



Research Paper

## Factors Affecting Goat Milk Consumption In Minna Metropolis

\*<sup>1</sup>Lawal, M., <sup>1</sup>Lawal, S. M., <sup>1</sup>Abdullahi, R. K/Bai., <sup>2</sup>Magaji, A. S.

<sup>1</sup>Federal College of Education, Katsina, Katsina State

<sup>2</sup>Hassan Usman Katsina Polytechnic, Katsina State

### Abstract

This study examined the factors affecting goat milk consumption in Minna metropolis NORTH central Nigeria (Niger State). Data were collected randomly from 120 respondents using questionnaires. Simple descriptive tools such as means, percentages and frequencies were used to analyse the data. About 32% of the respondents have a goat. Almost 90% of the respondents do not use milk in their households. Unavailability and unawareness were the most critical factors affecting the consumption of goat milk. In general, the study revealed that goat milk consumption is not typical in the area. Therefore, it was recommended that people be enlightened about the nutritional values of goat milk, and they should be encouraged to consume the milk through education campaigns.

**Keywords:** goat ownership, goat milk, consumption pattern

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### I. Introduction

Goat milk is very nutritious (Ibeawuchi *et al.*, 2003), has therapeutic values (Egwu *et al.*, 1995) and has been reported to be consumed in a lot of places around the world (Rubino and Haenlein, 1996). Goat milk is yet to be nationally accepted for consumption in Nigeria (Fasanya, 1986). Nigeria has a large population of goats (53 million), coming the 5<sup>th</sup> largest world producer after China, India, Pakistan and Bangladesh (FAOSTAT, 2008). Most of these goats are located in rural areas (Otchere *et al.*, 1985). An analysis of the nutritional situation and food consumption pattern of many Nigerians, especially the rural populace, has been protein deficient (Akinyele, 2009). Such food consumption patterns can cause several malnutrition diseases.

With a large number of goats in the country, it is ironic to say that people who keep them suffer from malnutrition due to low protein intake. Goat milk is a good source of animal protein; however, the milk produced continuously over the lactating period of around 120 days is rarely consumed. Therefore, the question that comes into mind is why such a negative attitude towards goat milk consumption or what are the factors affecting goat milk consumption?

This work thus seeks to examine the potential of goat milk as an acceptable source of protein in the country. More specifically, it aims to determine the goat ownership, pattern of goat milk consumption and factors affecting it.

### II. Materials and Methods

The study was conducted in Minna and its surrounding settlements. Minna is the capital city of Niger State and is located at latitude 9°37' North and 6°33' East. As it is with the whole of Niger State, Minna is found in the Southern Guinea Savanna.

Stratified random sampling was used for this research. The study involved 120 respondents purposively selected from six settlements/villages to capture three stratifications of social class based on the standard of living. These are 'F'Layout, and GRA classified as the high-class standard of living; Kpakungu and Bosso classified as a middle-class standard of living; Gidan Kwano and Gidan Mangwaro classified as a low-class standard of living. Twenty individuals were then randomly selected from each of the settlements. Primary data were used for the study. Information required was collected using a semi-structured questionnaire. The interview was conducted for individuals who could not read nor understand English. The questions were

interpreted in the local dialect, and answers from the respondents were recorded in the questionnaire. Simple descriptive statistical tools such as percentage, frequency, mean and mode were used to analyse the data.

### III. Results and Discussion

**Table 1: Goat Ownership of Respondents**

Goat ownership	High		Middle		Low		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
Yes	8	20	10	25	20	50	38	31.6
No	31	77.5	30	75	20	50	81	67.5
No response	1	2.5					1	0.83
Total	40	100	40	100	40	100	120	100

**Source: Field Survey 2007**

Goat ownership was not prevalent. A large number of the population, 67%, did not have goats, only 32% own goats. However, in areas of a low standard of living, that is, rural areas, 50% of the respondents own goats while the remaining 50% have no goat. This agrees that there are more goats in rural areas than in urban areas. It was discovered that respondents in areas of a high standard of living who owned goats value rearing animals. The more rich ones among them have quite a large number in their farms.

**Table 2: Distribution of Respondents Based on Goat Milk Consumption**

Consume Goat Milk	High		Middle		Low		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
Yes	4	10	5	12.5	4	10	13	10.83
No	36	90	35	87.5	36	90	107	89.17
Total	40	100	40	100	40	100	120	100

**Source: Field Survey 2007**

Most of the respondents (89%) do not consume goat milk. However, this does not mean if given, they will not consume. Some said they would try it if they were given the milk, and if they enjoyed it, they would consume it. Only 11% said that they consume goat milk.

**Table 3: Frequency of Goat Milk Consumption**

Frequency of Goat Milk Consumption	High		Middle		Low		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
Every day			1	20			1	7.69
Three-time per week								
Once per week								
Once per month								
Occasionally	4	100	4	80	4	100	12	92.31
Total	4	100	5	100	4	100	13	100

**Source: Field Survey 2007**

Most of the people who consume goat milk (92%) consume it occasionally. Only one person (8%) consumes it every day. He consumes it as “*Fura da nono*” and has a regular customer who supplies it every day.

**Table 4: Factors Affecting Goat Milk Consumption**

Factors affecting Goat milk Consumption	High		Middle		Low		Total		Rank
	Freq	%	Freq	%	Freq	%	Freq	%	
Unavailability	13	28.88	10	20.83	10	21.28	33	23.57	1 <sup>st</sup>
Affordability									
Unawareness	9	20	10	20.83	11	23.40	30	21.43	2 <sup>nd</sup>
Strong Smell	5	11.11	1	20.83			6	4.29	7 <sup>th</sup>
Allergy	3	6.66					3	2.14	8 <sup>th</sup>
Religious Prohibition									
Traditional Taboo	3	6.66					3	2.14	8 <sup>th</sup>
Non Traditional	5	11.11	10	20.83	1	2.127	16	11.43	4 <sup>th</sup>
Nausea					1	2.127	1	0.71	9 <sup>th</sup>
Pricing									
Not Interested	1	2.22	9	18.75	5	10.64	15	10.71	5 <sup>th</sup>
Not Used to	2	4.44	5	10.42	15	31.91	22	15.71	3 <sup>rd</sup>

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Other	4	8.88	3	6.25	4	8.511	11	7.86
Total	45	100	48	100	47	100	140	100

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Source: Field Survey 2007

Unavailability and unawareness were the most critical factors affecting goat milk consumption, 24% and 21%, respectively. About 16% of the respondents said they were "not used to", while 11% said it was "not traditional". Some of the respondents, about 11%, too said they were "not interested".

When looked into critically, all these factors seem to fall back to the fact that goat milk consumption is not customary in the area. Since it is not customary, a lot of people are not aware of its consumption. The problem of unavailability also falls back to the same fact. Goat milk cannot be completely unavailable since the goats that are the source of the milk are available, and some of the respondents have them. In the real sense, it is not that the milk is not available, but it is the people who are not used to consuming the milk and so do not milk their goats, thus making the milk seem unavailable. The primary factor affecting goat milk consumption includes but is not limited to unavailability and unawareness.

#### IV. Conclusion

There were more goats in the rural areas of a low standard of living where most people have goats ranging between 1-10. Goat milk consumption is unpopular and not common. Most of the respondents have never tasted goat milk, and only a few reported consuming it. Of the few that consume the milk, they consume it only occasionally. Most of the respondents said that one or more factors are affecting their goat milk consumption. Unavailability and unawareness were the main factors affecting the consumption of goat milk.

There is a need to create awareness of goat milk consumption in the area. People should know that goat milk is consumable, and they should also be informed about its nutritional values. This can be achieved through extensive education campaigns. They should also be taught how to milk these animals and how to process the milk. Due to poor production levels of our local goat breeds in terms of milk production, there is a need to improve these animals' milk yield. This can be achieved by the selection, crossbreeding and establishment of breeding and multiplication centres. This will go a long way to improve their milk production levels and consequently establish goat milk industries, thus creating a market for goat milk products.

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