Identifying Factors That Determine The Demand For Goat Meat In Florida.

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Abstract

Goat production has become one of the fastest growing livestock industries in the U.S. This is evidenced through the two-fold increase in demand for goat meat over the past two decades. However, despite the increase in demand, U.S. producers are still unable to match production with demand. Consumption of goat meat among non-traditional consumers is still relatively low at this time. Currently, most of the goat meat consumed in the U.S. is imported from New Zealand but research has shown that opportunities exist for U.S. producers to fill this gap. The demand for goat meat in the United States comes mostly from ethnic groups that include Asians, Africans, Latin Americans and the Caribbean. Most of these groups buy goat meat wherever they can find it, and are willing to pay premium prices for higher quality meat. The purpose of this study was to identify factors that affect the demand for Goat meat in the state of Florida. A marketing survey using 500 participants as a representative sample of the American population was used to collect data relevant to the study. The study focused primarily on the relationship between certain qualitative parameters such as cultural and religious practices, breeding programs, marketing age, weight and sex classes of animals, income categories, and the ethnic backgrounds of current and potential consumers of goat meat. These parameters were chosen since previous research has shown that they were linked to the demand for goat meat. A chi square analysis was done to test the null hypothesis of no association between these parameters and goat meat consumption. The results indicated no significant association ($p < 0.05$) between ethnicity and goat meat consumption so this hypothesis could not be rejected. Consistent with popular belief, the results indicated that Black Americans are the lowest consumers of goat meat, followed by Europeans and Hispanics. This information could be useful in identifying marketing opportunities for small and limited resource goat farmers in the state of Florida

Introduction

The demand for goat meat in the United States is growing. Meat goat slaughter at federally inspected plants surpassed 100,000 head in 1984, but numbers have climbed to over 600,000 in 2003 and 2004 (NASS, 2005). Goat meat comprises 63 percent of all red meat that is consumed worldwide. Preferences and consumption patterns for goat meat are dictated by cultural, traditional, and religious backgrounds, and the socioeconomic status of the community (NASS, 2005). Goat meat offers more nutritional value, greater health benefits, and is an ideal choice to be considered as "the other red meat." As the health benefits of goat becomes more widely

known among the general population, the demand for alternative low fat red meat should also continue to increase (A.M.G.A, 2008). The nutritive value of goat meat is becoming increasingly important among health conscious individuals. Not only is goat meat lower in total fat and cholesterol, but it is also lower in saturated fats than traditional meats. There are several reasons for the growing popularity of goat meat in the United States. A big factor is the larger number of ethnic groups who have settled in this country and who have a preference for goat meat, milk, and cheese products (Kime, 2009).

Materials and Methods

A survey designed to capture data on demographic, socio economic and consumption preferences for goat meat were used. The questionnaires were distributed to people of different ethnic backgrounds throughout the state of Florida. The surveys were distributed through email, person to person and also through telephone communication. A total of 173 surveys were distributed over a three-month period. The surveys were numbered for purposes of data integrity then the responses were coded then entered into a Microsoft Excel spreadsheet. The data were later analyzed using the Statistic analysis system (SAS) version 9.0 (SAS Institute, Cary, NC). Chi square tests of association and linear trends were done to look for significant relationships between meat goat consumption and the explanatory variables and significant trends in consumption patterns, with respect to the explanatory variables used in the study.

Results and discussion

Table 1: The Association between Race and Goat Meat Consumption

Table of Race by Consumption

Race of Respondent

Frequency Percent Row Pct Col Pct	Do you eat goat meat		
	Yes	No	Total
African-American	26 19.70 42.62 33.33	35 26.52 57.38 64.81	61 46.21
Black Caribbean	28 21.21 90.32 35.90	3 2.27 9.68 5.56	31 23.48
Black African	8 6.06 88.89 10.26	1 0.76 11.11 1.85	9 6.82
Black Hispanic	3 2.27 50.00 3.85	3 2.27 50.00 5.56	6 4.55
White European	7 5.30 43.75 8.97	9 6.82 56.25 16.67	16 12.12
White Hispanic	2 1.52 66.67 2.56	1 0.76 33.33 1.85	3 2.27
Asian	4 3.03 66.67 5.13	2 1.52 33.33 3.70	6 4.55
Total	78 59.09	54 40.91	132 100.00

Frequency Missing = 3

Table 2: The Association between Income and Goat Meat Consumption

Table of Income by Consumption

Income Category / Frequency / Percent / Row Pct / Col Pct	Do you eat goat meat: Yes	No	Total
<$20,000	22 16.67 59.46 27.85	15 11.36 40.54 28.30	37 28.03
$21,000-$40,000	22 16.67 66.67 27.85	11 8.33 33.33 20.75	33 25.00
$41,000-$60,000	14 10.61 50.00 17.72	14 10.61 50.00 26.42	28 21.21
>$60,000	21 15.91 61.76 26.58	13 9.85 38.24 24.53	34 25.76
Total	79 59.85	53 40.15	132 100.00

Frequency Missing = 3

Table 3: The Association Between Gender and Goat Meat Consumption.

Table of Gender by Consumption

Gender of Respondent / Frequency / Percent / Row Pct / Col Pct	Do you eat goat meat: Yes	No	Total
Male	48 36.92 69.57 60.76	21 16.15 30.43 41.18	69 53.08
Female	31 23.85 50.82 39.24	30 23.08 49.18 58.82	61 46.92
Total	79 60.77	51 39.23	130 100.00

Frequency Missing = 5

Table 4: Seasonal Demand For Meat Goats

Period	Frequency	Percent	Cumulative Frequency	Cumulative Percent
January-March	7	10.77	7	10.77
April-June	22	33.85	29	44.62
July-September	15	23.08	44	67.69
October-December	21	32.31	65	100.00

Frequency Missing = 63*

Conclusion

The study indicates a clear gender bias since males consume significantly more goat meat compared to females. Based on the results of the chi-square analyses, there is a stronger preference for goat meat among people from the Caribbean, Continental Africa and Asia respectively. Consumers from these regions consume significantly more goat meat than Europeans and Hispanics. The results indicated no significant trend in consumption patterns across the various income categories surveyed. Individuals in high income categories are just as likely to consume goat meat as those in low income categories. Meat goat sales are highest during the second quarter of the year (April to June). However, sales during the fourth quarter are comparable to those of the second quarter. This information bears strong implications for limited resource producers, since timing of breeding is important in order to have animals ready for these specific time periods.

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