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Current Trends, U.S. Immigration Policies, and Marketing Strategies for Goat Meat

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Abstract

Demand for goat meat currently depends on foreign-born immigrants, but current U.S. immigration policies may have negative impacts on immigrant populations, which may affect the meat goat industry. Data from a consumer survey conducted in Georgia was used to determine the potential domestic market for value-added goat meat products among foreign- and native-born Americans. About 56% of participants who had never tasted goat meat expressed willingness to taste if the grocery stores gave out goat meat samples. Current goat meat consumers were more willing to pay for locally grown, grass fed, and organic goat meat.

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Introduction

Goat meat is one of the most widely consumed meats in the world, especially in developing countries. Although goats have been raised in the United States for centuries, they are mostly produced for milk and fiber. According to the U.S. Department of Agriculture (USDA, 2017a), there are 80% more meat goats (2,115,000) than all of the other types of goats in the United States. Even though goat inventory has increased in past years, demand still exceeded supply, a fact that was reflected in a sharp increase in imports and has made the United States the world's leading importer of goat meat since 1999 (Extension, 2015).

In 2017, imports of fresh, chilled, or frozen sheep or goat meat increased by 27%, from \$523.55 million to \$665.04 million, through the first 8 months when compared to the same period of 2016. Most of these imports came from Australia and New Zealand (World City, 2017). This import increase has been attributed to an influx of recent immigrants from non-European countries where goat meat is widely consumed: 87% of the U.S. foreign-born population comes from non-European countries (U.S. Census Bureau, 2010).

The Pew Research Center (2015) recognized a dramatic shift in immigrants' origins that occurred between 1960 and 2013. In 1960, 85% of immigrants were from Europe or Canada, but by 2013, 78% of immigrants were from South/East Asia, Mexico, and other Latin American countries. The goat industry is projected to grow as long as the U.S. ethnic population continues to increase (U.S. Department of Agriculture, 2005).

If changes in the U.S immigration policy limit the entry or presence of migrants from the countries where goat meat is widely consumed, meat goat producers and markets will have several questions: What is the future of the meat goat industry and goat meat market? What impact would immigration policies changes have? Will there be opportunities for domestic goat farmers if ethnic populations decrease?

This research provides meat goat producers with strategies to capture larger markets. Specific objectives were to examine consumers' views on domestic goat meat compared with imported goat meat and their willingness to buy locally produced meat and to examine favorability of locally produced, genetically modified (GM), organic, and grass-fed meat goats.

Methods and Analysis

This study uses data from a consumer survey of 593 Georgia residents conducted in 2012. Of these respondents, 92.6% were native born, and 85% had never tasted or eaten goat meat. Many of them had not been exposed to it. When asked whether they would be willing to buy goat meat if it were available in their local store, about 54% answered affirmatively. Hence, a larger goat meat market may be attained with strategies that would appeal to potential consumers.

This study examined i) whether consumers perceive domestic goat meat to be safer compared to imported goat meat; ii) consumers' preferences for locally grown and fresh goat meat; and iii) the consumers' perceptions of health aspects of goat meat. Additionally, the 86 respondents who

March 2018 71 *Volume 49, Issue 1*

had tasted goat meat were asked about their preferences for types and varieties of processed goat meat products.

Domestic Goat Meat Is Safer than Imported Goat Meat

The U.S government ensures food safety at all levels with various USDA food safety and inspection programs. The U.S. Food and Drug Administration (FDA) requires producers to label all animal feed ingredients to prevent animal byproducts (such as meat and bone meal) from entering the ruminant food supply chain (USDA-ERS, 2017b). The safety of the supply chain is maintained by federal regulations that require livestock inspection before slaughter and meat inspection after slaughter (USDA-ERS, 2017b). However, the nearly 200 countries that export foods to the United States do not have the exact same pesticide, food additive, and veterinary drug approval systems as the United States, and many of these countries do not have any food safety or quality control programs (Wallace and Orja, 2010).

Therefore, the quality of imported goat meat to the United States can be questioned, and goat meat consumers in this study were asked whether they felt domestic goat meat was safer than imported. The study found that 48.20% either strongly agreed or agreed that domestic goat meat is safer than imported goat meat; only 13.25% disagreed or strongly disagreed. This may imply that Georgia goat meat consumers prefer domestic over imported goat meat. As of today, a large quantity of imported goat meat comes to market, which suggests that strategies for promoting domestic goat meat may encourage buyers to purchase domestically produced meat.

Loureiro and Umberger (2003) found that respondents wanted to pay more for products labeled "U.S. Certified Steak" and "U.S. Certified Hamburger." Consumers' confidence may therefore positively reflect demand for domestically produced goat meat because many U.S. food firms exceed regulated food safety standards or requirements (USDA-ERS, 2017b).

Willingness to Buy Locally Grown

Defining local food can be complex, and the definition varies with purpose, geography, and data availability. Local food represents local ownership of the farm and is associated with natural, organic, and other specialty foods marketed through direct consumer outlets (Martinez et al., 2010; Adams and Adams, 2011; Low et al., 2015). Consumers', producers', and policy makers' interest in local foods appears to be growing, and local food has been the subject of federal, state, and local government policies in recent years (Low et al., 2015). Several studies have examined consumers' preferences for various meat products. Maynard, Burdine, and Meyer (2003) found that locally produced ground beef with higher fat content was most preferred in terms of juiciness, texture, and overall palatability when compared to chicken. A large majority of consumers preferred every attribute of the product purchased from the grocery store to the locally produced free-range chicken. Feldman and Ham (2014) found that, unlike organic food, local food was not perceived to be expensive. Hence, information about consumers' preferences for local goat meat is important in understanding the impact on local and regional goat meat industries across the country. Will Americans be more willing to buy more of local goat meat versus organic, grass fed, or genetically modified (GM) goat meat? The current goat meat consumers were asked whether they would be more willing, indifferent to, or less willing to buy

March 2018 72 *Volume 49, Issue 1*

goat meat with different production attributes—such as grass-fed, organic, locally grown, and GM—if they were available. Consumers were more willing to purchase locally grown goat meat (68.67%) than grass-fed (61.45%) and organic goat meat (50.6%) (Figure 1). Only 6.02% were more willing to purchase GM goat meat, and 68.67% were less willing. This may indicate that locally grown goat meat may capture a larger share at the goat meat market. However, consumers' preferences for locally grown, grass-fed, or organic may need to be examined further. Local governments also provide many fiscal incentives for local food producers, retail stores, and farmers' markets such as loans, grants, or reduced permit and license fees. Several states also have adopted legislation to provide financial incentives for food retail outlets and local food retailers to locate in areas with low access to healthy food in order to increase food access (Neuner, Kelly, and Raja, 2011; Winterfeld et al., 2012).

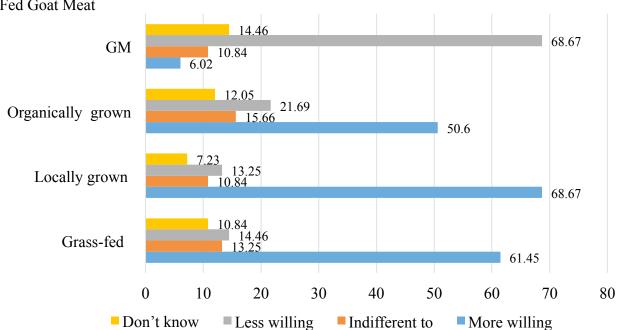


Figure 1. Percentage of Respondents Willing to Buy GM, Organic, Locally Grown, or Grass-Fed Goat Meat

Freshness or Not Frozen Goat Meat

The survey asked whether freshness and taste/flavor of goat meat were important factors for consumers' meat purchasing decisions. Meat quality, taste, and tenderness were very important for 91.57% of the goat meat consumers, and 94% of the respondents indicated that freshness or not frozen meat was either very important or somewhat important. According to the FDA's refrigerator and freezer storage chart, fresh meat can be refrigerated (at 40° F or 4° C) for 4–5 days before spoiling. Hence, local producers may be necessary to supply consumers' demand for fresh goat meat. This could make room for larger domestic goat meat production, and emphasis to increase local production could shift demand from imported frozen goat meat to local production. However, imported frozen goat meat is much cheaper compared to locally produced (Ashby and Lantz, 2010; Luginbuhl, 2015). In our study, 56.63% of respondents said that price was a very important factor.

Health-Conscious Consumers

In addition to many other benefits, goat meat is high in protein and lower in calories, total fat, saturated fat, and cholesterol compared to chicken, beef, pork, and lamb (USDA Nutrient Database, 2018). Saturated fat can increase levels of "bad" LDL cholesterol; less saturated fat and less cholesterol mean healthier red meat for the health-conscious consumer (Harvard Medical School, 2017; Correa, 2016). This is reflected in goat meat consumers in Georgia: 73.49% stated that leanness or less fat meat was very important, and 69.88% said that less cholesterol was very important (Figure 2). Ibrahim et al. (2016) showed that Individuals with higher levels of education were more likely to consume goat meat. Therefore, using an educational strategy, goat meat can be promoted as a healthy meat in the U.S. market.

Cholesterol 21.69 69.88 2.42 14.46 Leanness(N=83) 9.64 73.49 6.02 9.64 Freshness (N=83) 84.34 2.41 4.82 Price (N=83) 36.13 56.63 2.41 Quality (N=83) 7.23 91.57 30 0 10 20 40 50 60 70 80 90 100 ■ Don't know (%) ■ Not important (%) ■ Somewhat important (%) ■ Very Important (%)

Figure 2. Respondents' Views on Various Healthy Aspects of Goat Meat

Product Marketing Strategy

The survey found that 73.56% of respondents did not purchase raw goat meat. Hence, producers can add value by marketing meat goats as locally grown, grass-fed, and organic to the various niche markets. When asked "To compare with a package of beef jerky (1 ounce) which is typically sold for between \$1.29 and \$2.00 in grocery store, would you willing to buy goat jerky?" 35% of goat meat consumers were positive. Hence, producers could develop value-added products analogous to existing products that are familiar to consumers (e.g., jerky, sausage, and

March 2018 74 *Volume 49, Issue 1*

burgers). The survey also found that 24.42% of goat meat consumers preferred skinless and 26.74% preferred singed (skin-on burnt) types of goat meat.

Future Studies

Future studies of fresh, not frozen, goat meat and price may need to be conducted, and import policies should be enhanced so that local producers can compete with cheaper imported frozen goat meat. Food safety policies must apply to both domestic and imported goat meats, which may cut down the import quantity or raise imported goat meat price.

Conclusion

Domestic goat meat was considered by many respondents to be safer than imported goat meat, and locally grown goat meat was preferred to GM, grass-fed, and organic goat meat. Goat meat consumption can be increased through value-added products (sausage) and attributes (locally grown, organic, and grass-fed), especially among the native-born population and by targeting those who are willing to taste goat meat. A marketing strategy such as promoting health benefits may attract new consumers as well.

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March 2018 75 *Volume 49, Issue 1*

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March 2018 76 *Volume 49, Issue 1*

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March 2018 77 Volume 49, Issue 1