumption to reduce food miles and protect the environment. The farm-to-fork journey is rarely a simple link between producer

and consumer, but rather involves many actors located in different places and at different socioeconomic scales [43].

## 2.2 Generational Specificities in Consumer Behavior

An important aspect of the study of intergenerational behavior is the examination of value orientation and the identification of differences in this orientation. The basics of the concept are that in addition to the boundaries of age, the characteristically different group experience certain generations have must also be considered. The starting point of a marketing approach based on generational theory is that the major and defining events experienced during socialization, the 'zeitgeist', accompanies people throughout their lives and influences their choices [44].

Varga's research shows that Generation Z's offline purchasing decisions are strongly influenced by their in-store experience [45]. If they are attentive and kind in the store, if they feel like an important customer, they value this more than gifts. The most popular and influential promotional tool is the discount, but the need for entertainment and the shopping experience strongly influence young people's choice of products.

Generation Z has a strong purchasing power, but compared to Generation Y members, they have a stronger relationship with their parents, so their purchasing decisions are often made with them [46].

Our previous research has shown that perceptions of corporate social responsibility are related to the age of the individual and this is also true for the level of activity in social issues.

The perception of CSR is not the same across age groups. Their generational specificities are reflected both in their CSR activities and in the impact of CSR on purchasing decisions [47-49].

Consumer habits and the composition of the consumer basket have changed as a result of the QEO, with the services sector being the biggest loser over the period. Generation Z showed the strongest consumer activity in the consumer goods sector during the pandemic, while the same was true for Generation X in the tertiary sector. Generation Z, the least restrained consumers of this period, are also highly individualistic and hedonistic while the generation over 45, which is typically more restrained in spending and more frugal and active during the pandemic, is characterized by traditional values and social sensitivity, which explains the shift in their spending habits [50].

Research by Takáts [51] also highlights generational differences in shopping habits during the coronavirus pandemic, with respondents highlighting convenience and flexibility as the main advantages of online shopping, as well as the ability to buy products online that are not available in local shops. 60% of respondents are price-sensitive consumers, as they look for better prices when shopping online, which is more important for 16–24-year-olds and 25-34 year olds than for older members of Generation Y.

Further research has shown that the role of smaller local shops and markets has increased over supermarkets and hypermarkets in the purchasing behavior of domestic consumers. As local small-scale producers and retailers often delivered food products to their doorsteps, personal contact and trust in local products and foodstuffs became more important [52].

Also, in the first wave of the pandemic, Madarász *et al.*, [53] investigated the purchasing behavior of Hungarian consumers. The results showed that the food choice motivations of Hungarian consumers did not change in the first wave of Covid-19, but the order of preferences changed. In the period under study, the superior taste of products and the consistently high quality of the products selected retained their leading position, ahead of, for example, healthiness. Because of the closure, the importance of the popular, familiar brand declined, suggesting that consumers are more likely to abandon their familiar brand when they experience a crisis.

The results of PwC's 11th Global Consumer Insights Survey [54] show a clear trend towards online shopping for food purchases and a further increase in consumer awareness of transparent, sustainable companies. This suggests that successful companies should aim to build consumer trust in their operations and communications.

The difference between traditional and online purchasing decisions lies primarily in the process of gathering information and the circumstances of the purchase. Online purchase decision can be influenced by many factors, the most important of which are location, product and experience. Further research also shows that the online purchase decision process is similar in many respects to the traditional purchase decision, but an important difference is that in the online space there is no opportunity to touch or try the product before making a decision [55-58].

Lisányi et al., [58] conducted a quantitative survey to investigate generational attitudes towards local products, food consumption habits, and key motivational and purchasing factors. Their results show that the most important consumption motivators for Generation Z consumers are hedonic experiences, exploration of new foods and openness to new tastes. Healthiness and texture are less strong motivators for young people.

Lago *et al.*, [59] found the opposite in their research: health consciousness, healthy lifestyle and environmental awareness were dominant factors for young people. Csutora *et al.*, [60] examined whether the business model can be linked to students' individual consumption.

In earlier research by Garai-Fodor [61], Generation Z's values, food consumption behavior and opinions on health and healthy eating were investigated. As a result of the clustering procedure, four consumer segments could be distinguished: the 'health and environmentally conscious cluster', whose members rated the aspects belonging to the health and environment factor group above all others, the 'all-above-all non-price-sensitive consumers', who rated all aspects except the criterion of cheapness as more important than the sample average, and the 'no preference', for whom no aspect was really relevant; and the "time and price sensitive" group, for whom speed, time-related elements and price-related factors played an above-average role in the choice of a food. The research also found that there were significant differences in the value orientations of the food consumer preference groups.

#### 3. Material and Methods

## 3.1 Survey Management and Sample Making Method

The main research objective of the study is to analyze the Hungarian food purchasing habits of Generation Z. We wanted to segment the sample based on the criteria of Hungarian food consumption among Generation Z to define and characterize the main potential target group of Hungarian food consumers.

The research objectives were achieved in two phases: the first phase was qualitative, basic research, the second phase was quantitative data collection.

The qualitative method was used as pre-research to test and refine the research tool for quantitative data collection.

In the first phase of qualitative research, 15 mini-focus interviews were carried out, recruiting subjects from Generation Z, heterogeneous by gender but age, using a snowball sample. During the pre-qualitative research phase, a semi-structured interview schedule was used to analyze Hungarian food shopping preferences and habits, as well as consumer analysis of online food shopping. In the qualitative process, the results were evaluated using a traditional content analysis method.

In the qualitative research, we used open-ended questions and free word associations, as well as the projective technique of sentence completion. In the framework of the exploratory research, we asked the subjects to explain, along the lines of spontaneous answers, which aspects play a role for them when buying food and Hungarian food, which results provided the final structure of the preference system for this purpose in the quantitative research.

We used the technique of sentence completion to quantify the opinions on Hungarian food and quantified them in the second research phase, analyzing attitudes towards Hungarian food in the form of lists of statements.

Already the results of the qualitative research suggested that there might be a relationship between food consumption and the perception of Hungarian food, which is why the statistical analysis of this relationship was the focus of our quantitative research.

The second phase of the research was a quantitative data collection using a pre-tested standardized online questionnaire survey. Subject recruitment was carried out using a snowball sampling method, resulting in 518 evaluable questionnaires. The topics of the research tool include the values of Generation Z, food consumption behavior, perception of Hungarian food, preference for buying Hungarian food, online food shopping.

## 3.2 Survey Structure

The survey instrument included two open-ended questions for spontaneous association and closed questions: nominal - single- and multiple-choice selective questions, four-item rating scales for the analysis of consumer attitudes and value orientation. For the scaling questions, the so-called coercive scale was used ranging from 1 to 4. One reason for this is the individual scale preference of Hungarian respondents: due to the school grading system, our Hungarian respondents are most stable in interpreting a scale up to five as opposed to scales 1-7, 1-9 or 1-10.

The even scale was preferred because the middle value (3) for the odd (1-5) scale is an escape route for respondents. In the analysis of attitudes, those who chose the middle value do not tip the scales in either direction, resulting in an excessive proportion of "indifferent" consumers, making it difficult to segment them in a statistically and professionally meaningful way. Therefore, we opted for the even scale, which, by excluding the middle value, forces the respondent to take a more rigorous stance, thus contributing more to the successful segmentation [60]. Moreover, for the questions analysed using the odd scale, it was not necessary to give the middle, indifferent value either the option of do not know or cannot tell, as the cognitive level was filtered by means of separate questions.

### 3.3 Statistical Analysis

Descriptive statistics, bivariate and multivariate analyses were used to process the quantitative results and test the hypotheses put forward using SPSS 26.0 software. In the first step of segmentation by job choice preference, factor analysis was performed on the elements of the preference system, in which the final factor structure was decided based on KMO value, total variance value and occupational explicability. The procedure involved Principal Component Analysis and varimax rotation.

For segmentation, we used K-means clustering procedure, which is a statistically appropriate method due to the sample size of more than 1,000 sample elements.

In the present study, in addition to the results of factor and cluster analysis, Pearson's Khi-square significance values were used to establish statistical correlations for the characterization of segments, where for nominal measurement levels, Pearson's Khi-square significance values were used, while absolute values of Adjusted Standardized Residuals (Adj.R) were used to establish and analyze internal correlations.

To examine the correlation between the nominal and metric scale scores, the analysis of variance method was used, including the one-way ANOVA method for comparing multiple sample means. The meaning of a metric dependent variable was compared between more than two groups. The post-hoc test was used to determine which pairs of groups were significantly different. In doing so, significance values were used to determine the existence of correlations (sig<= 0.05). Internal correlations were analyzed along the comparison of group means using the F-statistic, i.e. the coefficient of variance of the means within samples [61]. For the correlation tests described in the study, where the significance value according to the ANOVA table was below 0.05, it was confirmed that there is a correlation between the Hungarian food consumer preference segment and the variable under study (Hungarian food perception).

In this study, we aimed to present partial results of the quantitative research phase, focusing on the generation-specific validation of two research hypotheses based on the Hungarian food consumer preference analyses presented in the secondary research.

One of the hypotheses (H1) of our research is that members of this generation can be segmented based on Hungarian food consumer preferences, and that distinct segments can be drawn on the basis of the descriptive variable mentioned above.

Our second hypothesis (H2) is that the groups of Generation Z according to Hungarian food consumption preference are significantly different from each other according to the perception of Hungarian food.

## 4. Results

For the first time, we conducted a factor analysis on the factors of Hungarian food purchasing preference to investigate which factors form a unit according to consumers' perceptions. The most relevant solution in terms of statistical and technical explanatory power was the three-factor factor structure (Table 1).

**Table 1**Factors of Hungarian food consumer preference

Floments of the Hungarian food	Factor groups of Hungarian food consumer preference					
Elements of the Hungarian food	Factor of packaging and	Factor of nutritional	Factor of price- related elements			
consumer preference	communication	values and convenience				
Packaging appeal	0.791	0.031	0.125			
Food-related advertising	0.780	-0.082	0.024			
Brand name	0.711	0.230	0.188			
Practicality of packaging	0.638	0.141	0.118			
Trademark on the packaging	0.583	0.134	-0.098			
Nutritional values (taste, smell,	-0.104	0.702	0.048			
calories, vitamins, minerals)	-0.104	0.792	0.046			
Geographical origin (place of origin	0.220	0.600	-0.118			
of the food, traditional character)	ing 0.583 0.134 smell, 1.5) -0.104 0.792 e of origin aracter) 0.238 0.699	-0.116				
Durability of food, expiry date	0.219	0.617	0.108			
Easy accessibility	0.106	0.560	0.187			
Cheap food	-0.015	0.090	0.899			
Food on sale	0.179	0.004	0.841			
Extraction Method: Principal Compo	nent Analysis. Rotation Metho	d: Varimax with Kaiser Norm	alization.			

Source: author's own research, 2023. N=51, KMO= 0.780, total variation= 62.135%

According to this, the first group of factors "communication and packaging" includes aspects such as packaging, brand name, trademark, advertising, i.e. the communication elements that dominate the purchase of Hungarian food. The second factor group was "nutritional elements and convenience", which was dominated by nutritional values, geographical origin and easy accessibility of food as purchasing aspects. The third group was the factor "Price-related elements", which included preference elements related to price and promotions.

As a second step of the research, a K-means clustering procedure was performed on the final (three-factor) structure - which was possible due to the sample size (>300 persons) - in order to segment the sample according to the factor groups. As a result of this procedure, we were able to isolate four significantly different segments. As a result, the consumer segments based on Hungarian food consumer preference were as follows (Table 2).

The "Traditional convenience-oriented food buyers" (168 persons), for whom the nutritional elements and convenience aspects are the most important when buying Hungarian food. They pay attention to the geographical origin and the ingredients, but at the same time the easy availability of food is important to them.

Price-sensitive food buyers", for whom price-related elements and the availability of promotions are the most important decision criteria when buying Hungarian food. They do not put much emphasis on packaging and communication elements, just as they do not put much emphasis on ingredients. The cheapness of the food and the fact that it is on sale are the most important criteria for them when buying.

Members of the "No preference cluster" did not rate any of the criteria as very important or more important (on sample average and compared to the other segment averages). They are presumably those consumers who are characterized by a system of values and preferences that have not yet been formulated, and who prefer to make decisions on the basis of impulses and current impressions rather than on the basis of a characteristic individual system of criteria.

The "Design and advertising-following Hungarian food buyers" for whom the external characteristics of the food and the communication and advertising associated with it are the most important. They are the consumers who we believe can be greatly supported and influenced in their purchasing decisions by packaging, brand names and trademarks, and they look for those communication elements that can be seen and perceived as distinctive features on a Hungarian food product and base their purchasing decisions on this.

**Table 2**Consumer segments by Hungarian food purchasing criteria

Factors of the Hungarian food -consumers' preferences	Consumer segments by Hungarian food purchasing criteria						
	Traditional convenience- oriented food buyers (N=168)	Price sensitive No food buyers preference (N=122) (N=92)		Design and ad followers (N=136)			
Factor of packaging and communication	-0.46324	-0.62482	-0.16705	1.24574			
Factor of nutritional values and convenience	0.84297	-0.38745	-1.26870	0.16449			
Factor of price-related elements	-0.42621	1.08608	-1.01983	0.24210			

Source: author's own research, 2023. N=518, K-means clustering, sig=0.000

We then examined whether this statistically verifiable correlation can be demonstrated for each of the consumer segments according to Hungarian food buyer preferences (Table 3). We sought to find out whether the differences in purchasing decisions (conative level) are reflected in attitudes and perceptions towards Hungarian food (affective level). To verify the relationship, an analysis of variance was performed, and as a result, we were able to confirm a significant difference by segment (sig<=0.05) for all the statements concerning Hungarian food.

**Table 3**Perception of Hungarian food among consumer segments

Perception of Hungarian food by	consumer segments	N		Mean	Std. Deviation	sig
Hungarian food is more reliable than foreign food	Traditional convenience- oriented food buyer (N=168)		168	2.62	0.92736	- - 0.000 -
	Price sensitive food buyer (N=122)		122	2.02	0.84290	
	No preference cluster (N=92)		92	1.76	0.76128	
	Design and ad follower (N=136)		136	2.68	0.71887	
	Total		518	2.34	0.90582	
The quality of Hungarian food	Traditional convenience- oriented food buyer (N=168)		168	2.46	0.85396	
	Price sensitive food buyer (N=122)		122	2.10	0.84706	
is better than foreign food	No preference cluster (N=92)		92	1.93	0.70795	0.000
Ü	Design and ad follower (N=136)		136	2.49	0.75997	-
	Total		518	2.29	0.83279	
Purchasing Hungarian food	Traditional convenience- oriented food buyer (N=168)		168	2.99	0.96022	- 0.000
	Price sensitive food buyer (N=122)		122	2.13	0.95304	
makes you feel better than	No preference cluster (N=92)		92	1.89	0.81815	
purchasing foreign food	Design and ad follower (N=136)		136	2.88	0.86973	
	Total		518	2.56	1.01764	
Hungarian food is better	Traditional convenience- oriented food buyer (N=168)		168	1.75	0.67238	- 0.000
	Price sensitive food buyer (N=122)		122	1.51	0.64598	
advertised than foreign food	No preference cluster (N=92)		92	1.74	0.82368	
	Design and ad follower (N=136)		136	2.16	0.85393	
	Total		518	1.80	0.78071	
Hungarian food is more expensive than foreign food	Traditional convenience- oriented food buyer (N=168)		168	2.74	0.87711	_
	Price sensitive food buyer (N=122)		122	3.08	0.85850	0.000
	No preference cluster (N=92)	-	92	2.41	0.90362	- 0.000
	Design and ad follower (N=136)		136	2.84	0.90448	
	Total		518	2.79	0.90842	
	Traditional convenience- oriented food buyer (N=168)		168	2.87	0.97612	0.000

Perception of Hungarian food b	y consumer segments	N	Mean	Std. Deviation	sig
Hungarian food is tastier and more delicious than foreign food	Price sensitive food buyer (N=122)	12	2 2.49	0.95559	_
	No preference cluster (N=92)	9	2 2.11	0.79083	_
	Design and ad follower (N=136)	13	6 2.79	0.81756	_
	Total	51	8 2.63	0.94054	=
Hungarian food is healthier than foreign food	Traditional convenience- oriented food buyer (N=168)	16	8 2.54	0.95962	
	Price sensitive food buyer (N=122)	12	2 2.11	0.91088	0.00
	No preference cluster (N=92)	9	2 1.83	0.73543	0.00
	Design and ad follower (N=136)	13	6 2.72	0.82274	_
	Total	51	8 2.36	0.93421	=

Source: author's own research, 2023. N=518, analysis of variance, sig=0.000

According to the results, we found that "Traditional convenience-oriented food buyers" consider Hungarian food to be more reliable and healthier, and in their case, we also saw the existence of a stronger emotional bond: they feel good about buying Hungarian food. "Design and ad follower" food buyers consider Hungarian food advertisements to be better compared to foreign ones, and they consider the food to be tastier and healthier. In their case, it is also true that Hungarian food is more reliable for them, and the positive emotional attachment to Hungarian food was above average for this segment as well. Unsurprisingly, the "Price sensitive food buyers" judged Hungarian food to be expensive, did not perceive Hungarian food to be tastier, healthier, or more reliable. In our view, this segment will hardly be the main target segment of Hungarian food purchases, due to strong price sensitivity.

In the case of the "No preference" cluster, we could see that they do not have a well-formed image of Hungarian food products, which, in our view, could be best supported primarily with appropriate education. Since we did not experience a negative attitude or rejection in their case, we think that support would be needed at the very first level of attitude, the cognitive stage, in the case of this segment. In their case, it would be worthwhile to understand, explain and make them aware of the concept, advantages, and properties of Hungarian food, based on which the influence on the elements affecting the emotional (affective) and action (conative) stage could be continued.

## 5. Summary

Our view of popularizing the consumption of Hungarian food is useful from several points of view. First, from an economic point of view, since it provides a potential range of users for domestic producers, and in this sense contributes to the strengthening of the given economy. Second, due to environmental and sustainability considerations, the ecological footprint of locally produced and used food is smaller. We believe that to make domestic products more popular, it is important to have a comprehensive knowledge and analysis of consumer preferences and attitudes. A combined, coordinated, and systematic examination of the three components of attitude (cognitive, affective, and conative) is essential in order to know how and with the help of which means consumers can be most effectively encouraged to consume.

In our view, the members of Generation Z represent an important potential group of food consumers, due to their demographic and economic strength. Therefore, we focused on this generation in the study. In the framework of quantitative research, based on the preferences of

Hungarian food consumers, we characterized clearly distinguishable segments among this generation (H1 was confirmed):

The group of "Traditional convenience-oriented food buyers" (168 people), for whom the contents and comfort aspects are the most important when buying Hungarian food. "Price-sensitive food buyers", for whom the existence of price-related elements and promotions was the most important aspect. Members of the "No preference" cluster, who do not yet have a marked preference system due to the absence of a mature value system. "Design and ad follower food buyers" for whom the external characteristics of the food and the communication and advertising associated with it are the most important purchase aspects.

During the research, we were also able to prove that the groups formed according to Hungarian food consumer preferences among Generation Z differ significantly from each other in terms of their perception of Hungarian food (H2 was confirmed).

According to the results, we found that "Traditional convenience-oriented food buyers" and "Design and ad follower Hungarian food buyers" are the ones who judge Hungarian food products most positively: they consider their taste and content values, as well as their advertisements, to be better compared to those of foreign countries.

In our view, the "Price-sensitive food buyers" will not be the main target segment of Hungarian food purchases, due to their strong price sensitivity, while in the case of the "No preference" cluster we could see that they do not really have a well-formed image or knowledge of Hungarian food products. In our view, they need support at the very first level of attitude, in the cognitive stage: to make them understand and aware of the concept and advantages of Hungarian food.

In terms of the practical applicability of the research results, we consider it important to note that "Traditional convenience-oriented food buyers" and "Design and ad follower food buyers" can be considered as the potential consumer base of Hungarian food among Generation Z.

In our view, it is worth focusing on these young people not only in terms of consumption, but also in terms of persuading and winning over the "No preference", who are still not aware of the benefits of Hungarian food and therefore do not typically consume it.

One of the characteristics of this generation is that they do not like direct marketing tools. Therefore, we believe that inbound marketing solutions, native advertising and educational programs can play a key role in winning over the "No preference", which is still unsure but not closed off. In addition, we believe that it would be of paramount importance to count and rely on these two potential consumer segments as opinion leaders in communication, as they could be sufficiently credible figures and message generators for the undecided youth. In this way, education campaigns, social marketing programs and CMR activities can be generated, considering the specificities of this generation, which we believe would be a successful solution for the promotion of Hungarian food products among young people.

During the research, we focused on the Z generation in terms of the purpose of the research, but we consider it important, due to the limitations of the research, to examine the consumer segments and potential target markets of Hungarian food products in the case of other generations as well. Another limitation of the research is that it did not consider aspects of education and residence within the Z generation, which could possibly make the results more sophisticated in the future. Regarding the continuation of the research, we plan to expand the sampling to further generations and in such a field, further, deeper analysis of the generation specificities.

#### **Author Contributions:**

Conceptualization, M.G.F., A.P. and L.V; methodology M.G.F., A.P.; software, L.V and M.G.F.; validation, A.P., M.G.F and L.V.; formal analysis, M.G.F. and A.P.; investigation, L.V., M.G.F. and A.P.;

writing—original draft preparation, G.F.M and A.P.; writing—review and editing, M.G.F. and L.V.; visualization, L. V.; supervision, M.G.F.; project administration, M.G.F. and L.V; funding acquisition, M.G.F. All authors have read and agreed to the published version of the manuscript.

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## **Data Availability Statement**

Not Applicable.

## **Conflicts of Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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