
THE ECONOMIC SIGNIFICANCE OF TRADITIONAL AND REGIONAL FOOD IN THE REGION OF CRETE

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ABSTRACT

Traditional foods play a key role in the economies of all countries, culture and everyday life. Crete is famous for its rich, delicious, also simple ingredients traditional dishes, based on local natural resources. The intention of the research is to identify the traditional and regional products of Crete also the economic status of its food products. The survey was carried out in 2022 with 607 respondents and responses were processed using SPSS and Excel. The results show that the consumption habits of residents at home are related to how often they choose traditional foods in restaurants. Older generations are more committed to local foods, while younger people consume them less often in restaurants. The research highlights the fact that consumption of traditional and regional foods can contribute to the region's economic development also it is positively correlated with emotional attachment to the region.

Introduction

The ancient and traditional dietary habits of the Cretan people were developed in connection with the raw materials that the Cretan land offered in abundance, mainly olive oil, grain, wine, honey also herbs and spices, which became essential ingredients in Cretan cuisine.

In addition to the region's tourist attractions and products, traditional and regional Cretan food products, typical of the Cretan landscape, also contribute to the development of the region's economic and social situation. Consumers' preference for quality over quantity is reflected in the purchasing decisions of the local population and is reflected in the food products on offer. Residents are committed consumers of traditional and local Greek food, an attitude which is generally shared in their daily lives.

Traditional foods are undeniably an integral part of the Cretan diet, which is a high quality and representative example of the Mediterranean diet (Trichopoulou et al.,

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2006). The diet itself is based mainly on the consumption of vegetables, fruits, legumes, grains and olive oil, which is used in the preparation of almost every plate of food. The nutrient-rich ingredients, which are available in abundance, contribute to a long and healthy life and well-being (Prefectural Administration of Heraklion, 2007).

As a preliminary stage to the Cretan research, I had earlier conducted a comparable study on traditional and regional food products in Hungary, especially within the Northern Great Plain region. The same methodological framework was applied in the research conducted in Crete to ensure analytical consistency and enable meaningful comparison between the two regions.

The study examines region-level particularities alongside the perceptions of residents in connection with the consumption of traditional food products. The questionnaire primarily explored consumer preferences, levels of knowledge, purchasing practices and risk-related considerations in relation to traditional and regional products. The Cretan survey is a fundamental basis for determining the local key economic conditions underlying food production, as well as the characteristic features of traditional food consumption among inhabitants and the identification of their willingness to pay (Halasi, 2025).

Traditional and regional foods in the region of Crete

Nowadays the various effects of globalization – both positive and negative – are forming consumers' daily activities, influencing their needs and choices in their regular food and basic material purchases. The presence and regular consumption also awareness of traditional products in a wide range of society is an important issue. Through the exponentially increasing market development and diversification of multinational companies, the distinctive characteristics, tastes and other specific distinguishing features of food products are becoming increasingly uniform and similar throughout the world. This process can obstruct the marketing of traditional and regional food, which can lead to various negative economic trends, such as loss of jobs and livelihoods for local populations also reduction of product diversity, tax revenues or local economic growth, forced migration, increased unemployment, or reduction of national, regional or local heritage (Nábrádi, 2010). Traditional and region-specific food products have a distinctive position in the global food market because of their traditional production, unique taste and appearance, which are desirable to the consumers (Halasi, 2025).

Traditional food products are key elements of each country's food economy. The term "traditional" itself is defined by Regulation (EU) 2023/2411 of the European Parliament and of the Council as the proven use, over a period of time in history, of a product originating in a geographical area by producers within a community, which allows its transmission from generation to generation (European Parliament and the Council, 2023). Regulation (EU) 2024/1143 of the European Parliament and of the Council (11 April 2024) established a scheme for traditional specialities guaranteed to assist producers in the marketing of their products and in making them known to consumers,

with a view to preserving traditional production methods and recipes. According to the Regulation, traditional specialties guaranteed are characterised by the fact that they are produced or processed using methods which are traditionally used or with a traditional composition; or are made from raw materials or components traditionally used (European Parliament and the Council, 2024). Bertozzi (1998) defines a traditional food product as belonging to a particular group and area, and as part of a culture that involves the cooperation of individuals working there. Traditional food products are agricultural and food products whose processing, storage and maturing methods are consolidated over time through uniform and constant local use (Ministero Agricoltura, 1999). Guerrero (2009) highlights that traditional food products are an important part of European culture, identity and heritage, which require continuous development in order to maintain and increase their market share.

The Cretan region is one of the thirteen regions of Greece, covering an area of 8.336 km², which represents 6.3% of the total area of the country. The island of Crete occupies the largest part of the region, but it also includes smaller islands of Gavdos, Gavdopoula, Zeus, Chrissi, Koufonissi and Dionysades. The region of Crete is one of the most popular destinations for tourism. The high quality/safety and reputation of traditional and local food products are essential to maintain the international recognition of the brand name 'Crete' and the 'Cretan diet' (Kokkinakis et al., 2011).

Nowadays traditional Cretan gastronomy - its ingredients and preparation methods - is considered one of the healthiest cuisines in the world. Over the centuries, the richness and high quality of the region's food products have created a distinctive and unique cuisine, fresh and delicious, which combines with the natural environment in an exceptional seasonal harmony. Cheeses, honey, herbs and many other foods from the mountains and farmland of the Cretan region are the basis of the local gastronomy (Prefectural Administration of Heraklion, 2007). Meals play a very important role in the life of Greek families also the country's southest and largest island is famous worldwide for its Cretan diet, which is based on Mediterranean eating habits. Many studies have shown that the Mediterranean diet is associated with longevity, which can be partly attributed to the traditional Mediterranean foods that the diet itself contains (Trichopoulou et al., 2006). Summarised by Konstantinos (2007), Cretan inhabitants often consume olive oil, whole grain food, legumes, seasonal fruits and vegetables, fish, and in smaller quantities poultry, red meat, processed food and wine made from locally grown grapes.

The EuroFIR AISBL is an international, non-profit and membership-based organisation established under Belgian law. It was founded in 2009 and its primary purpose to provide long-term representation and coordination in the field of food information in Europe. The purpose of the association is to generate, publish and use food composition information and to promote international cooperation and harmonisation of standards to improve the quality, storage and accessibility of data. EuroFIR AISBL integrates the most accurate food information sourced from 26 compiler organisations across Europe, the United States and Canada (FoodEXplorer) as well as validated information on bioactive compounds (eBASIS). Food composition databases provide detailed,

<http://ea.bg.ac.rs>

country-specific information on the nutrient composition of food products also a wide range of components, including energy content, macronutrients (e.g. protein, carbohydrate, fat), vitamins and minerals also in some cases specific compounds such as amino acids and bioactive compounds (European Food Information Resource, 2024). In addition, one of the objectives of each national database is to provide data on the nutritional composition of traditional food, so that they are included together with their composition and method of preparation, providing useful information to the food industry for the production of traditional products (Trichopoulou et al., 2006). In Greece, two related databases are available: the Composition tables of foods and Greek dishes (HelTH) also the Medical School of Crete has published a food composition database (Food Composition Tables of Greek Foods), specific to the country and Crete in particular (European Food Information Resource, 2024).

The Food Composition Tables of Greek Foods provide the nutritional composition of some Greek foods according to twelve categories - dairy products, fish, seafood, meat, meat products, vegetables, fruits, olives, seeds and nuts, legumes, grains and traditional food. The Greek database includes typical Cretan products in the following food categories:

- *Dairy products*: Anthotiro cheese (Ανθότυρο Κρήτης), Graviera cheese (Γραβιέρα Κρήτης), Kefalotiri cheese (Κεφαλοτύρι Κρήτης), Mizithra cheese (Μυζήθρα Κρήτης);
- *Meat*: Lamb stew (Αρνί ημιάγριο βραστό Κρήτης), Goat stew (Κατσίκι ημιάγριο βραστό Κρήτης), Homemade pork stew (Χοιρινό σπιτικό βραστό Κρήτης);
- *Vegetables*: Raw/green amaranth (Βλήτα ωμά, Κρήτης), Boiled silver onions (Βολβοί βρασμένοι, Κρήτης), Cretan boiled chard (Γούλες Κρήτης βρασμένες), Boiled chicory from Crete (Ραδίκια βρασμένα Κρήτης), Boiled spiny chicory from Crete (Σταμναγκάθι βρασμένο Κρήτης);
- *Fruits*: Black Cretan Cotsifali grape (Σταφύλι κοτσιφάλι μαύρο Κρήτης), Sultana grapes from Crete (Σταφύλι σουλτανί Κρήτης);
- *Olives*: Cretan black olives (Ελιές μαύρες (σταφιδοελιές) Κρήτης), Cretan green olives (Ελιές πράσινες (τσακιστές) Κρήτης);
- *Grains*: Traditional barley rusk from Crete (Παξιμάδι κριθαρένιο παραδοσιακό Κρήτης), Boiled sour trahanas from Crete (Τραχανάς ξινός Κρήτης (βραστός)). (Medical School of Crete, 2024).

Cretan people are really proud of their fresh raw materials also typical and local dishes, such as μουσακας (moussakas: casserole of aubergines with potatoes and minced meat), τζατζικι (tzatziki: yoghurt flavoured with grated cucumber and garlic), χοχλιοί μπουμπουριστοί (hohli bourbourouristi: a traditional dish made from snails), ντάκος (Cretan dakos: a traditional starter, actually a wholemeal rusk) - all of which are popular among tourists who are visiting the island. Traditional food products are essential part of the Cretan dietary patterns and are considered healthy and delicious by the local population.

Materials and methods

I carried out primary research related to the research topic, using descriptive statistical tools. Similar to my previous research conducted in the Northern Great Plain region, the Cretan questionnaire-based study used an identical research design and methodological approach. The same set of hypotheses was also formulated to ensure comparability between the two studies. During the primary research, I applied a quantitative approach utilizing structured questionnaires, which were administered between 5 June 2022 and 12 December 2022. The key objective was to evaluate respondents' willingness to pay more for traditional and regional food products also to draw deductions regarding the fundamental economic circumstances of food production, as well as the distinctive characteristics of the consumption of these products within the region of Crete (Halasi, 2025).

The questionnaire was conducted for the residents of the Cretan region, exclusively online, also it was created using the Google Docs application. The participation was voluntary and the Greek-language survey was attainable on a social networking site, linked to various local communities and regions through user communities/groups (names of the communities/regions: Agios Nikolaos, Chania, Elounda, Gournes, Gouves, Heraklion, Hersonissos, Ierapetra, Kalamaki, Koutouloufari, Lasithi, Malia, Mirtos, Mohos, Pacheia Ammos, Paleochora, Plakias, Platania, Rethymnon, Sissi, Sougia, Stalis, Stavrochori, Tertsia). The total sample size for the Cretan region is 607 persons, during the research SPSS 25.0 and Excel programs were used to process the questionnaires.

The sample size itself provides a solid basis for statistical inference also it can detect relationships among variables and supports the robustness of quantitative analysis. In survey research, samples exceeding 400–500 cases generally allow for reliable estimation with an acceptable margin of error at a 95% confidence level (Bryman, 2016). The sampling strategy ensured that the survey reached the relevant target population, namely individuals with direct experiences related to the island. In online environments, targeted community groups often function as natural clusters of the population under study, making them effective channels for accessing specific social segments (Kosinski et al., 2015). The Facebook groups used for the survey represent one of the most active and concentrated forms of community engagement related to the island, thereby supporting the appropriateness of the sampling approach.

Also some sources of bias may influence the representativeness of the data and must be acknowledged to fully contextualize them:

- self-selection bias (individuals with stronger interest in Crete may have been more inclined to participate, thereby overrepresenting highly engaged users),
- coverage bias due to platform-specific data collection (individuals who are not active on Facebook were excluded from the sampling frame and certain demographic categories may were underrepresented),
- social desirability bias (even in anonymous online settings, individuals may provide answers they perceive as socially acceptable or favourable),

- algorithmic exposure bias (the visibility of posts within Facebook is partially determined by the platform's algorithms and the algorithmic filtering may systematically favour highly active users (Bakshy et al., 2015).

Overall, the sample's size, targeted distribution, internal heterogeneity and alignment with the study's conceptual population make the 607-respondents dataset methodologically adequate and partially representative for the aims of this research.

Results and Discussions

Social and demographic attributes of the survey population

The demographic attributes of the respondent sample were classified according to gender, age categories, educational attainments and the type of settlement of habitation. In addition, the survey collected information on perceived income status of the responders, as well as the level of per capita household income (Halasi, 2025).

In the Cretan region, women comprised 71.5% of the responders and nearly the one-third (32.1%) of them belong to the '30-39 years' age category. More than a quarter of the respondents (26.2%) belong to the '18-29 years' or the '40-49 years' age categories. Almost two-thirds of respondents (64.9%) have higher education level and a quarter (25.0%) of them have graduated. Nearly three quarters (72.7%) of the surveyed inhabitants live in cities with county status. More than a third of Cretan respondents (35.9%) are active white-collar workers and nearly a fifth of them (17.3%) are dependents. The proportion of people in the categories of homemakers, retired/retired on disability pension and childcare allowance claimants is relatively low. Almost half of the residents (41.7%) have a per capita income of more than 600 EUR and 13.7% of them have an income between 451 and 600 EUR. Nearly two-thirds of respondents (61.8%) spend between 21% and 40% of their income on food and more than one fifth of them (21.4%) spend between 41% and 60%. The share of food purchases above 60% of the total income is 2.5%. The detailed social and demographic characteristics and composition of the survey population is shown in *Table 1*.

Table 1. Social and demographic attributes of the survey population.

Number of survey participants (N=607)		
Demographic categories	N	%
<i>Gender categories</i>		
Man	173	28.5%
Woman	434	71.5%
<i>Age categories</i>		
From 18 to 29 years old	159	26.2%
From 30 to 39 years old	195	32.1%
From 40 to 49 years old	159	26.2%
From 50 to 59 years old	75	12.4%
Over 60 years old	19	3.1%

<i>Educational attainments</i>		
Elementary school	1	0.2%
Specialized school	60	9.9%
Graduation	152	25.0%
Higher education	394	64.9%
<i>Settlement classification</i>		
County town	441	72.7%
Settlement with more than 10.000 residents	61	10.0%
Settlement from 2.000 to 10.000 residents	53	8.7%
Settlement with under 2.000 residents	52	8.6%
<i>Economic activity categories</i>		
Employed in blue-collar occupations	77	12.7%
Employed in white-collar occupations	218	35.9%
Childcare allowance claimant	12	2.0%
Retired/retired on disability pension	18	3.0%
Student	61	10.0%
Homemaker	19	3.1%
Unemployed	42	6.9%
Dependent	105	17.3%
Other	55	9.1%
<i>Level of per capita household income categories</i>		
Under 150 EUR	46	7.6%
151-250 EUR	45	7.4%
251-350 EUR	35	5.8%
351-450 EUR	46	7.6%
451-600 EUR	83	13.7%
Over 600 EUR	253	41.7%
No answer	99	16.3%
<i>How many percent of the income belongs to food purchasing in the household?</i>		
0-20%	87	14.3%
21-40%	375	61.8%
41-60%	130	21.4%
Over 60%	15	2.5%

Source: Own editing, 2024; Halasi, 2025

Hypothesis tests

A key objective of the study was to analyze the economic significance of traditional and regional food products among local consumers in the Cretan region. The study emphasized regional particularities by gathering the perspectives of local inhabitants regarding their consumption, with the dual aim of supporting the domestic market and enhancing product competitiveness. While local and traditional products primarily serve the interests of local enterprises and the tourism sector – and are therefore not positioned to address the broader structural challenges of the region – they can support the economic development and meet the specific needs of various social categories through their complementary or ‘supporting’ role (Halasi, 2025).

The first hypothesis

H₁: Local inhabitants who frequently eat traditional and regional meals in their own households often decide to consume them in restaurants as well.

The study examined how frequently local inhabitants consume traditional Greek meals within their own households, as well as the extent to which they select traditional Greek meals when dining in restaurants (Halasi, 2025). A cross-tabulation analysis of these two variables – household consumption frequency and consumption frequency in restaurants – was performed and the results are presented in *Table 2*. below.

Table 2. Household consumption frequency of traditional and regional foods in relation to their consumption in restaurants.

How often do you eat traditional Greek food in your own household?		When you visit a restaurant, how often do you select traditional Greek meals?			
		Mostly I don't select	Sometimes yes, sometimes no	Mostly I select	Total
Less than once a month	N	5	14	14	33
	%	15.2%	42.4%	42.4%	100.0%
No more than once a week	N	4	20	22	46
	%	8.7%	43.5%	47.8%	100.0%
Several times a week	N	5	74	161	240
	%	2.1%	30.8%	67.1%	100.0%
Daily	N	2	72	210	284
	%	0.7%	25.4%	73.9%	100.0%
Total	N	16	180	407	603
	%	2.7%	29.9%	67.5%	100.0%

Source: Own editing, 2024; Halasi, 2025

When examining the relation between the two qualitative variables, Pearson's chi-square (χ^2) test indicated a statistically significant association ($p < 0.01$). The result demonstrates that the frequency with which individuals consume traditional foods at their households is associated with how often they choose traditional foods when dining in restaurants. As both variables form an ordinal scale – meaning that the ranking of numerical values corresponds to an inherent order in the responses – the relation was additionally examined using Spearman's rank correlation (Halasi, 2025). The Spearman correlation has a value of -0.18 and $p < 0.001$. The latter means that individuals who consume traditional foods more frequently at home also tend to choose these foods more often when dining in restaurants, but there is a break in the monotony, and there are two distinct patterns of response. In one pattern, about 70% of consumers (67.1% and 73.9%) mostly and about 30% (25.4% and 30.8%) sometimes choose traditional Greek foods in restaurants, if they eat it several times a week and daily in their own households. The other pattern shows that around 45% (42.4% and 47.8%) of residents choose traditional Greek foods in restaurants most of the time and around 45% (42.4% and 43.5%) sometimes, if they eat it in their households at most once a month or once a week.

The hypothesis H_1 is confirmed.

The second hypothesis

H_2 : Local residents who frequently consume traditional and regional foods in their households consider that it is relevant that these food products are produced by using local ingredients.

A cross-tabulation analysis of the variables – the household consumption frequency of traditional and regional foods in relation to the relevance of using local ingredients – is shown in *Table 3.* below.

Table 3. Household consumption frequency of traditional and regional foods in relation to the relevance of using local ingredients.

How often do you eat traditional Greek food in your own household?		How significant is the use of local ingredients to you when evaluating a food product?			
		Very relevant	Relevant	Irrelevant	Total
Less than once a month	N	7	9	15	31
	%	22.6%	29.0%	48.4%	100.0%
No more than once a week	N	8	26	9	43
	%	18.6%	60.5%	20.9%	100.0%
Several times a week	N	84	126	25	235
	%	35.7%	53.6%	10.6%	100.0%
Daily	N	146	127	8	281
	%	52.0%	45.2%	2.8%	100.0%
Total	N	245	288	57	590
	%	41.5%	48.8%	9.7%	100.0%

Source: Own editing, 2024; Halasi, 2025

The association between the two variables was found to be statistically significant ($p < 0.01$) based on Pearson's chi-square (χ^2) test, indicating that the frequency with which individuals consume traditional foods at home is related to the degree to which they consider the importance of using local ingredients in food production. Since the two variables form an ordinal scale, their relation was further examined using Spearman's rank correlation. The resulting coefficient was 0.284 and $p < 0.001$, demonstrating that higher household consumption frequency of traditional and regional foods is connected to a higher relevance of using locally sourced ingredients (Halasi, 2025). The row percentages (Table 3.) further support this trend: as the frequency of home consumption increases, the proportion of consumers who consider the relevance of using local ingredients shows a monotonous rise (18.6%, 35.7%, 52.0%). Conversely, the share of respondents who regard this aspect as unimportant is monotonically decreasing (48.4%, 20.9%, 10.6%, 2.8%).

The hypothesis H_2 is confirmed.

The third hypothesis

H₃: Local inhabitants who frequently select traditional Greek meals in restaurants also demonstrate a greater willingness to pay more for food products prepared with traditional, locally sourced ingredients.

The survey investigated both the frequency with which residents choose traditional Greek foods in restaurants also their willingness to pay more for food products made from traditional, locally sourced ingredients (Halasi, 2025). *Table 4.* below presents the relation between these two variables.

Table 4. The relation between the frequency of selecting traditional Greek meals in restaurants also willingness to pay for food products made from traditional local ingredients.

When you visit a restaurant, how often do you choose traditional Greek dishes?		Would you be willing to pay more for a food product, prepared using traditional, locally sourced ingredients?			
		Yes	Maybe	No	Total
Mostly I don't choose	N	10	3	2	15
	%	66.7%	20.0%	13.3%	100.0%
Sometimes yes, sometimes no	N	85	76	19	180
	%	47.2%	42.2%	10.6%	100.0%
Mostly I choose	N	251	124	31	406
	%	61.8%	30.5%	7.6%	100.0%
Total	N	346	203	52	601
	%	57.6%	33.8%	8.7%	100.0%

Source: Own editing, 2024; Halasi, 2025

The Pearson's chi-square (χ^2) test indicated that the relation between the two variables is statistically significant ($p < 0.01$), suggesting that the frequency with which residents select traditional Greek foods in restaurants is associated with their willingness to pay more for products made from traditional, locally sourced ingredients (Halasi, 2025). Interestingly, even consumers who mostly do not choose traditional Greek dishes in restaurants exhibit a notable willingness to pay for these products (66.7%). Conversely, the willingness to pay decreases if a Cretan resident sometimes chooses (47.2%, 42.2%, 10.6%) or mostly chooses (61.8%, 30.5%, 7.6%) these traditional food products in a restaurant.

The hypothesis H₃ is confirmed.

The Kruskal-Wallis and Jonckheere-Terpstra tests were applied to examine differences in commitment to traditional and regional foods across groups defined by key background variables, including age, type of settlement, and per capita household income. The commitment was assessed using four survey items:

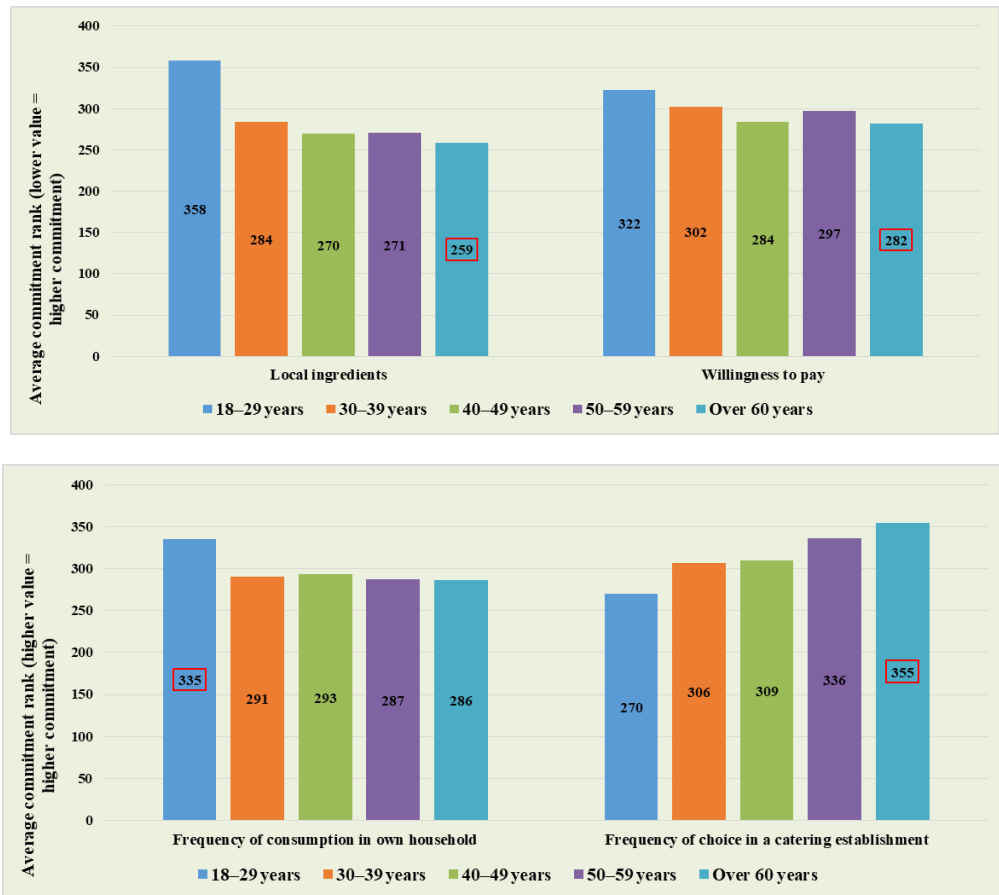
- The importance of a food product being produced from locally sourced ingredients.
- Willingness to pay more for a food product made from traditional, locally sourced ingredients.
- Frequency of consuming traditional Greek food products within the household.
- Frequency of selecting traditional Greek meals when visiting restaurants (Halasi, 2025).

The fourth hypothesis

H₄: The level of commitment to traditional and regional foods among local inhabitants increases with age.

The Jonckheere-Terpstra test is a rank-based nonparametric test that can be used to determine whether there is a statistically significant trend between an ordinal independent variable and a continuous or ordinal dependent variable (Ali et al., 2015). The Jonckheere-Terpstra test was applied to compare the level of commitment to traditional and regional foods across different age categories. In this case, in contrast to the Kruskal-Wallis test, the counterhypothesis is not the inequality of the group medians, but their monotonic variation, which is significant in connection with age categories and four factors: the importance of using local ingredients, willingness to pay more, frequency of consumption in households also frequency of selection in restaurants ($p < 0.05$). The level of commitment to traditional and regional foods by age groups is illustrated in *Figure 1*. below.

Figure 1. Commitment to traditional and regional foods across age categories of local residents



Source: Own editing, 2024; Halasi, 2025

For the variables importance of local ingredients and willingness to pay, lower response values indicate higher commitment to traditional and local foods (Halasi, 2025). Based on the average rank values, the 'over 60 years' age category demonstrates the strongest commitment, with average ranks of 259 for the importance of local ingredients also 282 for willingness to pay more. In contrast, the '18–29 years' age category shows the lowest level of commitment, with average ranks of 358 (importance of local ingredients) and 322 (willingness to pay).

For the variables frequency of consumption in households and frequency of selection in restaurants, higher values correspond to stronger commitment (Halasi, 2025). The '18–29 years' age category consumes traditional Greek foods most frequently at home (average rank: 335), whereas the 'over 60 years' group consumes them less often (average rank: 286). In restaurants, the pattern is reversed: the 'over 60 years' group selects traditional Greek meals most frequently (average rank: 355), while the '18–29 years' group shows the lowest commitment (average rank: 270).

The hypothesis H_4 is confirmed.

The fifth hypothesis

H_5 : In certain municipalities within the region, commitment to traditional and regional foods appears to increase as the population size decreases.

The Kruskal-Wallis test is a nonparametric statistical test. It evaluates differences between three or more independently sampled categories based on a single, non-normally distributed continuous variable. Non-normally distributed data (e.g., ordinal or ranked data) are suitable for the Kruskal-Wallis test (Kruskal & Wallis, 1952). The Kruskal-Wallis test was applied to compare the commitment to traditional and regional foods among residents across different types of settlements. The analysis revealed no statistically significant differences between settlement types, $p > 0.01$.

The hypothesis H_5 is not confirmed.

The sixth hypothesis

H_6 : Commitment to traditional and local foods increases as the per capita household income decreases.

The Kruskal-Wallis test was applied to compare consumer commitment to traditional and regional foods across different income categories. The results indicated no statistically significant differences between the groups ($p > 0.01$).

The hypothesis H_6 is not confirmed.

The results confirm that traditional and regional foods remain vital components of Crete's social and economic life, but with generational differences that reflect changing lifestyles and values. The integration of traditional food production with agritourism offers additional development opportunities. Collaboration between farmers, restaurant owners and tourism operators would further support the island's economy by combining gastronomy with

cultural tourism. Th research quantifies behavioral patterns among Cretan consumers and statistically confirms the socio-economic relevance of traditional food products.

Conclusions

Cretan locals are hospitable and traditional people who really love and respect their homeland also they are always ready to share their tables with a foreign visitor. They usually serve their guests a glass of local wine, raki or ouzo also homemade meals and sweets. Some special and traditional local restaurants, tavernas and cafés offer appetizers and main dishes based on the Cretan diet, which are often served also at regional community events and programs in the towns and villages (Region of Crete, 2013).

In the Cretan region women play a significant role in the society also in the family in connection with food purchasing. They are usually the ones who decide what foods to buy, also they are the decisive majority of respondents in the region. During my research, I formulated six hypotheses and four of them were confirmed also two of them were not confirmed.

As a result of the study, two correlations in particular can be highlighted:

- The frequency with which residents choose traditional Greek meals in restaurants is associated with their willingness to pay more for food products made from traditional, locally sourced components. Even consumers who rarely select traditional dishes in restaurants still demonstrate a willingness to pay for these food products. If the Cretan resident sometimes or mostly chooses these traditional Greek meals in a restaurant, their willingness to pay decreases.

- Among age categories, inhabitants over 60 years old represent the highest level of commitment to traditional and local foods, particularly regarding the significance of using local ingredients and willingness to pay more. In contrast, the '18–29 years' age group shows the lowest level of commitment (Halasi, 2025).

Traditional and regional foods can contribute to economic growth and increased tax revenues in the region:

- they represent product development opportunities for industry, enable the launch of small and medium-sized enterprises, and provide job creation opportunities in underdeveloped areas;

- they offer opportunities for expanding the range of products available in retail and catering, enabling a higher proportion of locally produced food products to be used locally;

- they can be used in rural development programs to promote and boost tourism, for example by organizing food tours and themed events;

- overall, they strengthen the attractiveness and image of the region and the country (Szakály et al., 2010).

It is a relevant objective that consumers in the Cretan region choose traditional and regional food products (Halasi, 2025). The practical implications of the research conclusions can be applied in several areas, including through the development and implementation of specific action plans:

- supporting regional governments in developing local product strategies and tourism identities,
- supporting local chambers of agriculture in planning marketing support for local producers,
- providing inspiration and guidance to tourism businesses in the region in developing their gastronomic tourism offerings based on consumer preferences,
- supporting and encouraging local producers in developing new branding and packaging strategies,
- supporting and encouraging the education of local young people to make conscious decisions about the consumption of traditional and local foods, supporting local communities and values, and increasing local tax revenues.

Conflict of interests

The authors declare no conflict of interest.

References

1. Ali, A., Rasheed, A., Siddiqui, A., Naseer, M., Wasim, S. & Akhtar, W. (2015). Non-Parametric Test for Ordered Medians: The Jonckheere Terpstra Test. *International Journal of Statistics in Medical Research*, 4(2), 203-207.
2. Bakshy, E., Messing, S., & Adamic, L. A. (2015). Exposure to ideologically diverse news and opinion on Facebook. *Science*, 348(6239), 1130–1132. DOI:10.1126/science.aaa1160
3. Bertozzi, L. (1998). *Tipicidad alimentaria y dieta mediterránea*. In Medina, A., Medina, F. & Colesanti, G. (Eds.), *El color de la alimentación mediterránea. Elementos sensoriales y culturales de la nutrición*, Icaria, Barcelona, pp. 15-41. [*in English*: Bertozzi, L. (1998). *Food typicality and Mediterranean diet*. In Medina, A., Medina, F. & Colesanti, G. (Eds.), *The color of Mediterranean food. Sensory and cultural elements of nutrition*, Icaria, Barcelona, pp. 15-41.]
4. Bryman, A. (2016). *Social Research Methods*. OXFORD University Press, Oxford, p. 170-197.
5. European Food Information Resource, Retrieved from https://www.eurofir.org/about_eurofir/ (December 18, 2024)

6. European Parliament and the Council (2023). *Regulation (EU) 2023/2411 of the European Parliament and of the Council of 18 October 2023 on the protection of geographical indications for craft and industrial products and amending Regulations (EU) 2017/1001 and (EU) 2019/1753 (Text with EEA relevance)*. Retrieved from <https://eur-lex.europa.eu/legal-content/HU/TXT/?uri=CELEX%3A32023R2411&qid=1734515370935> (November 23, 2024)
7. European Parliament and the Council (2024). *Regulation (EU) 2024/1143 of the European Parliament and of the Council of 11 April 2024 on geographical indications for wine, spirit drinks and agricultural products, as well as traditional specialities guaranteed and optional quality terms for agricultural products, amending Regulations (EU) No 1308/2013, (EU) 2019/787 and (EU) 2019/1753 and repealing Regulation (EU) No 1151/2012*. Retrieved from <https://eur-lex.europa.eu/legal-content/hu/TXT/?uri=CELEX%3A32024R1143> (November 23, 2024)
8. Guerrero, L., Guàrdia, M. D., Xicola, J., Verbeke, W., Vanhonacker, F., Zakowska-Biemans, S., Sajdakowska, M., Sulmont-Rossé, C., Issanchou, S., Contel, M., Scalvedi, M. L., Granli B. S. & Hersleth, M. (2009). Consumer-driven definition of traditional food products and innovation in traditional foods. A qualitative cross-cultural study. *Appetite*, 52 (2), 345-354. doi: 10.1016/j.appet.2008.11.008
9. Halasi, N. (2025). The economic importance of traditional and regional food in the Northern Great Plain region. *Applied Studies in Agribusiness and Commerce*, 19(1). <https://doi.org/10.19041/APSTRACT/2025/1/10>
10. Kokkinakis, E., Kokkinaki, A., Kyriakidis, G., Markaki, A. and Fragkiadakis, G. A. (2011). HACCP implementation in local food industry: a survey in Crete, Greece. *Procedia Food Science*. 1 (1), 1079-1083. doi: 10.1016/j.profoo.2011.09.161
11. Konstantinos, D. (2007): *Cretan diet*. Thesis, TEI of Crete, Crete. p.10-11. Retrieved from <https://apothesis.lib.hmu.gr/bitstream/handle/20.500.12688/7387/dragasis2007.pdf?sequence=1&isAllowed=y> (November 23, 2024)
12. Kosinski, M., Matz, S. C., Gosling, S. D., Popov, V., & Stillwell, D. (2015). Facebook as a research tool for the social sciences: Opportunities, challenges, ethical considerations, and practical guidelines. *American Psychologist*, 70(6), 543–556. <https://doi.org/10.1037/a0039210>
13. Kruskal, W. H. & Wallis, W. A. (1952). Use of ranks in one-criterion variance analysis. *Journal of the American Statistical Association*, 47, 583–621.
14. Medical School of Crete. (2024). *Food Composition Tables of Greek Foods*. Retrieved from https://users.sch.gr/cristom40/GreekTables/pinakes/full_trofima.htm (December 18, 2024)

15. Ministero Agricoltura. (1999). *Decreto Legislativo 30 Aprile 1998 n. 173*. Decreto Ministero Agricoltura 8 settembre 1999 n. 350. [in English: Ministry of Agriculture. (1999). Legislative Decree of 30 April 1998, No 173. Legislative Decree of 8 September 1999, No 350.]
16. Nábrádi, A. (2010). *A hagyományos és tájjellegű élelmiszerek gazdasági jelentősége*. In Szakály, Z., Pallóné Kisérdei, I. & Nábrádi, A. (szerk.). Marketing a hagyományos és tájjellegű élelmiszerek piacán, 30-36. Kaposvári Egyetem Gazdaságtudományi Kar, Kaposvár, p. 30. [in English: Nábrádi, A. (2010). *The economic importance of traditional and regional foods*. In Szakály, Z., Pallóné Kisérdei, I. & Nábrádi, A. (Eds.). Marketing of traditional and regional foods, 30-36. University of Kaposvár, Faculty of Economics, Kaposvár, p. 30.]
17. Prefectural Administration of Heraklion. (2007). *Prefecture of Heraklion, land of contrasts*. TYPOKRETA, Heraklion, p. 86-87.
18. Region of Crete. (2013). *Heraklion*. Mylonas Print, Athens, p. 32.
19. Szakály, Z. (2010). *Marketingkutató a hagyományos és tájjellegű élelmiszerek piacán*. In Szakály, Z., Pallóné Kisérdei, I. & Nábrádi, A. (szerk.). Marketing a hagyományos és tájjellegű élelmiszerek piacán, 70-79. Kaposvári Egyetem Gazdaságtudományi Kar, Kaposvár. [in English: Szakály, Z. (2010). *Marketing research in the market of traditional and regional foods*. In Szakály, Z., Pallóné Kisérdei, I. & Nábrádi, A. (Eds.). Marketing of traditional and regional foods, 70-79. University of Kaposvár, Faculty of Economics, Kaposvár.]
20. Trichopoulou, A., Vasilopoulou, E., Georga, K., Soukara, S. and Dilis, V. (2006). Traditional foods: Why and how to sustain them. *Trends in Food Science & Technology*, 17 (9), 498-504. doi: 10.1016/j.tifs.2006.03.005