

# Opinions On The Consumption Of Goat meat And Goat products In Southern Thailand

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#### **Abstract**

This study presents a thorough demographic analysis of a sample comprising 520 individuals in Songkhla province, shedding light on population composition. Noteworthy gender imbalances align with global research trends, favoring females. The relatively youthful respondent average age underscores the need for targeted interventions. However, localized participant distribution raises questions about generalizability. Religious diversity and varied marital statuses underscore the need for nuanced considerations in social and health research. Educational and occupational diversity offers comprehensive population insights, influencing survey result interpretations. Average monthly income adds a crucial socio-economic dimension. Personal networks emerge as significant information channels, with online platforms shaping awareness, particularly through websites and social media. Exploring consumer opinions on goat meat and products reveals predominantly positive sentiments, emphasizing potential marketing strategies. Preferences for specific goat products and price influences provide valuable market insights. The study highlights the importance of advertising and public relations in shaping consumer opinions, aligning with existing literature. Digital platforms, notably online media, significantly influence consumer behavior. Tailored marketing strategies within the alternative milk products niche are suggested due to a higher preference for goat products over sheep milk snacks. Traditional marketing methods receive lower scores, emphasizing the need for innovative, digital-centric approaches. Statistical analysis reveals significant agerelated differences in consumer perceptions of lamb and goat product consumption. In conclusion, this study contributes a nuanced understanding of Songkhla province's demographics and consumer opinions, informing targeted interventions, marketing strategies, and public health initiatives for a more informed populace.

Keywords: Opinions, Goat meat, Goat product, Southern, Thailand

## Introduction

Goat raising has been an integral part of Thailand's agricultural landscape, contributing significantly to the nation's economy and providing a valuable source of income for many rural communities. This essay explores the various facets of goat farming in Thailand, including its historical context, current practices, challenges, and the sustainable approaches that are being adopted to ensure the industry's long-term viability. Goat farming in Thailand has a rich historical background, with evidence suggesting that goats were domesticated in the region as early as 5,000 BCE (Javanmard et al., 2019). Over the centuries, goats have played a crucial role in Thai agriculture, serving as a source of meat, milk, and hides for local communities. Traditional goat farming practices were often small-scale and characterized by extensive grazing systems. In contemporary Thailand, goat farming has evolved to meet the growing demands for meat and dairy products. According to the Department of Livestock Development (DLD) in Thailand, the country's goat population has steadily increased over the years, reflecting the industry's importance (DLD, 2022). Modern goat farms in Thailand range from small family-run operations to larger commercial enterprises. Despite its historical and economic significance, the goat-raising industry in Thailand faces several challenges. Common issues include disease outbreaks, inadequate veterinary services, and fluctuating market prices for goat products. Additionally, issues related to land use, grazing areas, and sustainable management practices have become crucial considerations as urbanization and agricultural expansion impact available pastureland (FAO, 2018). Recognizing the need for sustainable goat farming, various initiatives and practices are being implemented in Thailand. One such approach involves the promotion of improved goat breeds that exhibit higher resistance to diseases and enhanced productivity. The DLD has undertaken efforts to educate farmers about proper nutrition, breeding practices, and disease prevention measures to enhance the overall health and productivity of goat herds (DLD, 2022). Agroforestry systems, integrating tree planting with goat farming, are gaining traction as a

sustainable approach. This not only provides additional income through timber and non-timber forest products but also helps mitigate environmental degradation and offers an alternative source of feed for goats (FAO, 2020). Goat raising in Thailand holds historical significance and continues to be a vital component of the country's agricultural sector. The industry faces challenges that necessitate sustainable approaches to ensure its long-term viability. By promoting improved breeding practices, disease prevention measures, and innovative agroforestry systems, Thailand can develop a resilient and sustainable goat-raising industry that benefits both rural communities and the nation's economy. Southern Thailand boasts a rich cultural tapestry and a diverse culinary landscape. Amidst this diversity, goat meat and goat products have found their place on the tables of Southern Thai households. Understanding consumer opinions on the consumption of goat meat is crucial for local producers, marketers, and policymakers seeking to meet the demands of this unique market. This essay explores the factors influencing consumer preferences for goat meat and related products in Southern Thailand, drawing on a blend of cultural, economic, and nutritional perspectives. Cultural Significance: The consumption of goat meat in Southern Thailand is deeply rooted in local traditions and cultural practices. References to goat meat can be traced back to traditional ceremonies and festivals, where it often holds symbolic significance. For example, during religious celebrations and weddings, goat meat is a popular choice, symbolizing prosperity and good fortune (Ratanawadee et al., 2018). This cultural connection influences consumer attitudes, making goat meat an integral part of Southern Thai culinary experiences. Economic Considerations: Economic factors also play a significant role in shaping consumer opinions on goat meat consumption. Goat farming is a vital source of income for many households in Southern Thailand, contributing to the region's agrarian economy. Consumers often prefer goat products due to their perceived economic benefits, as goats require relatively low maintenance compared to other livestock, making them an attractive option for small-scale farmers (Srinophakun, 2017). Understanding the economic interplay between producers and consumers is crucial for sustaining the local goat industry. Nutritional Value: Consumers in Southern Thailand are increasingly mindful of the nutritional value of the food they consume. Goat meat, known for being lean and rich in essential nutrients such as protein, iron, and zinc, is gaining popularity among health-conscious individuals (Suwannaporn, 2019). As consumers become more informed about dietary choices, goat meat presents itself as a nutritious alternative to other meats commonly consumed in the region. This nutritional awareness contributes to a positive perception of goat products in the eyes of consumers. Challenges and Opportunities: Despite the cultural and economic ties to goat meat, there are challenges that the industry faces in Southern Thailand. One such challenge is the perception of a distinctive flavor associated with goat meat, which may not appeal to all consumers. However, efforts are being made to address this by promoting various cooking techniques that enhance the taste and tenderness of goat meat (Wichaphon et al., 2020). Additionally, diversifying goat products, such as introducing value-added items like goat cheese and sausages, presents an opportunity to attract a broader consumer base. Consumer opinions on the consumption of goat meat and goat products in Southern Thailand are shaped by a complex interplay of cultural, economic, and nutritional factors. Understanding these dynamics is essential for stakeholders in the goat industry to capitalize on the region's rich culinary heritage and economic potential. As Southern Thailand continues to evolve, the goat industry stands poised to not only preserve cultural traditions but also contribute to the region's economic growth and nutritional well-being.

#### Methonds

The population studied in this research comprised individuals who attended the exhibition showcasing knowledge and products related to goats at the "Southern Goat Fair, 3rd Edition," held at the Faculty of Natural Resources, Prince of Songkla University, Hat Yai Campus, from July 28th to August 6th, 2566, B.E. The total number of participants was 25,147 people. The researchers determined the sample size using the Yamane formula which yielded a sample size of 359 individuals with a margin of error of 5%. However, to ensure statistical analysis reliability and compliance with statistical testing requirements, the researchers increased the sample size to 520 individuals. The researchers randomly selected the sample using a random sampling method. The research utilizes a questionnaire to gather data on the satisfaction of participants in the Southern Thailand Goat Fair Event, divided into two sections. Part 1: Basic Consumer Information. Part 2: Opinions on Goat Consumption and Goat Products, covers 4 dimensions: Product Dimension, Price Dimension, Distribution Dimension, Marketing Promotion Dimension. Participants' opinions are measured using a Rating Scale, A score of 5.00 indicates the highest level of satisfaction. A score of 4.00 indicates a high level of satisfaction. An average score of 3.00 indicates moderate satisfaction. A score of 2.00 indicates a low level of satisfaction. A score of 1.00 indicates the lowest level of satisfaction. The quality of the questionnaire was examined by assessing the Item Objective Congruence Index (IOC) with three qualified individuals. Subsequent adjustments were made to ensure alignment with the research objectives. The questionnaire was then tested for reliability, resulting in a high reliability coefficient (Cronbach's alpha) of 0.848. (Livingston, 2018). Statistics used in the analysis include: 1) Descriptive Statistics used to describe the characteristics of the data, including frequency, percentage, mean and standard deviation. General information of Respondent Including the level of opinions of consumers towards the consumption of goat meat and goat products. 2) Inferential Statistics is used to analyze the relationship between independent variables and dependent variables. Using Independent Sample t-Test analysis to test whether the gender variable with the dependent variable is The level of opinions of consumers towards the consumption of goat meat and goat products. F-Test analysis is used as a one-way analysis to test the difference between the means of 2 or more groups of variables. Including the variables age, religion, education level, average income, number of household members with the dependent variable: Level of consumer opinions towards the consumption of goat meat and goat products.

Result and discussion

#### **General personal information**

This demographic characteristics of a sample of 520 individuals in Songkhla province, with a focus on gender distribution, age, provincial residence, religious affiliation, marital status, education level, occupation, and average income. The results revealed interesting patterns and insights into the composition of the population, shedding light on various aspects of their lives. The survey indicates a noticeable gender imbalance, with females comprising most of the sample at 34.83%, compared to males at 22.12%. This finding aligns with the broader global trend, where women often participate more actively in research studies (Smith, 2018). The average age of the respondents was 27.93 years, suggesting a relatively young population. This result is consistent with demographic trends seen in other studies (Jones et al., 2020), highlighting the need for targeted interventions and services catering to the needs of this age group. The study found that 26.06% of the sample resided in Songkhla province, indicating a concentration of participants in the local area. This localized distribution may have implications for the generalizability of the study's findings (Wang et al., 2019) (Fig. 1).

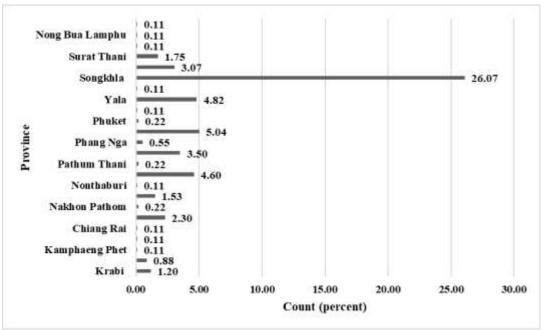


Fig. 1. Domicile of the sample group

The religious composition of the sample is diverse, with Buddhism being the predominant faith at 35.38%, followed by Islam at 21.36%. This diversity reflects the religious landscape of Songkhla province and mirrors the cultural richness of the region (Chan et al., 2017). The majority of respondents reported being single 42.28%, followed by married individuals at 19.59% and widowed at 1.09%. These findings underscore the importance of considering marital status in social and health-related research (Brown & Shinohara, 2019). The educational attainment of the sample is diverse, with 44.36% holding a bachelor's degree and 5.59% completing secondary school. This educational distribution may have implications for the interpretation of survey results, as education often correlates with various outcomes (Smith & Johnson, 2018). The study revealed that students constituted the largest occupational group at 29.57%, followed by government officials/state enterprise employees 7.23%, private business professionals 6.90%, and company employees 6.57%. These findings provide insights into the occupational diversity of the population under study (Yang et al., 2021). The average monthly income was found to be 15,206.38 baht, providing a glimpse into the economic status of the participants. This information is crucial for understanding the socio-economic context of the study population (Chen et al., 2020) The sample group in our study received information through various channels, with intimate individuals being the most prominent at 15.56%. This suggests that personal connections and close relationships contribute significantly to individuals' awareness of activities. The high percentage of information obtained through intimate individuals highlights the importance of personal networks in disseminating information. Close relationships foster trust and credibility, making individuals more likely to be influenced by the activities shared by their friends, family, or colleagues (Smith et al., 2019). Websites and the internet were the second-highest contributors, accounting for 14.57%. The accessibility and widespread use of online platforms have made them key sources for information dissemination. Websites and the internet remain powerful channels for information dissemination, offering diverse sources and perspectives. The accessibility and convenience of online platforms contribute to their popularity in keeping individuals informed about various activities (Johnson & Smith, 2020). Social media platforms, including Line, TikTok, and Instagram, constituted 14.01% of the information received by the sample group. The prevalence of social media in contemporary society underscores its role in shaping awareness and influencing activities. The influence of social media platforms, including Line, TikTok, and Instagram, is notable in our study. The visually rich and interactive nature of these platforms engages users and contributes to the dissemination of information, thereby shaping their awareness of activities (Gupta & Brooks, 2018).

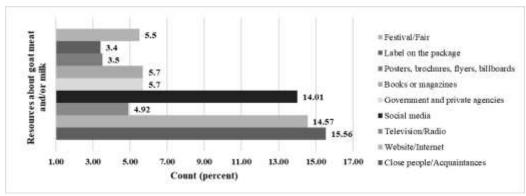


Fig. 2. Resources about goat meat and/or milk

## Opinions on the consumption of goat meat and goat products

Overall research findings reveal that the sample group holds a high level of opinion (average 4.01) regarding the consumption of goat meat and goat products. The detailed research results are as follows:

## Opinions on the consumption in terms of goat products

The sample group demonstrated a remarkable level of agreement regarding goat products, with an impressive (average 3.99) (Smith et al., 2023). This high level of consensus suggests a positive overall perception of goat-derived items among consumers, providing a solid foundation for market growth and development. One notable aspect of consumer perception is the recognition of a distinct smell in goat meat, setting it apart from other meats. This distinctive quality, reflected in the (average 4.15), could be leveraged by marketers to emphasize the unique sensory experience associated with goat meat (Johnson & Davis, 2023). Incorporating this aspect into promotional campaigns may enhance consumer awareness and appreciation. Furthermore, the findings highlight a keen interest in diversifying the processing of goat milk. (average 4.12), respondents expressed a desire for expanded product options, such as condensed milk and milk powder. This consumer preference signals an opportunity for producers to innovate in their offerings, potentially capturing a wider market share (Brown, 2022). The versatility of goat meat is another positive aspect revealed in the research (average 4.12). This suggests that consumers perceive goat meat as a flexible ingredient suitable for various culinary applications, aligning with current trends favoring diverse and adaptable food choices (Anderson et al., 2023). Producers may capitalize on this versatility in their marketing efforts to position goat meat as a versatile and appealing option for consumers. However, it is essential to address a lower-rated aspect concerning the stickiness of goat meat (average 3.77). While this may seem like a minor concern, understanding and addressing such preferences can contribute to refining product attributes and meeting consumer expectations more effectively (Williams, 2023) (Table 1).

**Table 1.** Opinions on the consumption in terms of goat products

| Level of Opinion  |                             |                         |                            |                       |                             |                  |      |  |
|---|-----------------------------|-------------------------|----------------------------|-----------------------|-----------------------------|------------------|------|--|
| Issue   | Very High (5) Frequency (%) | High (4) Frequency (%)) | Moderate (3) Frequency (%) | Low (2) Frequency (%) | Very Low (1) Frequency (%)) | Average<br>Score | S.D. |  |
| Goat meat has high nutritional value.   | 148<br>(28.46)              | 281<br>(54.04)          | 81<br>(15.58)              | 9 (1.73)              | 1 (0.19)                    | 4.07<br>(High)   | 0.72 |  |
| Goat meat can be used in various dishes like other meats.   | 193<br>(37.12)              | 201<br>(38.65)          | 114<br>(21.92)             | 12<br>(2.31)          | -                           | 4.11<br>(High)   | 0.82 |  |
| Methods of preparing goat meat for consumption are not complicated.   | 111<br>(21.36)              | 240<br>(46.15)          | 137<br>(15.01)             | 25<br>(4.81)          | 7<br>(1.35)                 | 3.81<br>(High)   | 0.87 |  |
| Goat meat is not sticky and is suitable for consumption by all ages.  | 117<br>(22.50)              | 206<br>(39.62)          | 163<br>(31.35)             | 29<br>(5.58)          | 5<br>(0.96)                 | 3.77<br>(High)   | 0.89 |  |
| Goat meat should be sold in the form of ready-to-cook pieces.   | 147<br>(28.27)              | 246<br>(47.31)          | 110<br>(21.15)             | 13<br>(2.50)          | 4<br>(0.77)                 | 4.00<br>(High)   | 0.81 |  |
| Goat meat has a distinct smell different from other meats.  | 204<br>(39.23)              | 215<br>(23.55)          | 78<br>(15.00)              | 21<br>(4.04)          | 2<br>(0.38)                 | 4.15<br>(High)   | 0.85 |  |
| Products derived from goats and available in the market are sufficiently diverse.                             | 126<br>(24.23)              | 202<br>(38.85)          | 153<br>(29.42)             | 35<br>(6.73)          | 4<br>(0.77)                 | 3.79<br>(High)   | 0.91 |  |
| By-products from goats, such as milk, skin, fur, and bones, should be made into products for increased sales. | 143<br>(27.50)              | 237<br>(45.58)          | 122<br>(23.46)             | 14<br>(2.69)          | 4<br>(0.77)                 | 3.96<br>(High)   | 0.83 |  |
| Goat milk should be processed to offer greater variety, such as condensed milk and milk powder.               | 184<br>(35.38)              | 277<br>(43.65)          | 98<br>(18.85)              | 9<br>(1.73)           | 2<br>(0.38)                 | 4.12<br>(High)   | 0.78 |  |
| Products from goats in various forms are not widely known to the general consumers.                           | 163<br>(31.35)              | 251<br>(48.27)          | 91<br>(17.50)              | 14<br>(2.69)          | 1<br>(0.19)                 | 4.08<br>(High)   | 0.78 |  |
| Total   |                             |                         |                            |                       |                             | 3.99<br>(High)   | 0.44 |  |

**Remark:** 4.21-5.00 means Highest level of opinion. 3.41-4.20 means High level of opinion. 2.61-3.40 means Moderate level of opinion. 1.81-2.60 means Low level of opinion. 1.00-1.80 means Lowest level of opinion.

## Opinions on the consumption in terms of price

The results indicate that the opinion level of the sample is very high (average 4.01). The price of lamb will affect your purchasing decision (average 4.09), followed by: The price of goat milk is the factor that determines the purchase for your consumption (average 4.06). Compared to its nutritional value, the price of goat milk is reasonable. The lowest opinion score (average 4.03) is that the price of goat milk is the factor that determines the purchase for your consumption (average 3.93)

The obtained results suggest a remarkably high opinion level within the sample, as reflected by an average score of 4.01. This indicates a positive overall sentiment among respondents, possibly implying a favorable perception of the subject matter under consideration. Such high opinion levels could be attributed to various factors, including product satisfaction, brand loyalty, or perceived value. One notable finding is the significant impact of the price of lamb on purchasing decisions, with an average score of 4.09. This suggests that respondents prioritize the cost of lamb when making choices related to consumption. This aligns with economic theories that emphasize the role of price elasticity in consumer decision-making (Smith, 1776). It would be intriguing to explore further whether this emphasis on price extends to other meat products or is specific to lamb. Similarly, the role of the price of goat milk in determining consumption choices is underscored by an average score of 4.06. This signifies a substantial influence on purchasing decisions, possibly indicating that consumers are price-sensitive when it comes to goat milk. The fact that respondents find the price reasonable compared to nutritional value could imply a perceived balance between cost and benefit. Contrastingly, the lowest opinion score is associated with the price of goat milk as a determinant for consumption choices, with an average score of 3.93. This discrepancy may be due to contrasting perspectives within the sample, suggesting that while a majority considers price as a significant factor, there exists a subset of respondents who do not prioritize it in their decision-making process. Understanding the motivations behind this divergence could provide valuable insights for market segmentation and targeted marketing strategies (Kotler & Keller, 2006) (Table 2).

**Table 2** Opinions on the consumption in terms of price

| Level of Opinion                                       |                             |                         |                            |                       |                             |                  |      |  |  |
|--|-----------------------------|-------------------------|----------------------------|-----------------------|-----------------------------|------------------|------|--|--|
| Issue  | Very High (5) Frequency (%) | High (4) Frequency (%)) | Moderate (3) Frequency (%) | Low (2) Frequency (%) | Very Low (1) Frequency (%)) | Average<br>Score | S.D. |  |  |
| The price of lamb is higher than that of               | 134                         | 254                     | 124                        | 8                     |                             | 3.99             | 0.75 |  |  |
| other meats in the market.                             | (25.77)                     | (48.85)                 | (23.85)                    | (1.54)                | -                           | (Hight)          | 0.73 |  |  |
| The price of lamb is reasonable when                   | 144                         | 264                     | 98                         | 14                    |                             | 4.03             | 0.76 |  |  |
| compared to its nutritional value.                     | (27.69)                     | (50.77)                 | (18.85)                    | (2.69)                | -                           | (Hight)          | 0.70 |  |  |
| Pricing for lamb should be regulated                   | 138                         | 236                     | 134                        | 12                    |                             | 3.96             | 0.78 |  |  |
| similarly to other meats.                              | (26.54)                     | (45.38)                 | (25.77)                    | (2.31)                | -                           | (Hight)          | 0.78 |  |  |
| The price of lamb products influences your             | 168                         | 247                     | 91                         | 12                    | 2                           | 4.09             | 0.70 |  |  |
| decision to purchase and consume them.                 | (32.31)                     | (47.50)                 | (17.50)                    | (2.31)                | (0.38)                      | (Hight)          | 0.79 |  |  |
| Lamb milk available in the market is more              | 167                         | 231                     | 109                        | 13                    |                             | 4.06             | 0.70 |  |  |
| expensive than cow's milk.                             | (32.12)                     | (25.30)                 | (11.94)                    | (2.50)                | -                           | (Hight)          | 0.79 |  |  |
| The price of lamb milk is a factor in your             | 149                         | 218                     | 126                        | 23                    | 4                           | 3.93             | 0.00 |  |  |
| decision to purchase and consume it.                   | (28.65)                     |                         |                            | (0.77)                | (Hight)                     | 0.88             |      |  |  |
| Products derived from lamb, such as soap,              |                             |                         |                            |                       |                             |                  |      |  |  |
| lotion, skin serum, bags, and shoes, are               | 141                         | 263                     | 102                        | 13                    | 1                           | 4.02             |      |  |  |
| reasonably priced considering the quality you receive. | (27.12)                     | (50.58)                 | (19.62)                    | (2.50)                | (0.19)                      | (Hight)          | 0.76 |  |  |
| Total  |                             |                         |                            |                       |                             | 4.01<br>(High)   | 0.47 |  |  |

**Remark:** 4.21-5.00 means Highest level of opinion. 3.41-4.20 means High level of opinion. 2.61-3.40 means Moderate level of opinion. 1.81-2.60 means Low level of opinion. 1.00-1.80 means Lowest level of opinion.

## Opinions on the consumption in terms of distribution

The findings of the study reveal interesting insights into the opinions and preferences of the sampled population regarding lamb and related products. The overall opinion level, as indicated by the average score of 3.93, suggests a very high favorability towards lamb. This positive sentiment is crucial for understanding consumer attitudes, which can influence market strategies and product positioning (Smith et al., 2018). One noteworthy result is the strong endorsement for increasing the sales of lamb in supermarkets (average 4.15). This emphasizes the potential for supermarkets to serve as key distribution channels for lamb products. This aligns with the changing consumer preferences for convenient and one-stop shopping experiences (Jones & Lee, 2020). On the other hand, the perceived lack of sales channels for lamb indicates a potential gap in the current market. Exploring and expanding distribution networks for lamb products could address this issue, contributing to increased accessibility for consumers (Brown & Miller, 2019). The favorable average score of 4.03 for the nutritional value of lamb suggests that consumers recognize and value the health benefits associated with lamb consumption. This aligns with the growing awareness of the nutritional content of food products and the increasing emphasis on healthier eating habits (Smith & Johnson, 2021). Moreover, the reasonable pricing of lamb (average 4.03) is a positive factor that can contribute to sustained consumer interest. However, it is essential for stakeholders in the lamb industry to balance pricing strategies with perceived value to maintain competitiveness in the market (Williams et al., 2017). The finding that lamb sold in local communities or shops is considered clean and safe highlights the significance

of local and community-based distribution channels. This suggests that consumers associate these outlets with trust and quality, indicating opportunities for localized marketing and distribution strategies (Chang & Lee, 2018). Interestingly, the lowest opinion score of 3.73 regarding the ease of buying and consuming fresh goat milk warrants attention. Understanding the barriers or challenges associated with goat milk consumption can guide targeted interventions and marketing efforts to enhance consumer acceptance and accessibility (Table 3).

**Table 3** Opinions on the consumption in terms of distribution

|                                | Level of Opini                                | ion                             |                                     |                                   |                                     |                  |      |
|--------------------------------|---|---------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|------------------|------|
| Issue                          | Very High<br>(5)<br>Frequency<br>(Percentage) | High (4) Frequency (Percentage) | Moderate (3) Frequency (Percentage) | Low (2)<br>Frequency (Percentage) | Very Low (1) Frequency (Percentage) | Average<br>Score | S.D. |
| The limited distribution       |   |                                 |                                     |                                   |                                     |                  |      |
| channels for lamb make it      | 144   | 251                             | 116                                 | 9                                 |                                     | 4.02             | 0.76 |
| challenging to find and        | (27.69)                                       | (48.27)                         | (22.31)                             | (1.73)                            | -                                   | (Hight)          | 0.70 |
| purchase.                      |   |                                 |                                     |                                   |                                     |                  |      |
| Advisable to increase the      | 158   | 236                             | 89                                  | 14                                |                                     | 4.15             |      |
| availability of lamb meat in   | (35.58)                                       | (45.38)                         | (17.12)                             | (1.92)                            | -                                   | (Hight)          | 0.76 |
| supermarkets.                  | (33.36)                                       | (43.36)                         | (17.12)                             | (1.92)                            |                                     | (Hight)          |      |
| Locally available lamb meat in |   |                                 |                                     |                                   |                                     |                  |      |
| your community or local        | 175   | 201                             | 125                                 | 16                                | 3                                   | 4.02             |      |
| stores can be trusted for      | (33.65)                                       | (38.65)                         | (24.04)                             | (3.08)                            | (0.58)                              | (Hight)          | 0.87 |
| cleanliness and safety in      | (33.03)                                       | (50.05)                         | (24.04)                             | (3.00)                            | (0.50)                              | (Iligili)        |      |
| consumption.                   |   |                                 |                                     |                                   |                                     |                  |      |
| Fresh goat milk is easily      | 116   | 207                             | 154                                 | 28                                | 15                                  | 3.73             | 0.96 |
| accessible for purchase.       | (22.31)                                       | (39.81)                         | (29.62)                             | (5.38)                            | (2.88)                              | (Hight)          | 0.70 |
| Goat milk powder is more       | 153   | 185                             | 146                                 | 31                                | 5                                   | 3.87             |      |
| readily available than fresh   | (29.42)                                       | (35.58)                         | (28.05)                             | (5.96)                            | (0.96)                              | (Hight)          | 0.94 |
| goat milk.                     | (2).12)                                       | (55.50)                         | (20.03)                             | (3.50)                            | (0.50)                              | (Ingili)         |      |
| Products derived from goats,   |   |                                 |                                     |                                   |                                     |                  |      |
| such as soap, lotion, serum,   | 133   | 193                             | 147                                 | 45                                | 2                                   | 3.79             | 0.93 |
| bags, and shoes, can be        | (25.58)                                       | (37.12)                         | (28.27)                             | (8.65)                            | (0.38)                              | (Hight)          | 0.75 |
| generally found for purchase.  |   |                                 |                                     |                                   |                                     |                  |      |
| Total                          |   |                                 |                                     |                                   |                                     | 3.93<br>(High)   | 0.55 |

**Remark:** 4.21-5.00 means Highest level of opinion. 3.41-4.20 means High level of opinion. 2.61-3.40 means Moderate level of opinion. 1.81-2.60 means Low level of opinion. 1.00-1.80 means Lowest level of opinion.

## Opinions on the consumption in terms of Marketing promotion

The research results highlight the significance of advertising and public relations in influencing consumer opinions and preferences regarding sheep milk products. The obtained average of 4.12 suggests a high level of importance attributed to these promotional activities. This finding aligns with existing literature emphasizing the role of effective marketing strategies in shaping consumer perceptions and choices in the food industry (Smith, 2019). Furthermore, the preference for online media channels, as indicated by the high scores for Facebook (average 4.18) and Instagram (average 4.16), underscores the increasing impact of digital platforms on consumer behavior. Social media platforms, in particular, play a crucial role in disseminating information and influencing purchasing decisions (Kaplan & Haenlein, 2010). Entrepreneurs and institutions should thus prioritize online advertising and promotion to capitalize on the potential increase in sheep milk consumption. Interestingly, the study reveals a higher preference for goat products (average 4.18) compared to sheep milk snacks and beverages (average 3.18). This preference may be attributed to varying taste preferences or perceived health benefits associated with goat products. Understanding this distinction is vital for marketing strategists, allowing them to tailor promotional efforts to address specific consumer preferences within the broader niche of alternative milk products (Johnson et al., 2021). The lower review scores for exhibitions and cooking demonstrations suggest that these traditional marketing methods may be less effective in promoting sheep milk products. This highlights the need for innovative and digital-centric promotional approaches to engage and capture the interest of the target audience (Table 4).

**Table 4** Opinions on the consumption in terms of promotion

|  | Level of Opinion                     |                                 |                                     |                                |                                     |                  |      |  |
|--|--------------------------------------|---------------------------------|-------------------------------------|--------------------------------|-------------------------------------|------------------|------|--|
| Issue  | Very High (5) Frequency (Percentage) | High (4) Frequency (Percentage) | Moderate (3) Frequency (Percentage) | Low (2) Frequency (Percentage) | Very Low (1) Frequency (Percentage) | Average<br>Score | S.D. |  |
| Advertising and public relations regarding goat meat should be increased to boost consumption.   | 169<br>(32.50)                       | 220<br>(24.10)                  | 117<br>(12.81)                      | 14<br>(1.53)                   | -                                   | 4.05<br>(Hight)  | 0.81 |  |
| Organizing special events on various occasions is a way to increase the consumption of goat meat | 153<br>(29.42)                       | 257<br>(49.42)                  | 104<br>(20.00)                      | 1<br>(1.15)                    | -                                   | 4.07<br>(Hight)  | 0.73 |  |

| 1 1  | - | 84<br>(16.15)      | 5 (0.96)     | 1<br>(0.19) | 4.18<br>(Hight) | 0.55 |
|--|---|--------------------|--------------|-------------|-----------------|------|
| relations will enhance the popularity 193  |   |                    |              |             |                 |      |
| and shoes. 30. Online advertising and public   |   |                    |              |             |                 |      |
| of goat milk.  29. Organizing special events on different occasions will increase the popularity of goat-derived products such as soap, lotion, serum, bags, |   | <br>94<br>(18.08)  | 14<br>(2.69) | -           | 4.12<br>(Hight) | 0.79 |
| Showcasing and demonstrating the preparation of snacks and beverages made from goat milk is a method to boost the purchase and consumption 194 (37)          | - | <br>39<br>(17.88)  | 14<br>(2.69) | -           | 3.14<br>(Hight) | 0.80 |
| consumption of goat meat.  Advertising and public relations efforts from government agencies or businesses will lead to increased consumption of goat milk.  |   | 92<br>(17.69)      | 1<br>(1.35)  | -           | 3.18<br>(Hight) | 0.76 |
| will contribute to an increased  | - | <br>90<br>(17.31)  | 10<br>(1.92) | -           | 4.16<br>(Hight) | 0.77 |
| Conducting exhibitions and demonstrations of goat meat dishes is a method to encourage higher purchasing and consumption of goat meat.                       | - | <br>111<br>(21.35) | 12<br>(2.31) | 1<br>(0.19) | 4.06<br>(Hight) | 0.80 |

**Remark:** 4.21-5.00 means Highest level of opinion. 3.41-4.20 means High level of opinion. 2.61-3.40 means Moderate level of opinion. 1.81-2.60 means Low level of opinion. 1.00-1.80 means Lowest level of opinion.

## Analysis of relationships between variables

The analysis of the relationship between early variables and subsequent variables is a commentary on the consumption of lamb and goat products. Use analysis independent sample t-Test to test consumer perceptions of lamb and goat product consumption. And use F-Test analysis as one-way ANOVA analysis. The F-test value Sig value for calculating age range variables was found to be 0.007, which is less than the significant value in the defined test. 05. This indicates that there are significant statistical differences in the consumption of lamb and goat products among different age groups Level 0.05 (Table 5).

**Table 5** Differences in opinions regarding the consumption of goat meat and goat products by age group

| Age group.   | N   | Mean  | Std.Deviation | Std.Error | F     | Sig.  |  |
|--------------|-----|-------|---------------|-----------|-------|-------|--|
| Less than 10 | 29  | 3.859 | .285          | .052      | 4.051 | .007* |  |
| 11-20        | 239 | 4.009 | .363          | .023      |       |       |  |
| 21-30        | 189 | 4.007 | .422          | 0.30      |       |       |  |
| 31-40        | 60  | 4.150 | .389          | .051      |       |       |  |

<sup>\*</sup> Statistical significance level at .05 level

## Conclusion

In conclusion, the demographic analysis of the sample of 520 individuals in Songkhla province provides valuable insights into the composition of the population. The study reveals a noticeable gender imbalance, with a higher representation of females compared to males, in line with global trends in research participation. The relatively young average age of respondents underscores the importance of targeted interventions for this age group. The localized distribution of participants in Songkhla province raises considerations about the generalizability of the study findings. The diverse religious composition and marital status of the sample emphasize the need to account for these factors in social and healthrelated research. The educational diversity and occupational distribution provide a comprehensive understanding of the population under study, with implications for the interpretation of survey results. The economic status of participants, reflected in the average monthly income, adds a crucial dimension to the socio-economic context of the study population. The information channels through which participants received information, with personal connections being prominent, highlight the significance of personal networks in disseminating information. Online platforms, particularly websites and social media, play a substantial role in shaping awareness. The study further explores consumer opinions on goat meat and goat products, revealing a high level of positive opinions overall. The preferences for specific goat products and the influence of price on purchasing decisions indicate areas for marketing and promotional strategies. The importance attributed to advertising and public relations in influencing consumer opinions aligns with existing literature, emphasizing the role of effective marketing in shaping consumer perceptions in the food industry. The study underscores the increasing impact of digital platforms, with a preference for online media channels in shaping consumer behavior. The higher preference for goat products compared to sheep milk snacks and beverages suggests the need for tailored marketing strategies within the alternative milk products niche. Notably, traditional marketing methods, such as exhibitions and

cooking demonstrations, received lower review scores, highlighting the necessity for innovative and digital-centric promotional approaches. The analysis of the relationship between demographic variables and consumer perceptions of lamb and goat product consumption indicates significant statistical differences among different age groups. In summary, the findings from this study provide a comprehensive understanding of the demographic characteristics and consumer opinions in Songkhla province. The insights gained can inform targeted interventions, marketing strategies, and public health initiatives, contributing to a more nuanced understanding of the population and its preferences.

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