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Research Article

A GOLDEN TOUCH TO ESKİŞEHİR GASTRONOMY: MIDAS

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Abstract

The purpose of this study is to develop an original recipe based on food elements consumed during the Phrygian civilization, considering contemporary eating habits and taste preferences. Within this scope, an original dish named "MIDAS," created by adapting the Phrygian culinary heritage to modern tastes, was developed. The research aims to contribute to cultural sustainability and gastronomic tourism by introducing a new and original product to both Eskişehir and Turkish cuisine. Furthermore, the study serves as an important example demonstrating that archaeological data can be transformed not only into theoretical knowledge but also into practical gastronomic products. It emphasizes that scientifically updating and presenting historical recipes can be an effective tool for revitalizing local cuisines and preserving cultural heritage. Based on archaeobotanical and zooarchaeological findings from the Phrygian period, the theoretical recipe proposed by McGovern (2000) was examined, and inspired by it, the original "MIDAS" dish was created. The developed dish was evaluated by a panel of 10 gastronomy experts using sensory analysis methods. Results revealed that the "MIDAS" dish scored higher in terms of taste, aroma, texture, and overall appreciation compared to the traditional Phrygian stew. However, Phrygian stew stood out for its odor and sharp taste.

Keywords: Phrygian Cuisine, Midas Dish, Archaeogastronomy

Introduction

The Anatolian region, as a crossroads of diverse civilizations throughout history, has developed a uniquely rich and diverse culinary heritage as a result of continuous cultural interactions (Mintz, 1996; Turner, 2003; Dalby, 2003). The distinct food and beverage traditions of major civilizations such as the Hittites, Phrygians, Romans, and Byzantines have deeply influenced the diversity and character of present-day Anatolian cuisine. The Phrygians, who ruled in the western and central parts of Anatolia between 1200 BCE and the 7th century BCE, made unique contributions to the cultural and, consequently, culinary history of the region. Valuable information about the dietary habits of the Phrygians has been uncovered through archaeological findings from the Midas Tumulus, located in their capital Gordion and dated to 740 BCE (Sevin, 2003; Penn Museums, 2025). The remains retrieved from this monumental tomb provide significant clues about ritualistic feasting and the foods consumed by the Phrygians (Liebhart and Stephens, 2016).

A review of the literature reveals that academic studies on Phrygian culinary culture mainly focus on archaeobotanical (plant remains) and zooarchaeological (animal bones) analyses (De Vries, 1990; Rose, 1997; Branting et al., 2019). Although these studies offer valuable insights into Phrygian agricultural practices, livestock activities, and basic food sources, research involving the reinterpretation of ancient recipes in the context of modern cuisine and the sensory evaluation of these interpretations remains limited. The hypothetical

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Phrygian meals proposed by McGovern (2000), based on the findings from the Midas Tumulus, provide a crucial starting point for understanding the dietary patterns of the era. However, the extent to which these theoretical reconstructions align with contemporary consumer preferences remains unclear. At this point, the approaches of prominent figures in the fields of food history and archaeogastronomy offer a valuable framework for understanding the modern potential of Phrygian cuisine. Albala (2011) emphasizes the cultural significance of adapting past dietary practices to the present, suggesting that the integration of ancient recipes into modern gastronomy serves as a vital bridge for preserving intercultural connections and promoting gastronomic tourism. Similarly, Flandrin and Montanari (1999) highlight that preserving and reviving ancient and traditional food cultures in the modern world is both a historical necessity and an economic opportunity. Horn (2010) also asserts that data obtained through the examination of ancient food remains in the field of archaeogastronomy opens new horizons for modern gastronomy and cultural heritage management, emphasizing the importance of adapting historical recipes to today's context as a means of promoting regional culture and stimulating tourism. Serel, Aytaç, and Özbal (2014) examine the reflections of Anatolia's ancient culinary traditions in today's cuisine, underlining the contribution of integrating historical food elements into contemporary gastronomy in terms of cultural sustainability and tourism development.

Despite these comprehensive insights, there remains a notable gap regarding the practical application of this knowledge; that is, how to develop an original recipe that reflects the gastronomic heritage of the Phrygian civilization while appealing to modern consumers. This issue constitutes the primary research problem of the study: formulating such a recipe that bridges past and present. Moreover, a critical dimension of this problem is scientifically assessing the acceptability of the developed recipe among the target audience through sensory analysis methods, ensuring its viability beyond theoretical reconstruction.

Furthermore, this study reinterprets the core elements and potential flavors of Phrygian cuisine by adapting them to contemporary taste preferences, thus presenting a significant potential for the integration of this rich cultural heritage into the gastronomy and tourism sectors. The incorporation of the culinary heritage of an ancient civilization into modern gastronomy is noteworthy in terms of cultural sustainability and the creation of unique gastronomic experiences.

Phrygian Culinary Culture

Anatolian cuisine has been enriched over a long period through the merging of diverse cultures. Archaeological evidence confirms that agriculture and animal husbandry—with their dietary foundations—were established here from the Neolithic period. Civilizations such as the Hittites, Phrygians, Romans, and Byzantines introduced their unique food and drink traditions to the region, blending them with existing customs. This multifaceted cultural interaction reveals the richness and distinctive character of today's Anatolian cuisine (Flandrin and Montanari, 1999; Sevin, 2003; Albala, 2011).

The culinary culture of the Phrygian region developed into a unique structure shaped by its geographical location and agricultural potential (Sevin, 2003). It was based on crops grown in the fertile lands of the region and the associated livestock activities (Mintz, 1996). Important information about this rich culinary culture has been obtained from the Great Tumulus, also known as the Midas Tumulus, located in Gordion, the Phrygian capital, and dated to 740 BCE. Discovered by archaeologists in 1957, this wooden burial chamber contained a male skeleton laid supine on a couch made of pine (or juniper) and cedar. Alongside him were bronze vessels, cauldrons, bowls, fibulae, ceramic storage jars, wooden serving tables, and a dining table; these items provide significant evidence about the lifestyle of the period. These findings support the hypothesis that the deceased was a Phrygian king and that a funeral banquet was held in his honor before burial. According to belief, the materials used in this feast were placed in the tomb to assist the king in the afterlife (Sevin, 2003; Penn Museum, 2025).

Remains from the Great Tumulus, thought to be of King Gordion, were subjected to detailed scientific analysis to clarify what was served at his funeral feast. Liebhart and Stephens (2016, p. 35) summarize the most notable research as the team led by Dr. Patrick McGovern: they chemically analyzed residues in the vessels from the tomb to determine the composition of the ancient foods and drinks. McGovern (2000) examined 18 ceramic jars inside three large bronze cauldrons (each holding 150 liters). These analyses revealed that the main dish at the funeral rite was a sheep or goat stew, seasoned with lentils and spices. The analysis indicated that lamb was more suitable for this dish. Chemical tests also showed the use of honey, wine, and olive oil in marinating the meat. According to the study, the meat was first cooked on a grill (before being deboned) and finally served

with herbs such as fresh anise or fennel, along with modest amounts of spice. Young (1958) notes that cereals like wheat and barley were commonly used for bread-making and porridge preparation. In addition, studies at Koru Mound by Lake Kuş (Manyas Lake) which includes tombs of Phrygian, Lydian, Persian, and Macedonian nobility—have shown that lentils, chickpeas, and beans were consumed in Phrygian cuisine (World Archaeology, 2012).

The archaeological site at Kerkenes in Yozgat also sheds light on Phrygian food culture. Archaeobotanical analyses there have identified four primary agricultural products: free-threshing wheat (likely bread wheat, *Triticum aestivum*), hulled six-row barley (*Hordeum vulgare*), bitter vetch (*Vicia ervilia*), and lentils (*Lens culinaris*). Wild fruits such as Starks Gold cherries (*Prunus avium*) and cornelian cherries (*Cornus mas*) were also identified (Branting et al., 2019, p. 547).

Based on these findings from the literature, the following table presents the food and drink elements discovered in Phrygia:

CATEGORY	ITEMS	REFERENCE			
GRAİNS	Free-threshing wheat (possibly	Branting et al., 2019			
	bread wheat, Triticum aestivum)				
	Hulled barley (at least partially	Branting et al., 2019			
	six-row variety, Hordeum				
	vulgare)				
LEGUMES	Bitter vetch (Vicia ervilia)	Branting et al., 2019			
	Lentils (Lens culinaris)	Branting et al., 2019; McGovern,			
		2000; World Archaeology, 2012			
	Chickpeas	World Archaeology, 2012			
	Beans	World Archaeology, 2012			
WILD FRUITS	Starks Gold Cherry (Prunus	Branting et al., 2019			
	avium L.)				
	Cornelian cherry (Cornus mas)	Branting et al., 2019			
MEAT	Sheep or goat (in stew)	McGovern, 2000			
	Lamb (determined to be more	McGovern, 2000			
	suitable)				
BEVERAGE	Wine (used in marination)	McGovern, 2000			
OTHER	Honey (used in marination)	McGovern, 2000			
	Olive oil (used in marination)	McGovern, 2000			
SPICES/HERBS	Anise or fennel (believed to be	McGovern, 2000			
	used for flavoring after cooking)				

Table 1. Food and Beverage Elements in Phrygian Culture

Reference: Table 1 is based on a literature review conducted by the authors.

Literature

Academic research on Phrygian culinary culture largely centers on archaeobotanical and zooarchaeological data derived from excavation sites. These studies provide valuable information about Phrygian dietary habits, agricultural practices, and livestock activities.

As Gordion was the capital of the Phrygian civilization, it is considered a key archaeological site for understanding Phrygian food culture. Excavations there have uncovered carbonized plant remains, offering direct evidence of staple cereals (barley and wheat species), legumes (lentils), fruits (grapes), and oil-producing plants consumed by the Phrygians (De Vries, 1990).

Henrickson's (1994) work on Phrygian ceramic vessels offers insights into possible cooking methods (boiling, baking, stewing). For instance, large pithoi were likely used for storage, while vessels of various sizes may have been used for food preparation and serving.

Zooarchaeological studies of animal bones show that livestock play a crucial role in Phrygian diets. Remains from cattle, sheep, goat, and pig suggest these animals were raised for both meat and dairy products (Rose, 1997). Evidence of wild game also suggests that hunting contributed to the Phrygian food economy.

More recently, in addition to paleobotanical and zooarchaeological analysis, new methods such as organic residue analysis on ceramic vessels have begun illuminating Phrygian food culture. These studies can provide detailed information on cooking techniques and the composition of consumed foods (Middleton & Barnard, 2005).

A review of the literature shows that some academic approaches aim to reconstruct Phrygian culinary culture. These approaches intend to draw inferences about possible dish compositions and preparation methods by interpreting archaeological data, evaluating environmental conditions, and conducting comparative analyses with contemporary Anatolian and Near Eastern gastronomic traditions (De Vries, 1990; Henrickson, 1994; Horn, 2010).

According to McGovern (2000, pp. 24–28), a hypothetical Phrygian recipe is as follows: fatty goat or sheep meat is first grilled (without removing bones) and then stewed with honey, wine, and olive oil. Lentils are added during cooking, and toward the end, vegetables such as fennel or anise and spices like bitter vetch and fenugreek enhance the flavor.

Another application involved reformulating a 2700-year-old organic residue to create an "Ancient Anatolian" beverage, the "Midas Touch." This reconstruction won a bronze medal in the "Best Honey Beer" category at the Great American Brew Fest, with its taste described as a spectrum between wine, beer, and the archaic honey-fermented drink known as mead (Penn Museum, 2025).

In Ankara, another "King Midas's Last Supper" menu was adapted as follows: local Polatlı village cheese served on a bed of olive-oil–cooked fennel, green lentil patties sweetened with unripe grape juice, and wild duck meatballs in broad bean sauce. Wrapped in vine leaves with cumin and walnut aroma, the Midas dolma, turkey meat and assorted Anatolian greens-filled Tumulus börek, followed by the main course of lamb loin roasted in honey and grape juice, accompanied by smoked Phrygian pilaf with plum sauce and pekmez. For dessert, a sweet ball prepared with mountain berry sauce and chickpeas was served (Aliin Andim, 2014).

In Afyonkarahisar, a recipe for the meal eaten at King Midas's funeral ceremony was developed and executed in collaboration with the Gordion excavation team's Ayşe Salzmann and Pam Horowitz of the Penn Museum Food Company, with input from paleobotanist Dr. Naomi Miller and Dr. Patrick McGovern. The possible Phrygian stew begins with diced lamb seasoned and sautéed in olive oil until browned. The meat is removed, then onions, carrots, and celery are sautéed in the same pot with cumin, thyme, and optionally red wine. The meat is returned to the pot along with water and simmered until tender. Green lentils and the remaining cooking liquid are added and cooked further. Finally, honey is stirred in, and all ingredients are baked in a preheated oven for approximately 40 minutes before serving (Tulay, 2024).

The relevant literature demonstrates a systematic examination of archaeobotanical and zooarchaeological data pertaining to Phrygian culinary culture. These studies provide significant insights into the dietary habits, agricultural practices, livestock management, and cooking methods of the Phrygians, thereby revealing the tangible components of the ancient cuisine. Moreover, some research focuses on the reconstruction of Phrygian culinary gastronomy. This directly supports the primary objective of the present study, which aims to reinterpret the Phrygian culinary heritage through modern taste sensibilities and develop an original product grounded in historical and archaeological findings. Therefore, these findings in the literature both reinforce the scientific foundation of the study and guide its methodological approach.

A Golden Touch to Eskişehir Gastronomy: Midas

Research on Phrygian culinary culture sheds light on the dietary habits of the era. According to previous literature, McGovern (2000: 24-28) described a possible Phrygian dish as follows: Fatty goat or sheep meat was grilled until separated from the bone, then cooked in a stew with honey, wine, and olive oil. Lentils were added and cooking continued; toward the end of the process, vegetables such as fennel or anise and regional spices such as bitter vetch and fenugreek were incorporated to enhance the flavor.

In this comprehensive study, based on archaeological findings and literature review, an original recipe has been developed that brings the dietary practices and potential flavors of the Phrygians to the present day. The first

item in this proposal is a reinterpretation of hummus. This version combines chickpeas, green lentils, and wheat — all staple foods of the Phrygians. To enhance its nutritional value and flavor, tahini and olive oil have been added, along with period-appropriate spices like fennel and cumin. Optionally, lemon juice and garlic can be added to better align with modern palates.

The second dish in the menu is a Lamb Stew inspired by McGovern's (2000) meat-based, olive oil-rich preparation. In this recipe, diced lamb is the main ingredient, with onions and garlic providing a flavorful base, and flour used to enrich the texture. Adapted to modern tastes but rooted in Phrygian culinary traditions, this special dish brings the flavors of antiquity into the present. Our suggestion, designed to take you on a journey to a Phrygian table, is as follows:





	Hummus
٠	500 g boiled chickpeas
•	250 g boiled green lentils
•	250 g boiled wheat
٠	60 g tahini
٠	50 g olive oil
٠	5 g fennel seeds
٠	3 g cumin
•	5 g salt
•	Lemon juice and garlic (optional)
	Preparation:
	Blend all the ingredients (including optional lemon juice and garlic) in a food
	processor or blender until smooth. Add water as needed to reach the desired
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•	2 kg diced lamb
•	2 medium onions
•	90 g olive oil
•	6 cloves (30 g) garlic
•	40 g flour
•	20 g salt (adjust to taste)
•	400 ml hot water
-	Preparation:
	Sauté the lamb in olive oil until browned. Add chopped onions and sauté until
	golden. Add garlic. Sprinkle in the flour and sauté for 1 minute. Gradually add
	hot water while stirring. Add salt. Cook on low heat until the meat is tender.
	Plating Stemps:
	Place the prepared hummus on the base of the serving plate. Using a spatula or spoon, make a well in the center of the hummus and place the lamb stew on top. Drizzle olive oil on top for a glossy finish and serve.

Method

This study aims to evaluate the sensory properties of an original recipe developed in light of archaeological findings related to Phrygian culinary culture. Sensory analysis was designed to scientifically measure and interpret characteristics of the recipe such as color, aroma, taste, texture, and overall acceptability (Meilgaard, Civille and Carr, 2016). The analyses were performed using the IBM SPSS Statistics 25.0 software package.

The research population consists of stakeholders experienced in the field of gastronomy and knowledgeable about Phrygian cuisine. In most studies, data is collected from samples rather than entire populations due to lower cost, faster access, and more detailed analysis using advanced tools. For a sample to be representative, it is important to use probabilistic (random) sampling methods. However, in some cases, non-probabilistic sampling methods are also used (Dawson and Trapp, 2001).

In this research, a non-probabilistic sampling method, specifically purposive sampling, was employed to select participants with special expertise in gastronomy and Phrygian cuisine (Patton, 2002; Etikan, Musa and Alkassim, 2016). Purposive sampling is a non-probabilistic sampling technique where the researcher consciously and judgmentally selects individuals, events, or situations with characteristics most suitable to provide answers to a specific research objective or question. In this method, sample selection is not random; rather, it relies on the researcher's expertise and predefined criteria related to the subject matter. The primary goal of this method is to gain in-depth knowledge and a comprehensive understanding of the phenomenon being studied, rather than to statistically generalize findings to a broader population (Patton, 2002; Etikan, Musa and Alkassim, 2016).

In the research, an original recipe compatible with modern ingredients and cooking techniques was developed by taking into account archaeobotanical (De Vries, 1990) and zooarchaeological (Rose, 1997) findings, as well as probable culinary practices of the Phrygian period (Henrickson, 1994). During the recipe development process, Phrygians' primary food sources (e.g., barley, wheat, lentils, grapes, lamb) and likely flavor combinations were considered.

Sensory analysis is defined as a scientific discipline that measures, analyzes, and interprets the responses of human senses (sight, smell, taste, touch, and hearing) to the properties of a product or material (Lawless & Heymann, 2010; Meilgaard et al., 2016).

Samples used for sensory analysis were prepared under standardized protocols using the same equipment and conditions. The quality and quantities of all ingredients were strictly controlled and recorded. Critical parameters such as cooking time and temperature were kept constant to ensure consistency among the samples.

Prepared samples were stored under appropriate conditions (e.g., at room temperature or specified serving temperature) before evaluation.

Sensory evaluation was conducted by a group of voluntary participants, selected among experienced chefs and expert stakeholders. During the participant selection process, individuals' sensory perception abilities and experience in food evaluation were considered. Participants were thoroughly informed about the sensory analysis procedures and evaluation criteria. Neutral and independent assessments were ensured (Lawless & Heymann, 2010). The recommended number of panelists for sensory analysis can vary depending on the type and purpose of the test. Evaluations conducted with trained panelists typically include 8 to 15 participants, which is considered scientifically adequate (Stone and Sidel, 2004; Lawless and Heymann, 2010). In this study, a panel of 10 individuals who evaluated under the same conditions was deemed appropriate for comparative sensory analysis.

To comprehensively evaluate the sensory characteristics of the developed recipe, descriptive scaling (flavor profile analysis) and hedonic scaling (preference testing) were used (Meilgaard et al., 2016). The flavor profile scale developed by Civille and Lyon (1996) and the hedonic scale developed by Peryam and Pilgrim (1957) were applied. Participants were asked to describe and rate the intensity of the main sensory attributes (color, aroma, basic tastes), texture (firmness, softness, chewiness, etc.), and aroma on structured scales (Civille & Lyon, 1996). Specially designed sensory evaluation forms were used for this purpose.

With the hedonic scale, participants were asked to rate their overall preference and preferences for different sensory characteristics (appearance, aroma, taste, texture) (Peryam and Pilgrim, 1957).

Sensory evaluations were conducted at individual tables to prevent participants from influencing one another. The samples were randomly coded and presented to all participants in the same sequence (MacFie & Bratchell, 1989). Water was provided as a palate cleanser between tastings.

The recipe described by McGovern (2000) was adapted and implemented in the study, based on findings from the related literatüre;



Figure 1. Phrygian Dish

In the first phase of the study, the possible Phrygian dish theoretically reconstructed by McGovern (2000) based on archaeological data obtained from the Midas Tumulus was prepared faithfully by utilizing existing literature and archaeological findings. The main purpose of this reconstruction was to establish a concrete starting point regarding the dietary habits and potential flavor profiles of the period. This prepared dish was then subjected to sensory evaluation by a stakeholder panel. This preliminary assessment was a critical step to understand the extent to which McGovern's theoretical proposals align with contemporary tastes and what kind of sensory experience they offer.

In the second phase, an original recipe named "MIDAS" was developed by reinterpreting the fundamental components and possible flavor profiles of Phrygian culinary culture through modern gastronomy principles.

The formulation of this recipe was not limited solely to archaeological data but also took into account factors such as contemporary consumer expectations, sustainability principles, and the potential of local ingredients. The selection of ingredients, preparation steps, and presentation were balanced to preserve authentic elements while creating a contemporary presentation and flavor profile.

Figure 2. Midas Dish



To scientifically determine the acceptability and sensory characteristics of both developed dishes (McGovern's reconstruction and the "MIDAS" dish) among consumers, a comparative sensory analysis study was conducted. Within the scope of this study, a stakeholder panel consisting of expert chefs and gastronomy specialists was formed. Prior to tasting, a survey was administered to the panelists to assess whether they had any allergies or intolerances to any of the ingredients used in the developed products.

Subsequently, the panelists tasted both dishes in sequence under standardized conditions and provided their evaluations through a questionnaire structured based on the following sensory attributes:

• Appearance: The color, brightness, texture, presentation, and overall aesthetic appeal of the dish.

• Aroma: The primary and complementary aromas of the dish, spice notes, and overall olfactory intensity.

• Texture (Mouthfeel): The sensation the dish leaves in the mouth (consistency, chewiness, moisture, dryness, oiliness, etc.).

Taste: The basic tastes of the dish (sweet, salty, sour, bitter, umami) and their balance and intensity.
Flavor: The overall perception formed by the combination of appearance, aroma, texture, and taste elements, including the duration of aroma retention on the palate.
Overall Liking: The general degree of liking, appeal, and willingness to consume the dish again.

IBM SPSS Statistics 25.0 software package was used for data analysis. Frequency analysis was performed.

For this study, "Ethics Committee Approval" was obtained at Eskişehir Osmangazi University Social and Human Sciences Human Research Ethics Committee meeting numbered 2025-09.

Findings

Findings Related to Expert Panelists

The expert panel consisted of 10 panelists, of whom 9 were male and 1 was female. The ages of the expert panelists ranged from 40 to 62 years. Among the group, all 5 panelists in one subgroup held postgraduate degrees, while the remaining 5 panelists were high school graduates. The professional experience of the panelists ranged from a minimum of 20 to a maximum of 35 years. When examining the demographic structure of the expert panel, a notable predominance of males was observed in the gender distribution of participants (9 male, 1 female). This situation resulted from the more concentrated representation of male professionals within the gastronomy sector generally, particularly among experienced chefs and senior expert stakeholders, as well as the structural factors encountered in accessing female experts during the voluntary sampling process (Flavour Network, 2025; Frontiers in Sociology, 2024; McKinsey, 2017).

Frequency Analysis Findings

Frequency analysis was conducted to determine the distribution of scores given for each sensory attribute. Through this analysis, it was possible to observe which scores were more frequently given and the ranges in which the scores were concentrated. Especially in small sample groups, frequency analysis serves as an important preliminary tool for understanding the overall tendency of the dataset (Büyüköztürk, 2019). For example, it was observed that the sharpness taste scores given to the Phrygian product were mostly concentrated between 6 and 7, which supported the characterization of the product's distinctive taste profile.

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Attribute	Phrygian Dish (Mean \pm SD)	MIDAS Dish (Mean \pm SD)
Color	4.40 ± 0.84	4.20 ± 0.92
Firmness	3.10 ± 1.37	1.80 ± 1.03
Sweetness	2.70 ± 0.94	2.10 ± 0.99
Saltiness	3.10 ± 0.74	2.90 ± 0.99
Sourness	2.40 ± 1.50	1.30 ± 0.48
Sharp Taste	6.60 ± 0.52	2.90 ± 1.66
Grainy Taste	5.00 ± 1.49	4.90 ± 1.19
Fat Enhancing Taste	2.80 ± 0.78	2.50 ± 0.71
Aroma	6.50 ± 0.52	3.20 ± 0.91
Overall Liking	4.40 ± 0.96	6.30 ± 0.48
Texture	3.70 ± 1.25	6.90 ± 1.00
Taste	3.20 ± 1.39	7.20 ± 1.13
Flavor	3.30 ± 1.56	7.10 ± 1.44
Appearance	4.40 ± 0.97	7.20 ± 1.13
Total Score	1.30 ± 0.67	5.00 ± 0.00

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The Phrygian stew and MIDAS products were subjected to participant evaluations based on fundamental sensory attributes such as color, taste, aroma, texture, and smell; average scores and standard deviations were calculated for each attribute. The analysis results showed that the MIDAS product received higher scores than the Phrygian stew in almost all key sensory areas.

Especially in critical criteria directly influencing consumer acceptance, such as taste, aroma, and texture, the MIDAS product clearly stands out. For example, the average taste score for MIDAS was 7.2, whereas it was 3.2 for the Phrygian stew. This difference is significant not only numerically but also in terms of the quality of the sensory experience. Taste is one of the most critical parameters in product acceptance, and the findings of this study reveal that participants evaluated the taste quality of the MIDAS product notably more positively (Lawless & Heymann, 2010).

Similarly, the average aroma score for MIDAS was 7.1, compared to 3.3 for the Phrygian stew. Aroma is an important component both in the perception of flavor and overall liking (Stone & Sidel, 2004). The high aroma score of the MIDAS product indicates that participants preferred it not only for its taste but also for its olfactory experience.

A similar pattern was observed in terms of texture. While the Phrygian stew had an average score of 3.7 in this attribute, MIDAS scored 6.9 on average. This suggests that MIDAS has a more homogeneous, possibly softer, or better mouthfeel texture. Physical properties such as texture significantly affect consumer satisfaction during consumption, and in this context, MIDAS can be considered to have an advantageous position (Meilgaard et al., 2016).

In terms of overall liking, the MIDAS product surpassed the Phrygian stew with an average score of 6.3 compared to 4.4. This value clearly indicates that participants overall favored and preferred MIDAS. Although no statistical tests were applied, this difference can be considered significant in terms of effect size, given the large differences between means and relatively low standard deviations (MIDAS overall liking SD = 0.48).

Another noteworthy finding of the study is that the Phrygian stew received a higher score than MIDAS for the smell attribute (Phrygian: 6.5, MIDAS: 3.2). This suggests that the Phrygian stew has a stronger, more characteristic, or traditional aroma; however, this feature may not have been perceived positively by all participants. In other words, the olfactory dominance of the Phrygian stew may not have positively influenced the product's overall liking. While smell can be a positive attribute for some consumers, it may be off-putting for others. The fact that MIDAS outperformed in overall liking despite a lower olfactory score highlights the relative influence of smell and the dominant role of factors such as taste, aroma, and texture (Delwiche, 2004).



Figure 3. Sensory Attribute Means of Phrygian Stew and Midas Products

The graph presents a comparative illustration of the average scores for the key sensory attributes of the Phrygian stew and MIDAS products. The graph clearly demonstrates that MIDAS was rated higher than the Phrygian stew in terms of taste, aroma, texture, and overall liking.

Conclusion and Suggestion

Conversely, the Phrygian stew stood out in categories involving more "traditional and authentic" attributes such as smell and sharp taste, especially outperforming MIDAS in smell (6.5 vs. 3.2). This finding suggests that the Phrygian stew remained faithful to its aromatic profile, but this did not necessarily provide a positive experience for all consumers. Although MIDAS offers a simpler olfactory profile, it achieves a holistic flavor balance and creates a more uniform liking.

Going beyond theoretical inferences often encountered in the literature, this research tested the proposed recipes through sensory analyses, enabling support for assumptions about ancient cuisine with concrete data. This experimental approach could serve as a model for future studies and contribute to more evidence-based findings.

The study not only focuses on recipe reconstruction but also questions the extent to which these recipes align with today's palate and how cultural transmission occurs. This perspective can add new dimensions such as consumer behavior and cultural adaptation to culinary history studies.

Ancient kitchen adaptations like the MIDAS dish can be offered as unique menu items in boutique restaurants, museum cafes, and gastronomy festivals. Such products can provide experiential gastronomy elements for both local and international tourists.

Gastronomy routes based on Phrygian cuisine can be organized in regions such as the Phrygian Valley, Gordion, and Afyon, including "Midas Table" themed cooking workshops and historical dining experiences. This would support the local economy and promote cultural heritage.

Reinterpreted Phrygian recipes can offer unique, story-rich menu items for regional restaurants, helping them gain a competitive advantage and provide customers with a different experience. Concepts like "Phrygian Inspired Flavors" can be developed. Food and beverage enterprises in Eskişehir and other ancient Phrygia regions incorporating the MIDAS dish—accompanied by mythological stories—into their menus can become a draw for gastronomic tourism, thereby helping these regions gain a competitive edge in the gastronomy tourism market. It is recommended that these enterprises offer variations of the MIDAS dish under names such as lamb-based (MIDAS GOLD), beef-based (MIDAS SILVER), chicken-based (MIDAS LÜLE), and vegetarian with asparagus and artichoke (MIDAS KING), enabling sales to diverse consumer segments.

The developed recipe can be transformed into a packaged product in collaboration with local producers. These products can be marketed as "archaeogastronomy products" at tourist sales points and digital marketplaces.

This research can serve as an inspiring resource for gastronomy students and professionals to explore ancient culinary cultures, learn different cooking techniques, and develop creativity. Integrating archaeogastronomy-based practical recipes into culinary education curricula can contribute to cultural sustainability.

In conclusion, this study points to valuable potential not only through sensory analysis data but also via cultural, touristic, and gastronomic insights. Presenting elements of ancient Phrygian cuisine combined with modern culinary techniques to today's consumers constitutes an important strategic area for revitalizing cultural heritage, supporting regional development, and enriching gastronomy tourism with unique content.

References

Albala, K. (2011). Food Cultures of the World Encyclopedia. ABD: Greenwood Greenwood Publishing Group.

- Aliin, A. (2014). 2,750-year-old meal. Retrieved May 20, 2025, from https://aliinandim.blogspot.com/2014/07/2-bin-750-yillik-yemek.html.
- Branting, S., Özarslan, Y., Lehner, J., Marston, J. M. and Graf, S. R. (2019). Kerkenes and Phrygia: Old and new directions of research. In G. R. Tsetskhladze (Ed.), *Phrygia in antiquity: From the Bronze Age to the Byzantine Period. Proceedings of an International Conference of the Phrygian Lands over Time from Prehistory to the Middle of the 1st Millennium AD (Eskişehir, 2015)* (pp. 539–547). Peeters.
- Büyüköztürk, Ş. (2019). Sosyal bilimler için veri analizi el kitabı. Pegem Akademi.
- Civille, G. V. and Lyon, B. G. (1996). Aroma and flavor lexicon for sensory evaluation: Terms, definitions, references. ABD: ASTM International.
- Dalby, A. (2003). Food in the ancient world from A to Z. UK: Routledge.
- Dawson, B. and Trapp, R. G. (2001). *Probability and related topics for making inferences about data*. In *Basic and clinical biostatistics*. ABD: Lange Medical Books/McGraw-Hill Medical Publishing Division.
- De Vries, K. (1990). The Gordion excavations, 1988–1989: The Middle Phrygian period. *American Journal of Archaeology*, 94(1), 1–36.
- Delwiche, J. (2004). The impact of perceptual interactions on perceived flavor. *Food Quality and Preference*, 15(2), 137–146. https://doi.org/10.1016/S0950-3293(03)00041-7.
- Etikan, I., Musa, S. A. and Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
- Flandrin, J.-L. and Montanari, M. (1999). Food: A culinary history from antiquity to the present. ABD: Columbia University Press.
- Flavour Network (2025). *Why Are So Few Head Chefs Women? We Investigate*. Retrieved June 27, 2025, from https://www.flavournetwork.ca/article/few-head-chefs-women-investigate/.
- Field, A. (2018). Discovering statistics using IBM SPSS statistics (5th ed.). ABD: Sage Publications.
- Frontiers in Sociology (2024). Gender inequality in the culinary profession in tourism from the perspective of university students with working experiences in culinary. Retrieved June 27, 2025, from https://www.frontiersin.org/journals/sociology/articles/10.3389/fsoc.2024.1323096/full.
- Henrickson, R. C. (1994). Pottery and people: Socioeconomic aspects of ceramic production at Gordion in the Middle Phrygian period (ca. 800–550 B.C.). ABD: University of Pennsylvania Museum of Archaeology and Anthropology.
- Horn, E. F. (2010). Ancient foods and modern tables: Archaeogastronomy and cultural heritage. *Journal of Food History*.
- Lawless, H. T. and Heymann, H. (2010). *Sensory evaluation of food: Principles and practices* (2nd ed.). ABD: Springer Science & Business Media.
- Liebhart, R. and Stephens, L. (2016). Tumuls MM: Fit for a king–Tümülüs MM: Krallara layık. ABD: In C.
 B. Rose & G. Darbyshire (Eds.), *The age of King Midas–Kral Midas'ın Altın Çağı* (A. Arslan & A. Gürsan-Salzmann, Trans.; pp. 28–39). Penn Museum.

- MacFie, H. J. H. and Bratchell, N. (1989). Designs to balance the effect of order of presentation in sensory tests. *Journal of Sensory Studies*, 4(2), 129–147.
- McGovern, P. E. (2000). The funerary banquet of King Midas. Expedition-Philadelphia, 42(1), 21-29.
- McKinsey (2017). Women in the food industry. Retrieved June 27, 2025, from frehttps://www.mckinsey.com/~/media/mckinsey/featured%20insights/gender%20equality/women%2 0in%20the%20food%20industry/women%20in%20the%20food%20industry-web-final.pdf.
- Meilgaard, M. C., Civille, G. V. and Carr, B. T. (2016). *Sensory evaluation techniques* (5th ed.). ABD: CRC Press.
- Middleton, W. D. and Barnard, H. (2005). Organic residue analysis of pottery from Gordion, Turkey. Archaeometry, 47(4), 769–786.
- Mintz, S. W. (1996). *Tasting food, tasting freedom: Excursions into eating, culture, and the past*. ABD: Beacon Press.
- Pallant, J. (2020). SPSS survival manual: A step by step guide to data analysis using IBM SPSS. UK: Open University Press.
- Patton, M. Q. (2002). Qualitative research & evaluation methods. ABD: Sage Publications.
- Peryam, D. R. and Pilgrim, F. J. (1957). Hedonic scale method of measuring food preferences. *Food Technology*, 11(9), 9–14.
- Penn Museum (2025). Retrieved May 20, 2025, from https://penn.museum/sites.
- Rose, C. B. (1997). *The pottery of Gordion, Middle Phrygian period*. ABD: University of Pennsylvania Museum of Archaeology and Anthropology.
- Serel, T., Aytaç, G., ve Özbal, Ö. (2014). Anadolu'da antik dönem mutfak kültürü ve günümüz Türk mutfağına yansımaları. *Gastronomi ve Mutfak Sanatları Dergisi*.
- Sevin, V. (2003). Eski Anadolu ve Trakya: Başlangıcından Pers egemenliğine kadar. İstanbul: İletişim Yayınları.
- Stone, H. and Sidel, J. L. (2004). Sensory evaluation practices. ABD: Academic Press.
- Tulay, S. A. (2024). 3000 yıllık bir yemek tarifi. Retrieved May 20, 2025, from https://afyonsehir.com/3000yillik-bir-yemek-tarifi/
- Turner, B. S. (2003). The anthropology of food and body: Gender, meaning and power. UK: Routledge.
- World Archaeology. (2012). Turkey: The Koru tumulus. Retrieved May 15, 2025, from https://www.world-archaeology.com/features/turkey-the-koru-tumulus/.
- Young, R. S. (1958). Gordion: The first five years of excavation, 1950-1955. ABD: University Museum, University of Pennsylvania.