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A Traditional Cheese of the Balıkesir Gulf: Production Process, Local Knowledge, and Sustainability of Kirli Hanım Cheese

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Abstract

This study examines the production process, chemical composition, distinctive characteristics, and sustainability dimensions of Kirli Hanım Cheese (Dirty Lady), a traditional dairy product specific to the Balıkesir Gulf region of Türkiye. Adopting a qualitative research design, it integrates document analysis with field-based observations to systematically document traditional production practices and their cultural context. The findings demonstrate that Kirli Hanım Cheese is produced through a complex, multi-stage process involving milk filtration, heat treatment, cooling, renneting, curd breaking, hot water scalding, molding, salting, open-air drying, grilling, and long-term maturation. The product is characterized by low moisture and high dry matter content, elevated levels of fat and protein, a darkened outer surface, a white interior, and a pronounced taste and aroma profile. Production is strongly shaped by specific environmental conditions, particularly the temperature regime and northern winds prevailing in June and July, which play a critical role in determining both durability and product-specific qualities. In addition, the partial reuse of whey, the reliance on natural drying techniques, and the persistence of localized artisanal practices position Kirli Hanım Cheese not only as a food product but also as a culturally embedded and environmentally aligned production model. Although production remains limited to a small number of producers, recent international recognition highlights its potential for increased visibility. By documenting a scarcely studied traditional cheese, this study contributes to the preservation of local food heritage and underscores the importance of sustaining production knowledge, cultural value, and regional identity.

1. Introduction

Culture constitutes a fundamental driver of societal continuity, with food and dietary practices representing one of its most essential components. The ways in which food and beverages are produced, preserved, and prepared shape culinary cultures and enable their transmission across generations [1]. In this regard, culinary culture extends beyond the satisfaction of nutritional needs; it also reinforces local identity, preserves cultural heritage, and enhances the attractiveness of regions [2]. Traditional foods, in particular, are closely linked to cultural identity and serve as key carriers of local knowledge systems, thereby supporting community continuity and the intergenerational transmission of heritage [3].

Türkiye possesses a rich culinary heritage shaped by its historical depth and geographical diversity. Within this context, cheese occupies a central role in both production and consumption patterns. Variations in milk types, production techniques, climatic conditions, and region-specific cultural practices have resulted in a remarkable diversity of cheeses across the country [4, 5]. This diversity reflects not only dietary preferences but also the influence of regional ecological conditions and localized production knowledge. As highlighted in cheese science literature, differences in raw materials, environmental factors, and processing techniques directly affect the structural, chemical, and sensory properties of cheese [6].

Balıkesir is one of the regions in Türkiye that stands out for its rich diversity of cheeses. In particular, the Balıkesir Gulf provides highly favorable conditions for traditional cheese production due to its diverse vegetation, suitable climatic characteristics, and well-developed livestock practices [7–9]. The region's natural pasture systems and small ruminant farming directly influence milk quality, thereby contributing to the development of distinctive characteristics in locally produced cheeses. In this regard, cheeses produced in the Balıkesir Gulf should be understood not merely as food products but as integral components of the region's cultural and economic structure. The literature on traditional cheese production consistently emphasizes that local environmental conditions, feeding practices, and regional production systems play a decisive role in shaping cheese identity and quality [10].

Kirli Hanım (Dirty Lady) Cheese, a traditional product specific to the Balıkesir Gulf, distinguishes itself from other cheese varieties through its unique production process and characteristic features. Its production integrates traditional techniques such as drying, fermentation, and heat treatment, and is highly dependent on specific seasonal and environmental conditions. In particular, wind and temperature regimes during the summer months play a critical role in the drying and maturation stages. As in other traditional cheese systems, the interaction between multi-stage processing techniques and environmental factors significantly shapes the final product characteristics [11]. Furthermore, the partial use of whey-derived materials in the production process suggests that this cheese represents not only a traditional product but also a practice aligned with sustainability principles [12, 13].

Whey, generated as a by-product of cheese production, constitutes a significant environmental concern. Approximately 70–90% of processed milk remains as whey, and its improper disposal can lead to water and soil pollution [14, 17]. However, the literature emphasizes that whey should be reconceptualized not as waste but as a valuable resource when effectively utilized [18]. In this context, the reuse of whey within the production process emerges as a critical practice for enhancing both environmental sustainability and resource efficiency. The production structure of Kirli Hanım Cheese, which incorporates this by-product, exemplifies the integration of traditional knowledge with contemporary sustainability approaches.With the increasing industrialization of the food sector, a tendency toward standardization in consumption habits has emerged, causing traditional products to gradually lose their prominence. However, the decline in cultural authenticity and the rise of health-oriented consumption trends have renewed interest in local and traditional foods [19]. Sustainable food systems require the integration of environmental, economic, and cultural dimensions [20]. In this context, traditional foods are increasingly recognized not only as cultural assets but also as components of sustainable production systems.

Despite their cultural and gastronomic value, traditional cheeses are often produced in limited quantities, which poses risks for their sustainability. Studies focusing on traditional cheeses emphasize the importance of documenting production processes, preserving local knowledge, and ensuring the continuity of regional food heritage [21]. However, the limited number of academic studies on Kirli Hanım Cheese indicates that its production process and cultural context have not yet been sufficiently documented.

Accordingly, this study aims to examine the production process, characteristic features, and sustainability dimensions of Kirli Hanım Cheese, a traditional product specific to the Balıkesir Gulf. It seeks to document its production techniques, preserve associated local knowledge, and highlight its gastronomic value. In doing so, the study contributes to the literature while supporting the continuity and transmission of this unique product within its regional context.

This study makes several original contributions. First, it provides a systematic documentation of a scarcely studied traditional cheese, thereby contributing to the preservation of local knowledge systems. Second, it demonstrates the close interdependence between traditional cheese production, environmental conditions, and localized practices, positioning the product not merely as a food item but as part of a broader cultural and ecological system. Third, by examining the use of whey within the production process, the study shows how traditional practices align with the principles of circular economy and sustainability. In this respect, it advances the literature by linking traditional food systems with contemporary sustainability frameworks. Finally, by emphasizing the gastronomic value and tourism potential of Kirli Hanım Cheese, the study offers practical implications for rural development and the promotion of local food heritage.

2. Materials and Methods

This study adopts a qualitative research approach to examine the production process, characteristic features, and sustainability dimensions of Kirli Hanım Cheese, a traditional dairy product specific to the Balıkesir Gulf. Qualitative research is particularly well suited to the investigation of traditional food systems, as it enables an in-depth exploration of practices within their natural context and facilitates the interpretation of culturally embedded knowledge systems [22]. In this regard, the study employs an exploratory and descriptive design aimed at documenting and interpreting traditional production practices.

Data were collected through a combination of document analysis and observation-based methods. Document analysis was used to systematically examine written and visual materials related to Kirli Hanım Cheese, allowing for the structured evaluation and interpretation of existing knowledge sources [23]. Accordingly, academic publications, local records, and relevant written documents concerning the production process, historical background, and product characteristics were reviewed and analyzed.

In addition to document analysis, observation served as the primary data collection method for examining the production process in its natural setting. Observation enables the direct investigation of phenomena within their real-life context and allows processes to be captured as they unfold [24]. Accordingly, the stages of cheese production, raw materials, environmental conditions, and applied techniques were systematically observed and recorded.

Fieldwork was conducted at two different production sites located in the Balıkesir Gulf region. Each producer was observed for two consecutive days, enabling the documentation of the full sequence of the production process. Observations were carried out as non-participant observations within the natural

production environment. During this process, production stages, materials, environmental conditions, and techniques were systematically recorded. Due to restrictions imposed by the producers, only photographic documentation was permitted, while audio and video recordings were not allowed. The resulting visual data were used to support both the documentation and interpretation of the production process.

Observation plays a critical role in the study of traditional food production systems, which are inherently dependent on local knowledge and environmental conditions. Field-based approaches provide insights into production practices that cannot be fully captured through documentary sources alone. As emphasized in the literature on traditional cheese production, such practices are highly context-specific and require direct observation for accurate documentation [11]. The selection of two producers was based on accessibility and their active engagement in traditional production practices within the region. Given the limited number of producers currently maintaining this production method, the selected cases were considered representative of existing practices.

The data obtained from document analysis and field observations were analyzed using a descriptive analysis approach. In this process, the data were organized under predefined themes and systematically compared across observation and document sources. Recurring patterns were identified, and the findings were interpreted within their environmental and cultural context [25]. Within this framework, the data were categorized under three main themes: production process, product characteristics, and sustainability dimensions.

This methodological framework enables the production practices of Kirli Hanım Cheese to be examined not only from a technical perspective but also within their broader environmental and cultural context. The literature on traditional cheeses consistently underscores the importance of documenting production processes as integral components of wider cultural systems [21]. In this regard, the integration of document analysis and observation facilitates a comprehensive and context-sensitive understanding of the product.

Nevertheless, the study is subject to certain limitations. It focuses on a specific geographical area and a single traditional product, which restricts the generalizability of the findings to other cheese types or regions. Despite this constraint, the study provides valuable insights into the documentation and preservation of localized food production practices and contributes to a deeper understanding of traditional food systems.

3. Results and Discussion

This section examines the production process, chemical properties, production conditions, distinctive characteristics, consumption patterns, and sustainability dimensions of Kirli Hanım Cheese within a holistic framework. The findings are derived from field observations and document analysis and are interpreted in relation to the existing literature on traditional cheese production. Traditional food

production processes are inherently shaped by local knowledge systems and environmental conditions, a relationship that becomes particularly evident in small-scale cheese production [3, 6].

3.1. Chemical Composition of Kirli Hanım Cheese

The chemical properties of Kirli Hanım Cheese are presented in Table 1. The low moisture content (26.96%) and high dry matter content (73.04%) of the cheese are among the main factors enabling the product to be preserved for a long time without spoilage. Similarly, its high fat (33.0%) and protein (28.0%) contents indicate that the cheese has a high nutritional value.

Table 1
Chemical properties of Kirli Hanım cheese

Moisture (% m/m)	**26,96**
Dry Matter (% m/m)	73,04
Salt (% m/m)	7,15
Protein (N×6.38) (% m/m)	28,0
Nitrogen (% m/m)	4,39
pH	5,50
Acidity (Lactic Acid) (% m/m)	0,63
Fat (% m/m)	33,0
Fat (in Dry Matter) (% m/m)	45,18

The pH value of 5.50 and the acidity level of 0.63% indicate a controlled fermentation process. The relatively high salt content (7.15%), on the other hand, plays an important role in both flavor formation and microbial stability. It is also emphasized in the literature that low moisture and high salt content in traditional cheeses prolong shelf life and increase microbial stability [6].

3.2. Production Process and Flow Structure

The production process of Kirli Hanım Cheese was systematically documented on the basis of field observations and is shown in Fig. 1. The production process exhibits a multi-stage structure based on traditional knowledge. In line with the production stages observed in the area where production takes place, the production scheme shown in Fig. 1 was created by the authors.

Kirli Hanım Cheese is produced by first milking sheep and filtering the milk, after which it is heated to 65°C. The milk heated to 65°C is then cooled to 31–34°C depending on ambient temperature and pressure conditions, as shown in Fig. 2.

As shown in Fig. 3, rennet is added and the milk is left to rest for 1 to 1.5 hours for coagulation. The resulting curd is then stirred and broken. The curd in the whey is scalded with water at 85 to 90°C, allowing the curd particles to fuse together. After this stage, the cheeses are pressed into molds.

The cheeses pressed into small molds of approximately 500 grams are turned upside down twice and left in a resting room for one day. Afterwards, they are hardened by rubbing with salt for three to four days. In this process, unrefined crystallized rock salt is used. Figure 4 shows the cheeses during salting stage.

The drying stage is one of the most critical steps of the production process. As shown in Fig. 5, the salted cheeses are exposed to sunlight and the poyraz wind for 20–30 days in wire cages with wooden bases, thereby ensuring moisture loss and increasing the durability of the product. In this way, the cheeses lose all of their water and moisture, shrink to 200–250 g, and harden. Afterwards, the dried cheeses are washed individually with warm water and left to rest for one more day. Such open-air drying techniques are known in traditional cheeses to both prolong shelf life and determine the characteristic properties of the product [26].

As shown in Figs. 6, after the drying process is completed, the cheeses are sealed by grilling both the bottom and top at 200°C so that they contain no water or moisture. After spoilage is thus prevented, the cheeses are matured for at least 12–18 months. This process is carried out during June and July, when sunlight and the poyraz wind are abundant.

As shown in Fig. 7, because the dried outer surface is dark and the interior is white, the cheese is called “Kirli Hanım.”

The entire production structure reflects a complex and multi-stage process in which heat treatment, fermentation, and environmental exposure are integrated, as commonly observed in traditional cheese production systems [11]. These findings suggest that the production process extends beyond technical procedures and represents an accumulated local knowledge system transmitted across generations.

3.3. Production Conditions and Environmental Dependency

The production of Kirli Hanım Cheese is strongly dependent on specific climatic conditions. In particular, the temperature regime and wind patterns prevailing in June and July are critical for the successful execution of the production process. The poyraz wind originating from the Kaz Mountains plays a decisive role, especially in the drying stage, by facilitating moisture loss and contributing to product stability.

The influence of environmental factors on product quality in traditional cheese production is well established in the literature. Climate, flora, and livestock conditions directly affect milk composition and, consequently, the sensory properties of cheese [6, 10, 12]. In this regard, Kirli Hanım Cheese can be characterized as an environmentally embedded product, whose production and quality are closely linked to natural conditions rather than controlled industrial processes. This finding suggests that production is

inherently shaped by place-specific conditions and can be conceptualized within the framework of place-based production systems [3, 31]. In this perspective, environmental factors are not external variables but integral components that define product identity.

3.4. Distinctive Characteristics and Differences

Kirli Hanım Cheese is distinguished from other cheese types by its unique production process and characteristic features. The contrast between its dark outer surface and white interior results directly from prolonged drying and environmental exposure during production. The cheese typically exhibits an irregular shape and a pronounced taste and aroma profile [27].

Cheese diversity is widely recognized to vary according to milk type, production techniques, and environmental conditions [28]. In this context, the distinctiveness of Kirli Hanım Cheese can be attributed to the combined effects of rennet use, open-air drying, and extended maturation. These interconnected factors play a decisive role in shaping the structural and sensory properties of the product, highlighting the strong relationship between production practices and final product characteristics [6].

3.5. Consumption Patterns and Gastronomic Uses

Kirli Hanım Cheese can be consumed in a variety of ways, reflecting its versatility within local culinary practices. It may be grated or crumbled over dishes such as pasta and noodles, consumed on its own, or paired with complementary ingredients such as olive oil, honey, molasses, or jam [13, 29].

Traditional foods play a central role in gastronomic diversity and are widely recognized as key components of destination marketing. The literature emphasizes that local food products enhance the attractiveness of destinations and contribute significantly to the development of gastronomic tourism [30, 31]. In this context, Kirli Hanım Cheese can be considered a valuable gastronomic asset with strong potential for integration into regional tourism strategies. From a tourism perspective, such products can be positioned within the framework of authenticity-driven destination development, where local foods serve as key experiential assets.

3.6. Historical Background and Cultural Narrative

Although historical sources on Kirli Hanım Cheese are limited, a reference in Abdülhak Şinasi Hisar's Çamlıca'daki Eniştemiz suggests that the cheese was already known and appreciated as a distinctive local product in the late twentieth century [32]. This literary evidence points to its historical presence within regional culinary culture.

According to accounts obtained from the production area, the origins of Kirli Hanım Cheese are closely linked to practical preservation needs. In earlier periods, when refrigeration was unavailable, local communities shaped broken cheese curds during the summer months—particularly June and July, when sunlight and the poyraz wind were abundant—then dried and sealed them to extend shelf life. This process is considered the foundation of the product's emergence. It is also reported that the cheese was

commonly stored for extended periods by hanging it in baskets from pantry ceilings, and that it served as a portable food source, often prepared by women and placed in their husbands' provisions [33].

These practices illustrate how traditional food production systems evolve in response to necessity and gradually acquire cultural significance. Over time, what began as a preservation strategy developed into a culturally embedded production practice. This transformation supports the view that traditional foods often originate from functional needs before becoming elements of cultural heritage [3].

The name "Kirli Hanım" derives from the characteristic contrast between the darkened outer surface and the white interior, a visual outcome of prolonged drying under natural environmental conditions. This naming reflects the close relationship between production processes, environmental factors, and cultural interpretation.

Kirli Hanım Cheese is currently produced by a very limited number of producers in Türkiye, with its production and commercialization largely confined to the Balıkesir Gulf region. Despite this restricted scale, recent developments indicate a growing recognition of the product. Notably, a producer from the Gömeç district participated in the 2023 World Cheese Awards held in Norway with aged Kirli Hanım Cheese (Fig. 8) and was awarded a Bronze medal among 4,502 cheeses from 43 countries.

This achievement represents a significant milestone, as it marks the product's entry into an international platform and enhances its visibility beyond local boundaries. Moreover, such recognition contributes to the broader promotion of regionally produced cheeses in Türkiye, a country characterized by considerable cheese diversity, and highlights their potential to reach wider audiences in global markets.

Cheese diversity is shaped by multiple factors, including milk type, production techniques, processing conditions, temperature, and humidity [28]. More broadly, it reflects the interplay between cultural practices, environmental conditions, and localized production knowledge [12]. In this context, Kirli Hanım Cheese stands out as a distinctive example shaped by these interrelated factors.

Its production involves the use of rennet obtained from newly weaned lambs fed on high-quality olive pulp, alongside a process that is tightly constrained by specific seasonal conditions. Production is limited to June and July, when the combined effects of appropriate temperatures and the poyraz wind from the Kaz Mountains create optimal conditions for drying and maturation. These environmental dynamics facilitate moisture loss and contribute directly to the product's durability and extended shelf life.

Thus, the distinctive characteristics of Kirli Hanım Cheese emerge from the interaction between traditional production techniques and environmental conditions, rather than from standardized industrial processes. This highlights the role of environmental dependency as a defining factor in shaping both the structural and sensory properties of the cheese.

3.7. Recognition and Promotion Potential

Kirli Hanım Cheese is produced by a limited number of producers, which constrains its current market presence. However, its recent recognition—most notably the Bronze medal awarded at the 2023 World Cheese Awards—has significantly enhanced its international visibility.

Such achievements play a critical role in increasing the global recognition of local products and facilitating their integration into wider markets. The promotion of traditional foods on international platforms not only raises product awareness but also contributes to local economic development [34]. The literature further emphasizes that the long-term sustainability of traditional cheeses depends on systematic documentation, effective promotion strategies, and institutional support mechanisms [21].

In this context, Kirli Hanım Cheese demonstrates considerable potential for branding and promotion at both national and international levels, particularly as a niche product positioned at the intersection of cultural heritage and gastronomic value.

3.8. Sustainability Perspective

The production process of Kirli Hanım Cheese reflects a multidimensional sustainability framework that integrates environmental, economic, and cultural dimensions. The reliance on traditional techniques—particularly natural air drying—substantially reduces external energy inputs, thereby lowering the overall environmental footprint of production. Moreover, the valorization of whey as a by-product enhances resource efficiency and aligns closely with the principles of the circular economy.

Within circular food systems, the reuse and valorization of by-products are recognized as essential strategies for minimizing waste and improving resource efficiency [35, 36]. In dairy production, whey constitutes one of the most abundant by-products, and its improper disposal can result in significant environmental impacts due to its high organic load. Recent approaches, however, emphasize its conversion into value-added products, thereby contributing to more sustainable and resource-efficient production systems [18, 37, 38].

In addition, global organizations such as the Food and Agriculture Organization (FAO) emphasize that sustainable agrifood systems should promote resource efficiency, reduce food loss, and foster circularity within production processes [20, 39]. In this context, traditional food systems are increasingly recognized for their relatively low environmental impact, reliance on local resources, and capacity to sustain cultural continuity—key dimensions of sustainability.

Taken together, these findings position Kirli Hanım Cheese as a representative example of a traditional food product that embodies circular economy principles through by-product utilization, low-energy processing practices, and the preservation of local production knowledge. As such, it can be conceptualized as a model product that integrates environmental sustainability, economic viability, and cultural heritage within the broader framework of sustainable food systems.

Overall, the findings highlight that Kirli Hanım Cheese should be understood as an environmentally embedded and culturally constructed food system rather than a standardized food product. This

perspective contributes to the growing body of literature emphasizing the importance of traditional foods within sustainable and place-based food systems [3, 31].

4. Conclusion and Implications

This study provides a comprehensive examination of the production process, chemical properties, distinctive characteristics, and sustainability dimensions of Kirli Hanım Cheese, a traditional product specific to the Balıkesir Gulf. The findings demonstrate that this cheese should be understood not merely as a food product, but as a distinctive production system shaped by the interaction of local knowledge, environmental conditions, and cultural heritage. This interpretation is consistent with the literature on traditional cheeses, which highlights the embeddedness of production practices within localized knowledge systems and cultural contexts [10, 11].

The results further indicate that the production of Kirli Hanım Cheese is highly dependent on natural environmental conditions. In particular, seasonal factors—especially wind patterns and temperature regimes—play a critical role in enabling production and determining product characteristics. This environmental dependency underscores the fact that the product is rooted in traditional, place-based production systems rather than standardized industrial processes, thereby contributing to its distinctive qualities. Moreover, practices such as open-air drying, extended maturation, and the use of rennet constitute key elements shaping the cheese's structural and sensory profile. These findings align with the literature emphasizing that traditional cheese production in the Mediterranean basin is strongly influenced by environmental conditions and localized production practices [6, 10].

The findings on chemical composition indicate that Kirli Hanım Cheese possesses an extended shelf life, primarily due to its low moisture and high dry matter content. In addition, its relatively high protein and fat levels suggest considerable nutritional value. These compositional characteristics demonstrate that traditional production techniques offer not only cultural significance but also functional and technological advantages. Similar properties have been documented in traditional hard and semi-hard cheeses, where low moisture content and controlled fermentation processes enhance both durability and product quality [6, 26].

From a sustainability perspective, the production process of Kirli Hanım Cheese integrates environmental, economic, and cultural dimensions. The reuse of whey as a by-product represents a key practice in improving resource efficiency, while the low-technology nature of production and reliance on natural drying methods reduce energy consumption and environmental impact. Furthermore, the predominance of small-scale local producers contributes to rural development and supports local economies. These findings are consistent with the literature emphasizing that the valorization of by-products enhances resource efficiency and that traditional food systems play a critical role in sustainable food production [18, 20].

The limited number of producers involved in the production of Kirli Hanım Cheese constitutes a significant risk for its long-term sustainability. At the same time, increased visibility through international

recognition—particularly participation in competitions and inclusion in initiatives such as Slow Food—creates important opportunities for its preservation and promotion. In this regard, formalizing the product through geographical indication schemes, establishing production standards, and supporting branding strategies are critical steps for ensuring its sustainability. These observations are consistent with the literature, which emphasizes that the protection, documentation, and geographical indication registration of traditional cheeses are essential for safeguarding their cultural identity and continuity [21, 40].

From a practical perspective, positioning Kirli Hanım Cheese within the framework of gastronomic tourism offers considerable potential for regional development. Expanding its presence in local restaurants and promoting it through gastronomic festivals and targeted events can enhance its visibility. Furthermore, integrating the production process into experiential tourism activities may strengthen its touristic value. Previous studies demonstrate that traditional cheeses play a significant role in gastronomic tourism and contribute to the attractiveness of rural destinations [31].

This study contributes to the limited literature by providing a detailed examination of the production process and characteristics of Kirli Hanım Cheese. Nevertheless, it is constrained by its focus on a specific region and a single product, which limits the generalizability of the findings. Future research could extend this work by conducting comparative analyses across different traditional cheese types, incorporating producer perspectives, and examining consumer perceptions. Such studies would provide deeper insights into the relationships among local knowledge, sustainability, and food heritage [10, 11].

Declarations

Ethics approval and consent to participate

Ethical approval for this study was obtained from the Social and Human Sciences Research Ethics Committee of Balıkesir University (Decision No: 2026/04-39; Meeting Date: 30 April 2026). All procedures performed in this study were conducted in accordance with institutional ethical standards.

Consent for publication

Not applicable.

Availability of data and materials

The datasets generated and/or analyzed during the current study are available from the corresponding author upon reasonable request.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

M.O.İ.: Conceptualization, methodology, supervision, investigation, project administration, writing – original draft preparation, writing – review and editing.

.M.Y.: Data collection, formal analysis, investigation, visualization, writing – review and editing.

All authors reviewed the manuscript and approved the final version of the manuscript.

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Figures



Figure 1

Production Stages of Kirli Hanım Cheese (photo by authors)



Figure 2

Heat treatment and cooling stages of milk (photo by authors)



Figure 3

Coagulation and Molding Process (photo by authors)



Figure 4

Salting Stage (photo by authors)



Figure 5

Drying Stage in Wire Cages (photo by authors)



Figure 6

Sealing Method by Grilling (photo by authors)



Figure 7

Kirli Hanım Cheese (photo by authors)



Figure 8

Award-Winning Kirli Hanım Cheese (by photo authors)