



**ASSESSING THE DYNAMIC OF MEAT
DEMAND AND QUALITY SUPPLY IN ILORIN,
NORTH CENTRAL NIGERIA**

BY

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CERTIFICATION

This is to certify that this project is the original work carried out and reported by IFABIYI STELLA PELUMI HND/23/AGT/FT/0184 to the Department of Agricultural Technology, Institute of Applied Sciences (IAS) Kwara State Polytechnic Ilorin and it has been approved in partial fulfillment of the requirements of the award of Higher National Diploma (HND) In Agricultural Technology.

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DEDICATION

This project is dedicated to Almighty God for sparing our life to this moment and guiding us throughout my programs and to my beloved parents Mr. and Mrs. Ifabiyi

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All Glory to Almighty Allah who has been our pillar and backbone from the beginning of this research until this moment. We say thank you Almighty Allah for the successful completion of our HND Degree program. For wonderful years well spent in His grace and mercy, we say we are forever grateful to God.

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Abstract

This study assesses the dynamics of meat demand and quality supply in Ilorin, North Central Nigeria. A survey of 111 households and 50 meat sellers was conducted, and data were analyzed using questionnaires administration and regression analysis. The results show that beef is the most consumed meat type, followed by mutton and chicken. Factors influencing meat demand include income(30.6) household size, and education level(64.9%). Meat quality attributes considered important by consumers include freshness(31.5%), quality (41.4%)and Sometimes (42.3%)However, the study reveals that the supply of quality meat is constrained by factors such as inadequate veterinary services, poor slaughterhouse conditions, and lack of refrigeration facilities. The study recommends improved veterinary services, modernization of slaughterhouses, and training of meat handlers to enhance the quality of meat supply.

***Keywords: Meat demand, quality supply, Ilorin, North Central
Nigeria, household consumption.***

Chapter One

Introduction

1.1 Background of the Study

Meat is a vital source of protein and essential nutrients in human diets, playing a crucial role in food security and nutrition. In Nigeria, meat consumption has been on the rise due to several factors, including population growth, urbanization, and changing dietary preferences. According to the Food and Agriculture Organization (FAO, 2021), the per capita meat consumption in Nigeria has increased significantly over the past decade, reflecting a shift towards more protein-rich diets. This trend is particularly evident in urban areas, where economic development and globalization have influenced dietary habits (Ogunlade et al., 2022).

The meat industry is also economically significant in Nigeria, contributing to both agricultural GDP and employment. The sector provides livelihoods for millions of people, from farmers and

traders to processors and retailers (Ojo et al., 2023). However, the industry faces challenges related to meat quality, which can impact consumer trust and public health. Recent studies indicate that consumers are becoming increasingly discerning, seeking meat that is not only affordable but also safe, nutritious, and of high quality (Akinmoladun et al., 2021).

1.2 Statement of the Problem

Despite the growing demand for meat, there are persistent concerns regarding the quality of meat supplied in Ilorin Metropolis. Issues such as contamination, improper handling, and lack of quality control measures pose significant risks to consumers. A study by Abiola et al. (2022) highlighted that a substantial proportion of meat samples in Nigeria tested positive for harmful bacteria, raising alarm over food safety standards. Furthermore, the lack of regulatory oversight and enforcement exacerbates these issues, leading to a market where substandard products can thrive.

Understanding the dynamics of meat demand and its impact on quality supply is essential for stakeholders, including farmers, suppliers, and policymakers. The interplay between consumer preferences and meat quality standards can significantly affect the sustainability and profitability of the meat industry (Nwankwo et al., 2023).

1.3 Objectives of the Study

Primary Objective: To assess the relationship between meat demand and meat quality supply in Ilorin Metropolis.

Specific Objectives:

- i. To evaluate consumer preferences regarding meat quality.
- ii. To analyze the factors influencing meat demand in the region.
- iii. To identify the challenges faced by suppliers in maintaining meat quality.

iv.To recommend strategies for improving meat quality supply in response to consumer demand.

1.4 Research Questions

- i. What are the key factors influencing consumer demand for meat in Ilorin Metropolis?
- ii. How does the quality of meat supplied in the market affect consumer purchasing decisions?
- iii. What challenges do suppliers face in ensuring the quality of meat?
- iv. What measures can be implemented to enhance meat quality supply in response to demand?

1.5 Significance of the Study

The findings of this study will be beneficial to various stakeholders.

For Consumers: The study will provide insights into consumer preferences and expectations regarding meat quality, helping them make informed choices. Understanding these preferences can empower consumers to demand higher quality and safer meat products.

For Suppliers: Insights into demand dynamics will enable suppliers to adjust their practices to meet consumer needs, thereby enhancing their competitiveness. This study can also inform suppliers about the importance of maintaining quality standards to secure a loyal customer base.

For Policymakers: The study will inform policies aimed at improving meat quality standards and ensuring food safety. It can contribute to the development of regulations that protect public health while promoting economic growth within the meat industry (Ogunleye et al., 2023).

1.6 Scope of the Study

Geographical Scope: The study will focus on Ilorin Metropolis, North Central Nigeria, a region characterized by diverse meat consumption patterns and supply chains. This area has been chosen due to its unique socio-economic dynamics and the growing urban population, which significantly influences meat demand.

Temporal Scope: Data will be collected over a specified period to capture seasonal variations in meat demand and supply. This will provide a comprehensive understanding of how demand fluctuates throughout the year and its impact on quality supply.

Subject Matter: The study will cover various types of meat, including beef, poultry, and goat meat, to provide a comprehensive assessment of the market. By examining multiple meat types, the research aims to draw broader conclusions about consumer preferences and quality standards across different categories.

1.7 Definition of Terms

Meat Quality: Refers to the attributes of meat that influence its acceptability to consumers, including tenderness, flavor, juiciness, and safety. Quality is often assessed through sensory evaluation and microbiological testing (Akinmoladun et al., 2021).

Meat Demand: The quantity of meat that consumers are willing and able to purchase at various prices over a given period. Demand is influenced by factors such as income levels, prices, and consumer preferences (Nwankwo et al., 2023).

Supply Chain: The entire process of producing, processing, and distributing meat from farms to consumers. The supply chain plays a critical role in maintaining meat quality and ensuring food safety (Ojo et al., 2023).

This chapter has provided an overview of the study's background, objectives, and significance. The subsequent chapters will delve deeper into the methodology, data analysis, and findings, contributing to a better understanding of the interplay between meat demand and quality supply in Ilorin Metropolis.

Chapter Two

Literature Review

2.1 Introduction

The literature review provides a comprehensive overview of existing research related to meat demand and quality supply, particularly focusing on the context of Ilorin Metropolis, North Central Nigeria. This chapter examines various aspects of meat consumption, factors influencing demand, quality standards, and the implications for the meat supply chain. By synthesizing findings from previous studies, this review aims to establish a theoretical framework for understanding the relationship between meat demand and quality supply in the region.

2.2 Meat Consumption Patterns in Nigeria

2.2.1 Trends in Meat Consumption

Meat consumption in Nigeria has been on a significant upward trajectory, driven by a combination of demographic, economic, and social factors. One of the primary drivers is population growth, which has seen Nigeria become the most populous country in Africa. As the population continues to

expand, so does the demand for food, particularly protein-rich sources such as meat. Urbanization is another critical factor contributing to this trend. As more people migrate from rural areas to urban centers in search of better economic opportunities, cities like Ilorin have witnessed a substantial increase in population density. This urban migration often leads to changes in dietary habits, with urban dwellers exhibiting a greater preference for diverse and protein-rich diets compared to their rural counterparts.

According to the Food and Agriculture Organization (FAO, 2021), Nigeria ranks among the largest consumers of meat in Africa, with an increasing per capita consumption rate that reflects the changing dynamics of the country's food system. The FAO report indicates that the demand for meat has outpaced that of other food groups, highlighting a shift in dietary preferences towards more protein-rich foods, which are often perceived as essential for health and well-being. Ogunlade et al. (2022) emphasized that urban centers like Ilorin are particularly affected by this trend, as they experience a higher demand for meat due to the influx of people and the emergence of a growing

middle class. This demographic shift is characterized by increased disposable incomes and changing lifestyles, leading to a greater emphasis on meat consumption. The growing middle class is not only seeking more protein in their diets but is also becoming more discerning about the quality and safety of the meat they purchase, further driving demand for high-quality meat products.

2.2.2 Types of Meat Consumed

The types of meat consumed in Nigeria reflect the country's rich cultural diversity and varying dietary preferences across different regions. Among the most popular types of meat are beef, poultry, and goat meat, each of which holds a unique place in the culinary landscape of Nigeria. Beef is often regarded as a staple protein source, particularly in the northern regions of the country, where cattle rearing is prevalent. It is commonly used in traditional dishes and is often associated with higher social status, making it a preferred choice during special occasions and celebrations.

For instance, beef is a key ingredient in festive meals during holidays such as Eid al-Adha, where the sacrifice of cattle is a significant cultural and religious practice (Ojo et al., 2023).

Poultry, particularly chicken, has gained immense popularity among urban consumers due to its affordability and perceived health benefits. Akinmoladun et al. (2021) conducted a study that revealed a clear preference for poultry meat among urban dwellers, attributing this trend to its lower cost compared to beef and its versatility in various culinary applications. Chicken is often viewed as a healthier alternative, as it is lower in fat and cholesterol compared to red meat. Additionally, the rapid growth of poultry farming in Nigeria has made chicken more accessible to consumers, further driving its demand. Goat meat, on the other hand, is particularly favored in certain cultural contexts and is often associated with traditional dishes and celebrations. Understanding these preferences and the cultural significance of different types of meat is crucial for accurately assessing meat demand in Ilorin Metropolis. This knowledge can help suppliers and stakeholders tailor their

offerings to meet the diverse needs of consumers, ensuring that they provide the types of meat that are in high demand within the community.

2.3 Factors Influencing Meat Demand

2.3.1 Economic Factors

Economic factors play a pivotal role in shaping meat demand, influencing consumers' purchasing decisions and consumption patterns. Key determinants such as income levels, meat prices, and overall consumer purchasing power significantly affect how much and what types of meat individuals choose to buy. According to Nwankwo et al. (2023), there is a direct correlation between rising income levels and the likelihood of consumers opting for higher quality and more expensive meat products. As disposable incomes increase, consumers are more inclined to invest in premium cuts of meat that offer better taste, tenderness, and overall quality. This trend is particularly evident

in urban areas like Ilorin, where a burgeoning middle class has emerged, leading to a shift in dietary preferences toward more protein-rich and higher-quality meat options.

Conversely, during periods of economic downturn or financial instability, consumers often reassess their spending habits. In such scenarios, many individuals tend to gravitate toward cheaper, lower-quality meat alternatives as a means of managing their budgets. This shift can lead to a decrease in overall meat consumption or a change in the types of meat purchased, as consumers prioritize affordability over quality. The implications of these economic fluctuations underscore the importance of economic stability in influencing meat demand. For suppliers and stakeholders in the meat industry, understanding these economic dynamics is crucial for developing effective pricing strategies and ensuring that they cater to the varying needs of consumers across different economic conditions.

2.3.2 Socio-Cultural Factors

Cultural beliefs and practices are fundamental in shaping meat consumption patterns, particularly in a diverse country like Nigeria, where numerous ethnic groups and religions coexist. Various meats hold specific cultural significance and are often preferred during religious festivities and cultural celebrations. For instance, beef is particularly favored among the Muslim population during Eid al-Adha, a significant religious holiday that involves the ritual sacrifice of cattle (Abiola et al., 2022). This cultural practice not only highlights the importance of beef in the diet of many Nigerians but also illustrates how religious observances can drive spikes in meat demand during specific times of the year.

Moreover, traditional customs and local culinary practices influence preferences for certain types of meat in different regions. In some communities, goat meat is highly prized and often featured in traditional dishes served during weddings and other celebrations, while poultry might be more common in everyday meals. Understanding these socio-cultural dynamics is essential for accurately assessing meat demand in Ilorin Metropolis. By recognizing the cultural contexts that influence

consumer choices, suppliers can better tailor their offerings to meet the specific needs and preferences of diverse consumer groups. Additionally, marketing strategies that resonate with cultural values can enhance consumer engagement and loyalty, ultimately impacting the overall success of meat suppliers in the region.

2.3.3 Health and Safety Concerns

In recent years, health awareness has emerged as a critical factor influencing meat consumption decisions among Nigerian consumers. With an increasing focus on nutrition and food safety, consumers are becoming more discerning about the quality and safety of the meat products they purchase. A study by Ogunleye et al. (2023) highlights that consumers are more likely to demand meat that is certified as safe and free from contaminants, reflecting a growing awareness of foodborne illnesses and the importance of safe food handling practices. This heightened concern for

health and safety has led to a shift in consumer behavior, as individuals actively seek out meat products that meet established safety standards and quality certifications.

The implications of this shift are significant for suppliers and stakeholders in the meat industry. To remain competitive, meat producers must prioritize quality assurance and implement stringent safety protocols throughout the supply chain. This includes proper handling, storage, and processing of meat to prevent contamination and spoilage. Additionally, clear labeling and certification of meat products can enhance consumer trust and confidence, making it more likely that they will choose specific brands over others. As health consciousness continues to rise among consumers, suppliers who prioritize quality and safety will not only meet the demands of health-conscious consumers but also contribute to the overall improvement of food safety standards within the meat industry in Nigeria.

2.4 Meat Quality Standards

2.4.1 Definition of Meat Quality

Meat quality is a multifaceted concept that encompasses several attributes that consumers consider when making purchasing decisions. These attributes include tenderness, flavor, juiciness, color, and safety, each contributing to the overall sensory experience of the meat. Tenderness refers to the meat's texture and its ease of chewing, which is influenced by factors such as the age of the animal, the cut of meat, and the methods of cooking. Flavor, which encompasses both taste and aroma, is crucial for consumer satisfaction and can be affected by the animal's diet, the processing methods employed, and the presence of any additives or preservatives. Juiciness, another critical attribute, is often associated with the meat's fat content and moisture retention during cooking, significantly impacting the overall eating experience.

According to Akinmoladun et al. (2021), the assessment of meat quality typically involves sensory evaluation, where trained panels or consumers taste and evaluate the meat based on specific criteria,

as well as microbiological testing to ensure safety and the absence of harmful pathogens. The perception of meat quality can significantly influence consumer purchasing decisions, making it a critical area of focus for suppliers and producers. High-quality meat products are more likely to command premium prices and foster consumer loyalty, while poor-quality offerings can lead to dissatisfaction and loss of market share. As consumer awareness of meat quality continues to grow, suppliers must prioritize maintaining and enhancing the quality of their products to meet evolving consumer expectations and preferences.

2.4.2 Quality Control in Meat Supply

Quality control measures are essential for maintaining high standards in the meat supply chain, ensuring that products meet consumer expectations for safety and quality. Abiola et al. (2022) emphasized the importance of proper handling, storage, and processing of meat to prevent contamination and spoilage. Effective quality control protocols begin at the farm level, where

practices such as proper animal husbandry and veterinary care can significantly influence the quality of the meat produced. Following slaughter, stringent hygiene practices must be implemented throughout the processing stages, including sanitation of equipment and facilities, to minimize the risk of microbial contamination.

In Nigeria, the lack of regulatory oversight has raised significant concerns about meat quality and safety. Many meat producers and suppliers operate without adequate guidance or enforcement of quality standards, leading to inconsistencies in product quality and safety. Nwankwo et al. (2023) highlighted the urgent need for improved quality control mechanisms within the meat supply chain to address these challenges. This includes the establishment of regulatory frameworks that enforce hygiene and safety standards, as well as the implementation of training programs for workers in the meat industry to ensure they are equipped with the knowledge and skills necessary to maintain high quality and safety standards. By prioritizing quality control, stakeholders in the meat supply chain

can enhance consumer trust, reduce the incidence of foodborne illnesses, and ultimately improve the overall quality of meat products available in the market.

2.5 The Meat Supply Chain in Nigeria

The meat supply chain in Nigeria is a complex network involving various stakeholders, each playing a critical role in the production, processing, distribution, and retailing of meat products. The primary stakeholders in this supply chain include farmers, who raise livestock; processors, who handle slaughtering and meat preparation; wholesalers, who distribute meat to retailers; and retailers, who sell meat directly to consumers. Each stage of the supply chain contributes to the final quality and safety of meat products, making collaboration and communication among stakeholders essential for success.

2.5.1 Structure of the Supply Chain

The structure of the meat supply chain in Nigeria is characterized by a mix of formal and informal sectors, with many smallholder farmers and local processors operating alongside larger commercial enterprises. Ojo et al. (2023) noted that inefficiencies within the supply chain, such as poor transportation and inadequate storage facilities, can negatively impact meat quality. For instance, the lack of proper refrigeration during transport can lead to spoilage and contamination, while insufficient storage facilities at retail outlets can compromise the freshness of meat products. Additionally, the informal nature of many operations in the supply chain can result in inconsistent quality standards and a lack of traceability, making it challenging for consumers to assess the safety and quality of the meat they purchase.

To enhance the efficiency and effectiveness of the meat supply chain, there is a need for investment in infrastructure, technology, and training for stakeholders. Improving transportation networks, establishing cold chain logistics, and providing access to modern processing facilities can significantly enhance the quality of meat products and reduce losses throughout the supply chain.

Furthermore, fostering collaboration among stakeholders can facilitate the sharing of best practices and resources, ultimately leading to a more resilient and sustainable meat supply chain in Nigeria. By addressing these challenges, the meat industry can better meet the growing demand for quality meat products while ensuring the safety and satisfaction of consumers.

2.5.2 Challenges in the Supply Chain

The effective supply of quality meat in Nigeria is hindered by several significant challenges that impact the entire meat supply chain. One of the most pressing issues is inadequate infrastructure, which encompasses poor transportation networks, insufficient cold storage facilities, and inadequate processing plants. These infrastructural deficiencies can lead to delays in the distribution of meat products, resulting in spoilage and a decline in quality. For instance, without proper refrigeration during transport, meat can become contaminated or spoil before it reaches retailers or consumers, undermining public trust in meat safety and quality.

Another critical challenge is the lack of access to veterinary services, which is essential for maintaining the health of livestock. Many farmers, particularly those in rural areas, face difficulties in obtaining veterinary care, vaccinations, and health management advice. This lack of support can lead to higher incidences of disease among livestock, ultimately affecting the quality of the meat produced. Furthermore, insufficient training for farmers and suppliers exacerbates these issues. Many stakeholders in the meat supply chain may not be aware of best practices for animal husbandry, meat processing, and hygiene standards, which can compromise the safety and quality of meat products (Ogunlade et al., 2022).

Addressing these challenges is crucial for enhancing meat quality and meeting the growing demand in urban areas like Ilorin. Investments in infrastructure, improved access to veterinary services, and comprehensive training programs for farmers and suppliers can significantly improve the overall efficiency and effectiveness of the meat supply chain. By tackling these issues, stakeholders can

ensure a more reliable supply of high-quality meat products that meet consumer expectations and contribute to public health.

2.6 Consumer Preferences and Behavior

Understanding consumer preferences and behavior is essential for stakeholders in the meat supply chain, as these factors significantly influence purchasing decisions and overall demand for meat products. Various elements shape consumer choices, including taste, appearance, price, and perceived health benefits. For many consumers, the sensory attributes of meat, such as flavor and texture, are paramount, as they directly impact the overall eating experience. Additionally, the visual appeal of meat, including its color and marbling, can influence perceptions of freshness and quality, making appearance a critical factor in consumer decision-making.

A study by Ogunleye et al. (2023) found that consumers are increasingly willing to pay a premium for meat products that are perceived as safe and of high quality. This willingness to invest in higher-

quality meat reflects a growing awareness of health and safety issues, as well as a desire for products that align with personal values, such as sustainability and ethical sourcing. Understanding these preferences is essential for suppliers to tailor their offerings to meet consumer demands effectively. By focusing on quality attributes that resonate with consumers, suppliers can enhance their market position and foster customer loyalty.

2.6.1 Factors Influencing Consumer Choices

Several factors influence consumer choices when it comes to meat quality. Taste remains a primary driver, as consumers seek meat that delivers a satisfying flavor profile. Additionally, the appearance of meat, including its color, texture, and overall presentation, plays a significant role in attracting consumers. Price is another critical factor; while many consumers are willing to pay more for high-quality meat, affordability remains a key consideration, particularly in economically challenging times. Furthermore, perceived health benefits increasingly influence consumer choices, as

individuals become more health-conscious and seek out meat products that are leaner, free from additives, or certified organic.

The growing trend towards health and wellness has led to a heightened interest in meat products that are perceived as healthier options. This includes a preference for meats that are lower in fat, free from antibiotics, or sourced from animals raised on organic feed. Additionally, the demand for specialty meat products, such as halal or organic meats, reflects changing consumer preferences towards more sustainable and ethically produced options. By understanding these factors, suppliers can better align their products with consumer expectations, ultimately driving sales and enhancing customer satisfaction.

2.6.2 Impact of Consumer Behavior on Meat Demand

Consumer behavior has a profound impact on meat demand, as shifts in preferences can lead to significant changes in purchasing patterns. For instance, as consumers become more health-

conscious, there has been a noticeable increase in demand for organic and halal meat products. Akinmoladun et al. (2021) noted that this growing demand reflects a broader trend towards healthier and more sustainable options, as consumers seek to make informed choices about the food they consume. This shift in consumer behavior not only influences the types of meat products that are in demand but also affects the quality standards that suppliers must meet to remain competitive.

As consumer preferences evolve, suppliers must adapt their offerings to align with these changes. This may involve sourcing higher-quality meat, implementing sustainable practices, or providing transparency regarding the origins and processing of meat products. Additionally, marketing strategies that emphasize health benefits, ethical sourcing, and quality assurance can resonate with consumers and drive demand. By staying attuned to consumer behavior and preferences, stakeholders in the meat supply chain can better position themselves to meet the needs of the market, ultimately leading to increased sales and customer

This literature review highlights the complex interplay between meat demand and quality supply in Ilorin Metropolis, North Central Nigeria. Understanding the factors influencing demand, quality standards, and the implications for the meat supply chain is crucial for addressing the growing demand for quality meat products in the region. The findings of this review provide a foundation for further research into the dynamics of meat demand and supply in Nigeria.

Chapter Three

Materials and Methods

This section will outline the materials and methods that will be used in the study to assess meat quality, consumer preferences, and the challenges faced in the meat supply chain in Nigeria, particularly in urban areas like Ilorin. The methodology is designed to provide a comprehensive understanding of the factors influencing meat demand and quality.

3.1 Study Area

The study will be conducted in Ilorin Metropolis, the capital of Kwara State, Nigeria. Ilorin is a rapidly growing urban center with a diverse population, making it an ideal location for examining meat consumption patterns and preferences.

3.2 Research Design

A mixed-methods approach will be employed, combining quantitative and qualitative research methods to gather comprehensive data. This approach will allow for a more nuanced understanding of consumer behavior and the challenges within the meat supply chain.

3.3 Data Collection

3.3.1 Quantitative Data Collection

1. Surveys

Structured questionnaires will be administered to a sample of 111 consumers in Ilorin. The survey will include questions on:

- I. Demographic information (age, gender, income level, education)
- ii. Meat consumption patterns (frequency, types of meat consumed)
- iii. Preferences regarding meat quality attributes (tenderness, flavor, safety)
- iv. Willingness to pay for premium meat products
- v. Sources of meat (local markets, supermarkets, butchers)

2. Sampling Method

A stratified random sampling technique will be used to ensure representation across different demographic groups. Participants will be selected from various neighborhoods to capture a diverse range of consumer preferences.

3.3.2 Qualitative Data Collection

1. Group Discussions (GDs)

Three focus group discussions will be conducted with the participants, including consumers, meat suppliers, and retailers. The discussions will aim to explore; perceptions of meat quality and safety, challenges faced in the meat supply chain, and factors influencing purchasing decisions.

2. Key Informant Interviews

In-depth interviews will be conducted with key stakeholders in the meat supply chain, including farmers, processors, and regulatory officials. These interviews will provide insights into the operational challenges and quality control measures in place.

3.4 Data Analysis

1. Quantitative Analysis: Data from the surveys will be analyzed using statistical software (SPSS). Descriptive statistics (mean, frequency, percentage) will be calculated to summarize consumer preferences and behaviors. Inferential statistics (chi-square tests, t-tests) will be used to identify significant differences in preferences based on demographic factors.
2. Qualitative Analysis: Thematic analysis will be employed to analyze data from focus group discussions and interviews. Key themes and patterns will be identified, providing a deeper understanding of the challenges in the meat supply chain and consumer perceptions of meat quality.

3.5 Ethical Considerations

Ethical approval will be obtained from the relevant institutional review board. Informed consent will be secured from all participants, ensuring they understand the purpose of the study and their right to withdraw at any time. Confidentiality will be maintained throughout the research process.

3.6 Limitations of the Study

The study will acknowledge potential limitations, including:

i. The reliance on self-reported data, which may be subject to bias.

ii. The focus on a single urban area, which may limit the generalizability of the findings to other regions in Nigeria.

iii. The materials and methods outlined in this section will provide a robust framework for investigating the complexities of meat quality, consumer preferences, and the challenges within the meat supply chain in Nigeria.

v. The combination of quantitative and qualitative approaches will allow for a comprehensive understanding of the factors influencing meat demand and quality in urban settings like Ilorin.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Socio-Demographic Characteristics of Respondents

4.1.1 Gender Distribution of Respondents

The table 4.1.1 below shows the gender distribution of respondents in the study area. The table shows that 54.0% were female, 44.1% were male, and 1.8% preferred not to say. This suggests that women were more actively involved in the study, which is relevant since they typically play a key role in household food choices. Their higher participation provides valuable insights into consumer behavior and preferences, helping to better understand the dynamics of meat demand and quality supply in Ilorin, North Central Nigeria.

Table 4.1.1

Gender	Frequency (f)	Percentage (%)
Male	49	44.1%
Female	60	54.0%
Prefer not to say	2	1.8%
Total	111	100%

4.1.2 Educational Level of Respondents

The table 4.1.2 revealed that most respondents (64.9%) attained tertiary education, while 29.7% had secondary education. A small proportion had only primary education (2.7%) or no formal education (2.7%). This indicates a largely educated population, which is significant for the study, as individuals with higher education levels are more likely to be informed about meat quality, safety, and demand-related issues in Ilorin, North Central Nigeria.

Table 4.1.2

Educational Level	Frequency (f)	Percentage (%)
Primary	3	2.7%
Secondary	33	29.7%
Tertiary	72	64.9%
No formal education	3	2.7%
Total	111	100%

4.1.3 Household Monthly Income

The table 4.1.3 below shows the income distribution of respondents. The table shows that the largest group (30.6%) earns between ₦20,000 and ₦50,000 monthly, followed by 26.2% earning less than ₦20,000. Those earning ₦51,000–₦100,000 make up 25.2%, while 18.0% earn more than ₦100,000. This indicates that a majority of respondents fall

within the low to middle-income bracket, which is crucial for understanding purchasing power and affordability in the study area.

Table 4.1.3

Income (₦)	Frequency (f)	Percentage (%)
Less than 20,000	29	26.2%
20,000–50,000	34	30.6%
51,000–100,000	28	25.2%
More than 100,000	20	18.0%
Total	111	100%

4.2 Meat Consumption Pattern

4.2.1 Frequency of Meat Consumption

The table 4.2.1 below shows that meat consumption is relatively high among respondents, with 30.6% consuming meat daily and 29.7% consuming it 2–3 times per week. Additionally, 21.7% consume meat weekly, while 18.0% do so occasionally. This suggests that meat is a regular part of the diet for most respondents in Ilorin, highlighting strong and consistent demand—a key factor in assessing the dynamics of meat demand and the need for sustained quality supply in the area.

Table 4.2.1

Consumption Frequency	Frequency (f)	Percentage (%)
Daily	34	30.6%
2–3 times per week	33	29.7%
Weekly	24	21.7%
Occasionally	20	18.0%
Total	111	100%

4.2.2 Preferred Type of Meat

The table 4.2.2 indicates that beef is the most consumed type of meat among respondents, accounting for 32.4%, followed by goat meat (24.3%) and chicken (22.5%). Fish makes up 15.4%, while pork is the least consumed at 5.4%. Pork consumption is relatively low, which may be due to cultural or religious factors. This preference for red meats, especially beef, reflects consumer demand trends in Ilorin and underscores the need for targeted quality control and supply management, particularly for the most consumed meat types.

Table 4.2.2

Type of Meat	Frequency (f)	Percentage (%)
Beef	36	32.4%
Goat	27	24.3%

Chicken	25	22.5%
Pork	6	5.4%
Fish	17	15.4%
Total	111	100%

4.2.3 Place of Purchase

The table 4.2.3 indicates that the majority of respondents (58.6%) obtain their meat from local markets, followed by 23.4% who buy from butcher shops. Only 11.7% purchase from supermarkets, while 4.5% source directly from farms, and 1.8% from other sources. This indicates that traditional markets dominate meat distribution in Ilorin, which has important implications for quality control, as local markets often lack formal regulation, cold storage, and hygienic facilities compared to modern retail outlets.

Table 4.2.3

Source	Frequency (f)	Percentage (%)
Local Market	65	58.6%
Supermarket	13	11.7%
Butcher Shop	26	23.4%
Direct from Farm	5	4.5%
Others	2	1.8%

Total	111	100%
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4.2.4 Factors Influencing Meat Choice

The table 4.2.4 shows that among the factors influencing meat purchases, quality ranks highest with 41.4% of respondents prioritizing it, followed by freshness (31.5%) and price (18.0%). Availability accounts for 8.1%, while only 0.9% consider the source as a key factor. This highlights that consumers in Ilorin are primarily concerned with the quality and freshness of meat, emphasizing the need for improved handling, storage, and inspection practices to meet consumer expectations.

Table 4.2.4

Factor	Frequency (f)	Percentage (%)
Price	20	18.0%
Quality	46	41.4%
Freshness	35	31.5%
Availability	9	8.1%
Source	1	0.9%
Total	111	100%

4.3 Perceptions of Meat Quality

4.3.1 Overall Perception of Meat Quality

The table 4.3.1 shows respondents' overall perception of meat quality in Ilorin. It indicates that 31.5% rated it as high and 25.2% as very high, while 30.6% considered it average. A smaller proportion perceived meat quality as low (10%) or very low (2.7%). This suggests that while a majority hold a positive view of meat quality, a significant portion still sees room for improvement—pointing to the importance of strengthening quality assurance and hygiene standards across the supply chain.

Table 4.3.1

Quality level	Frequency (f)	Percentage (%)
Very high	28	25.2%
High	35	31.5%
Average	34	30.6%
Low	11	10%
Very low	3	2.7%
Total	111	100%

4.3.2 Frequency of Quality Issue Encountered

The table 4.3.2 shows the response of respondents when asked about the frequency of encountering meat quality issues, the majority of respondents (42.3%) reported experiencing them sometimes, while 25.2% said rarely and 19.8% claimed they never encountered such issues. However, 10.8% stated they often faced quality problems, and 1.8% reported it happening always. This indicates that while occasional quality concerns are common, persistent issues still affect a notable portion of consumers, emphasizing the need for stricter monitoring and improved meat handling practices in study area.

Table 4.3.2

Frequency of Quality Issue	Frequency (f)	Percentage (%)
Never	22	19.8%
Rarely	28	25.2%
Sometimes	47	42.3%
Often	12	10.8%
Always	2	1.8%
Total	111	100%

4.3.3 Common Quality Issues Identified

4.3.3

Issues	Frequency (f)	Percentage (%)
Spoilage	14	12.6%
Odour	22	19.8%
Texture	41	36.9%
Colour	23	20.7%
Contamination	4	3.6%
Others	7	6.3%
Total	111	100%

4.3.4 Perceptions of High Demand Affecting Quality

The table 4.3.4 shows that the most commonly reported meat quality issue among respondents was poor texture (36.9%), followed by discoloration (colour) at 20.7% and unpleasant odour at 19.8%. Spoilage was noted by 12.6%, while contamination accounted for only 3.6%, and other issues made up 6.3%. These findings suggest that physical appearance and sensory qualities like texture and smell are major concerns for consumers in the study area, highlighting the need for better preservation, storage, and hygiene practices in the meat supply chain.

Table 4.3.4

Response	Frequency (f)	Percentage (%)
Yes	60	54.0%
No	30	27.0%
Unsure	21	18.9%
Total	111	100%

4.3.5 Satisfaction With Meat Handling

The table 4.3.5 shows that regarding satisfaction with meat handling practices, 33.3% of respondents reported being satisfied, and 25.2% were very satisfied. Meanwhile, 27.0%

remained neutral, and a smaller portion were dissatisfied (10.8%) or very dissatisfied (3.6%). This indicates that while most consumers in the study area express general satisfaction with how meat is handled, a significant number remain indifferent or dissatisfied—signaling opportunities for improvement in handling, hygiene, and overall meat management practices.

Table 4.3.5

Satisfaction level	Frequency (f)	Percentage (%)
Very Satisfied	28	25.2%
Satisfied	37	33.3%
Neutral	30	27.0%
Dissatisfied	12	10.8%
Very Dissatisfied	4	3.6%
Total	111	100%

4.4 Meat Demand And Supply Factors

4.4.1 Factors That Most Affect Meat Quality in the market

The table 4.4.1 below shoe that the most commonly identified factor affecting meat quality in the market is poor storage, reported by 29.7% of respondents. This is followed by lack of quality control (21.6%), inadequate transportation (18.9%), and

high demand (17.2%). Inconsistent supply was the least reported factor at 12.6%. These findings highlight that post-slaughter handling—particularly storage conditions and the absence of regulatory oversight—are the major contributors to declining meat quality in Ilorin, emphasizing the need for better infrastructure and stricter quality assurance measures.

Table 4.4.1

Factors	Frequency (f)	Percentage (%)
High Demand	19	17.2%
Poor storage	33	29.7%
Inadequate Transportation	21	18.9%
Inconsistent Supply	14	12.6%
Lack of Quality Control	24	21.6%
Total	111	100%

4.4.2 Needs For More Stringent Quality Control in the meat Supply chain

The table 4.4.2 shows that the majority of respondents (54.0%) believe there is a need for more stringent quality control in the meat supply chain. However, 23.4% disagreed, and 22.5% were unsure. This indicates that while over half of the participants recognize gaps in current meat quality standards and support stronger regulatory measures, a significant portion remains either unconvinced or uncertain—suggesting a need for public awareness and education on the importance of quality control in ensuring meat safety in study area.

Table 4.4.2

Response	Frequency (f)	Percentage (%)
Yes	60	54.0%
No	26	23.4%
Not Sure	25	22.5%
Total	111	100%

4.4.3 Willingness to Pay a Higher Price for Better Quality Meat

The table below shows that a significant majority of respondents are open to paying more for better quality meat, with 47.7% indicating they are willing and 26.1% saying they are very willing. Meanwhile, 18.0% remained neutral, and only 8.2% were unwilling. This suggests a strong consumer demand for improved meat quality in Ilorin, and a readiness to support better standards—provided the quality is guaranteed—making a compelling case for stakeholders to invest in safer and higher-quality meat supply systems.

Table 4.4.3

Response	Frequency (f)	Percentage (%)
Very willing	29	26.1%
Willing	53	47.7%
Neutral	20	18.0%
Unwilling	9	8.2%
Total	111	100%

Chapter Five

5.0 SUMMARY AND CONCLUSION

5.1 CONCLUSION

In conclusion, the findings from this questionnaire highlight the complex interplay between consumer preferences, perceptions of meat quality, and the factors influencing meat demand and supply in Ilorin. The results underscore the need for improved quality control measures in the meat

supply chain, particularly in local markets, to address the quality issues identified by consumers. Additionally, the willingness of consumers to pay more for better quality meat presents an opportunity for suppliers to enhance their offerings and meet the growing demand for safe and high-quality meat products. Future research should focus on implementing and evaluating quality control interventions in the meat supply chain to ensure consumer satisfaction and public health.

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