

**Research on World Agricultural Economy** 

https://journals.nasspublishing.com/index.php/rwae

### ARTICLE

# **Consumer Profile and Rabbit Meat Preferences: Analyzing Marketability and Acceptance Using the 4A's Model of Marketing**

Clarizza L. De Leon \* <sup>©</sup> , Angelo R. Santos <sup>©</sup>

College of Management and Business Technology, Nueva Ecija University of Science and Technology, Cabanatuan City 3100, Philippines

### ABSTRACT

This study analyzes the consumer profile and preferences for rabbit meat using the 4A's Model of Marketing: acceptability, affordability, accessibility, and awareness, to provide insights for enhancing marketability and acceptance. A descriptive research design with snowball sampling identified 177 rabbit meat consumers in Central Luzon. Quantitative and qualitative data were collected through a self-structured questionnaire and interviews. Findings revealed rabbit meat's popularity among young male professionals with higher income and education levels. Consumers allocated a small budget for rabbit meat, purchasing it occasionally and preferring it for its health benefits, primarily as celebratory food. Processed rabbit meat products are valued for convenience, but price sensitivity remains a challenge. Accessibility relies heavily on online platforms due to the absence of rabbit meat in public markets, while awareness is driven by producer interactions emphasizing health benefits. Tailored marketing strategies focusing on identified consumer profiles can strengthen demand. A customer-centric approach enhances marketability, acceptance, and sustainability in this sector, aligning with evolving consumer demands. This study contributes to achieving the United Nations Sustainable Development Goals (SDGs), particularly SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-being), and SDG 12 (Responsible Consumption and Production), by promoting rabbit meat as a sustainable, nutritious protein source.

Keywords: 4A's Model of Marketing; Accessibility; Affordability; Awareness; Consumer Preferences; Rabbit Meat

#### \*CORRESPONDING AUTHOR:

Clarizza L. De Leon, College of Management and Business Technology, Nueva Ecija University of Science and Technology, Cabanatuan City 3100, Philippines; Email: clrzdeleon@gmail.com

#### ARTICLE INFO

Received: 4 January 2025 | Revised: 24 February 2025 | Accepted: 6 March 2025 | Published Online: 14 March 2025 DOI: https://doi.org/10.36956/rwae.v6i1.1651

#### CITATION

De Leon, C.L., Santos, A.R., 2025. Consumer Profile and Rabbit Meat Preferences: Analyzing Marketability and Acceptance Using the 4A's Model of Marketing. Research on World Agricultural Economy. 6(1): 702–716. DOI: https://doi.org/10.36956/rwae.v6i1.1651

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Marketability; Sustainable Protein Source

## 1. Introduction

In collaboration with the Department of Science and Technology (DOST), the Department of Agriculture (DA) continuously seeks innovative solutions to combat food insecurity and create livelihood opportunities for Filipinos. In response to the ASF outbreak in 2020, DA identified rabbits as a potential alternative to pork due to their lower capital investment and quicker returns<sup>[1]</sup>. Rabbit meat is seen as a healthier alternative and a promising business opportunity for low-income families. However, despite its potential, the marketing of rabbit meat remains disorganized, posing one of the significant challenges to the development of the rabbit industry. According to DA Communications Group<sup>[2]</sup>, this sector is still in its infancy, and intensive marketing efforts are required to establish itself in the market. One major constraint is the perception of rabbits as pets, which limits their acceptance as a food source, compounded by the lack of awareness of their nutritive value and health benefits<sup>[3]</sup>. Nevertheless, with proper marketing and strategic support, the rabbit industry holds significant longterm prospects for food security and economic growth.

The evolution of the marketing mix reflects significant shifts in consumer behavior and organizational strategies over the decades. The traditional 4Ps modelproduct, price, place, and promotion-remains foundational, yet modern marketing has expanded to include concepts such as digital marketing and sustainability. Driven by technological advancements, modern marketing strategies increasingly emphasize customer engagement and societal impact<sup>[4]</sup>. Digital marketing, for instance, has transformed communication strategies, allowing for more interactive and personalized consumer engagement<sup>[5]</sup>. Additionally, the rise of sustainable practices has prompted marketers to incorporate corporate social responsibility into their strategies, aligning with consumer values regarding environmental and social issues<sup>[6]</sup>. However, these factors should be seen from the consumer's perspective in this volatile environment. A shift from producer-centric to customer-centric ap-

proaches is essential to meet evolving consumer expectations and drive market success<sup>[7]</sup>.

The 4A's Model of Marketing<sup>[8]</sup> has been applied across various industries beyond food, including healthcare, education, and digital marketing. For example, in healthcare marketing, the 4A's framework has been utilized to assess patient access to medical services and affordability of treatments, ensuring patient-centric strategies<sup>[7]</sup>. In education, it has been employed to evaluate accessibility to learning resources and affordability of tuition fees, guiding institutions in making education more inclusive<sup>[6]</sup>. Digital marketing has also leveraged the 4A's Model to enhance customer engagement by ensuring products and services are easily accessible and widely known through targeted awareness campaigns<sup>[9]</sup>. These examples demonstrate the model's versatility in addressing consumer needs across different sectors, supporting its relevance in assessing consumer behavior and marketability in the rabbit meat industry. One of these complementary tools is the 4A model of marketing developed by Sheth and Sisodia<sup>[8]</sup>. This approach is organized around the values that matter most to customers: acceptability, affordability, accessibility, and awareness. Acceptability ensures that product offerings meet or exceed the needs and expectations of customers in a given target market. Affordability refers to whether customers in the target market are economically able and psychologically willing to pay a product's price. Accessibility describes whether customers can easily acquire and use a product. Lastly, awareness denotes whether customers are adequately informed about a product's attributes and benefits in a way that persuades potential buyers to try the product and reminds existing users why they should continue to purchase a product. This concept emphasizes activities that enhance the effectiveness of marketing efforts targeted at end consumers by utilizing all available tools. The 4A's Model of Marketing is particularly relevant in emerging markets, where affordability, accessibility, and awareness play crucial roles in shaping consumer behavior. Studies have shown that in developing economies, food producers and marketers must overcome infrastructure limitations, price sensitivity, and cultural biases to introduce new products successfully<sup>[8]</sup>. In the agricultural sector, the 4A's framework has been utilized to enhance the marketability of alternative protein sources by addressing consumer concerns about availability and nutritional benefits<sup>[3]</sup>. This model has been successfully applied in the dairy and poultry industries in developing regions, demonstrating its effectiveness in improving product adoption in price-sensitive markets<sup>[10]</sup>. By integrating these strategies, the rabbit meat industry in emerging markets can better position itself as a viable and sustainable protein source. This study integrates the Theory of Planned Behavior<sup>[11]</sup> as a theoretical framework to understand consumer preferences for rabbit meat. This theory suggests that an individual's intention to perform a behavior is influenced by three factors: (1) attitudes toward the behavior, (2) subjective norms, and (3) perceived behavioral control. Attitudes toward rabbit meat include consumers' perceptions of its health benefits and taste. Subjective norms reflect the influence of social and cultural perceptions, particularly the classification of rabbits as pets rather than food. Perceived behavioral control involves accessibility and affordability, which determine whether consumers can purchase rabbit meat regularly. By applying this framework, the study aims to explain how marketing strategies aligned with the 4A's Model influence consumer decision-making and market acceptance.

Consumer preferences for meat, including rabbit meat, are shaped by several factors such as taste, texture, nutritional value, affordability, availability, and awareness of the product's benefits. Understanding these preferences is crucial for effectively marketing rabbit meat as a viable and sustainable protein source. For instance, rabbit meat's unique flavor and nutritional benefits, such as low fat and high protein, position it as an attractive alternative for health-conscious consumers<sup>[12]</sup>. However, the perception of rabbit meat as a less desirable option compared to more traditional meats like chicken or beef can hinder its marketability<sup>[13]</sup>. Therefore, enhancing the sensory attributes through innovative cooking methods and product diversification, such as the introduction of rabbit sausages or meatballs,

could improve consumer acceptance<sup>[14]</sup>. Educational campaigns highlighting its nutritional advantages, sustainable production practices, and versatility in cooking can help shift consumer perceptions<sup>[15]</sup>. Integrating consumer preferences for taste, nutritional value, affordability, availability, and awareness into marketing strategies is essential for promoting rabbit meat as a viable and sustainable protein source.

Akbar<sup>[16]</sup> emphasized placing the customer at the forefront of strategic decision-making and operational execution, emphasizing the importance of prioritizing customer needs, preferences, and experiences to drive business success. Through a customer-centric approach, organizations can enhance customer satisfaction, loyalty, and advocacy, ultimately leading to improved financial performance and market share. The primary objective of this study is to analyze consumer preferences and marketability of rabbit meat using the 4A's Model of Marketing (acceptability, affordability, accessibility, and awareness). By integrating the Theory of Planned Behavior, the study seeks to explain how consumer attitudes, social influences, and perceived control over purchasing rabbit meat impact its marketability. This framework provides an in-depth understanding of the psychological and economic factors that drive consumer behavior, offering valuable insights for producers and marketers to strengthen demand and acceptance of rabbit meat as a sustainable protein source.

## 2. Methodology

This study employed the descriptive research design. This design was appropriate because the researcher aimed to analyze the customers' meat preferences. This study was conducted in Central Luzon. The 177 respondents of the study were existing customers of rabbit meat. The researchers utilized the snowball sampling technique because of the difficulty of identifying all customers, considering the lack of established data on per capita rabbit meat consumption. Respondents were identified through referral networks and producer recommendations. To fully examine how accessibility and awareness impact consumer behavior, the study included specific survey items assessing the ease of acquiring rabbit meat, preferred purchasing channels, and con- Agree; (2) Disagree; (1) Strongly Disagree. The responsumer knowledge about its benefits. Unstructured interviews with business owners provided additional insights into how awareness campaigns and online platforms influence purchasing decisions. The interviews offered qualitative data that helped explain why patterns and trends exist and how they influence consumer behavior.

While snowball sampling allowed access to an otherwise difficult-to-identify consumer group, it may have introduced selection bias by primarily capturing respondents who are already aware of or interested in rabbit meat. This could lead to an overrepresentation of consumers with positive perceptions of rabbit meat while excluding those unfamiliar with or opposed to its consumption. To mitigate this bias, the study sought referrals from a diverse range of sources, including occasional consumers and business owners who cater to different customer demographics.

This study utilized a self-structured checklist questionnaire based on the review of related literature and studies on the 4A's Model of Marketing that focused on the paper of Abendroth and Pels<sup>[17]</sup> entitled Customer-Centricity in Emerging Markets: 4A's and Value Co-Creation. The questionnaire had two sections with 27 items:

- Part I collected socio-demographic data to identify key consumer segments.
- Part II measured the 4A's components using a modified 4-point Likert scale (4 = Strongly Agree, 1 = Strongly Disagree):
  - Acceptability: Preferences regarding taste, nutrition, and product presentation.
  - Affordability: Willingness to pay, price comparisons with other meats, and budget allocation.
  - · Accessibility: Availability of rabbit meat in markets, reliance on online platforms, and ease of purchase.
  - Awareness: Knowledge of rabbit meat's health benefits, production methods, and cultural perceptions.

This part of the instrument was formulated in the modified 4-point Likert scale: (4) Strongly Agree; (3)

dents were instructed to read the statements and rate based on their mean preferences using the given scale. To ensure that a set of questions was laid out to extract the desired information from the target respondents and enhance the survey process, the crafted survey questionnaire was tested. A pre-test was conducted to determine if the respondents answered the same set of questions. Some modifications were made to facilitate the respondents' comprehension.

The researcher employed descriptive statistical tools to analyze the data. Frequency and percentage were used to summarize the socio-demographic profile of respondents, ensuring a clear representation of consumer characteristics. The weighted mean was applied to assess consumer preferences across the four components of the 4A's Model (acceptability, affordability, accessibility, and awareness). This method effectively captures the intensity of consumer agreement or disagreement on key preference indicators. The chosen approach aligns with the research objectives and provides meaningful insights into rabbit meat marketability and acceptance.

As part of the ethical concerns, the researcher asked permission from the authors of the paper, who served as the primary references for formulating the research instrument.

## 3. Results

### 3.1. Profile of the Rabbit Meat Consumers

Most of the consumers were primarily from provinces in Central Luzon since they are the existing customers of the rabbit meat producers operating from the same region. Table 1 shows that the majority of respondents were from Bulacan (36%), followed by Pampanga (22%) and Tarlac (13%). The remaining respondents were from Bataan (9%), Nueva Ecija (8%), the National Capital Region (5%), and other provinces of Luzon (7%).. In terms of sex, 80% of respondents were male, while female respondents comprised 20%. Regarding age, 58% were in early adulthood (21-35 years old), 19% were in adolescence (12-20 years old), 20% were in midlife (36–50 years old), and 3% of the

respondents were in mature adulthood (51 years old and above). The educational attainment of the respondents showed that 67% had completed college, followed by high school graduates (24%). There were also 6% who completed post-graduate education, while others were elementary graduates (1%) and had vocational training (1%). Monthly household income revealed that 42% of the respondents earned below ₱10,957, while 27% earned within the ₱10,957 to 21,914 range. Twenty-nine percent were earning within the range of ₱21,915 to 131,484, while only 2% earned higher amounts, which was above ₱131,484.

Variables	Frequency	Percentage
Location		
Bataan	16	9%
Bulacan	63	36%
Nueva Ecija	15	8%
Pampanga	39	22%
Tarlac	23	13%
National Capital Region	9	5%
Other provinces of Luzon	12	7%
Sex		
Male	142	80%
Female	35	20%
Age	00	20,0
Adolescence (12–20 years old)	34	19%
Early Adulthood (21–35 years old)	103	58%
Midlife (36–50 years old)	36	20%
Mature Adulthood (51 years old and above)	4	3%
	4	3 %
Highest Educational Attainment	1	10/
Elementary	1	1%
High school	44	24%
Senior high school	1	1%
Vocational	1	1%
College	120	67%
Post-graduate	10	6%
Monthly Household Income		
Below ₱10,957	74	42%
₱10,957 to 21,914	47	27%
₱21,915 to 43,828	32	18%
₱43,829 to 76,669	15	8%
₱76,670 to 131,484	6	3%
₱131,485 to 219,140	3	2%
Weekly Budget for Rabbit Meat		
Below ₱500	106	60%
₽500 – ₽1,000	55	31%
₽1,001 – ₽1,500	16	9%
Frequency of Rabbit Meat Purchase		
Always	23	13%
Frequently	4	2%
Sometimes	135	76%
Seldom	15	9%
Weekly Budget for Other Types of Meat		
Below ₱500 (Mas mababa sa ₱500)	71	40%
₽500 – ₱1,000	84	47%
₽1,001 – ₽1,500	20	12%
More than ₱1,500	2	1%
Frequency of Other Types of Meat Purchase	-	170
Always	54	31%
Frequently	65	36%
Sometimes	54	31%
Seldom	4	2%
Preferred Viand for Rabbit Meat*	т	270
	93	53%
Everyday meal		
Celebratory food	126	71%
Appetizer taken with alcohol	67	38%
Others (Fitness, Snacks)	4	2%

Table 1. Profile of the rabbit meat consumers.

Note: \*Multiple responses: n = 177.

In terms of their weekly budget for rabbit meat, 60% of respondents allocated less than ₱500, while 40% were willing to spend more than ₱500. Regarding the frequency of rabbit meat purchases, 76% of respondents reported buying it "sometimes." On the other hand, 13% indicated they "always" purchased rabbit meat, 8% stated they bought it "seldom," and 2% reported buying it "frequently."

In comparison, the respondents' weekly budget for other types of meat showed that 47% allocated between ₱500 and ₱1,000, 40% spent below ₱500, and 12% allocated more than ₱1,000. Regarding the frequency of purchasing other types of meat, 37% reported buying them frequently, 31% purchased them always, another 31% bought them sometimes, and 4% stated they seldom bought other types of meat.

Finally, in terms of rabbit meat consumption, 71% of the respondents preferred it as celebratory food (71%), followed by everyday meals (53%). 38% considered rabbit meat as an appetizer taken with alcohol, and only 2% preferred to eat it as a fitness meal or snack.

### 3.2. The Meat Preferences of the Customers Based on 4A's Model of Marketing

This section involved the meat preferences of the customers surveyed in terms of acceptability, affordability, accessibility, and awareness.

The findings, as presented in **Table 2**, indicate that the acceptability of rabbit meat among consumers is generally very acceptable, with an overall weighted mean of 3.40. The respondents strongly agreed that they chose meat based on its calorie and nutritional content, with a weighted mean of 3.68. They also strongly agreed that they highly valued the origin, feeding method, and slaughtering process in their purchase decision, the product labels used may form the basis of their food product preferences or rejection, and the structural features of the meat, including its packaging, significantly affect their purchasing decision with weighted means of 3.62, 3.44 and 3.42, respectively. Meanwhile, they agreed they prefer buying semi-prepared and readymade products, with a weighted mean of 2.85.

Compared to more commonly consumed meats like pork, chicken, and beef, rabbit meat presents both op-

portunities and challenges in consumer acceptance. Nutritionally, rabbit meat has a higher protein-to-fat ratio and lower cholesterol content, making it an attractive choice for health-conscious individuals. However, its market positioning as an alternative meat creates a disadvantage in terms of familiarity and cultural perception. Chicken remains the most widely consumed meat due to its affordability, availability, and versatility, while pork and beef continue to dominate celebratory and homecooked meals. The study's findings indicate that rabbit meat is currently viewed similarly to other "specialty meats" like duck or lamb, which are consumed less frequently. To increase competitiveness, marketing efforts should highlight rabbit meat's unique benefits while integrating it into mainstream consumption habits, such as featuring it in popular Filipino dishes or promoting premarinated and ready-to-cook versions for convenience.

The data reveal that rabbit meat is affordable from the consumers' perspective, with an overall weighted mean of 2.96 as presented in **Table 3**. They strongly agreed that they have a regular budget for rabbit meat, with a weighted mean of 3.27. On the other hand, the respondents agreed that they compared the price of rabbit meat to other types of meat before making a purchase (3.24), and they are willing and able to pay a price premium for healthier food like rabbit meat (2.77). They are also willing and able to pay a higher price for cooked or processed meat (2.54).

The study findings, as shown in **Table 4**, indicate that rabbit meat is generally accessible to consumers, with an overall weighted mean of 3.03. Respondents strongly agreed that rabbit meat is mostly accessible online, with a weighted mean of 3.27. However, they claimed that no rabbit meat can be found in supermarkets and public markets, with a weighted mean of 3.26. Respondents also agreed that processed and cooked rabbit meat is available from private farmers/producers (3.20), and rabbit meat can be delivered through doorto-door delivery (2.90), but there are only certain places in the province where rabbit meat can be bought (2.54).

As shown in **Table 5**, awareness levels significantly influence rabbit meat consumption. Respondents reported strong awareness of its health benefits, which correlates with its appeal among health-conscious con-

Table 2. Consumers' acceptability of rabbit meat.

		sumers acceptus	inty of fubble meat.	
	Acceptability	Weighted Mean	Verbal Interpretation	Verbal Description
1	I choose meat based on its calorie and nutritional content.	3.68	Strongly Agree	The respondent viewed the statement as very acceptable.
2	I highly valued the origin, feeding method, and slaughtering process in my purchase decision.	3.62	Strongly Agree	The respondent viewed the statement as very acceptable.
3	The product labels used may form the basis of my food product preferences or rejection.	3.44	Strongly Agree	The respondent viewed the statement as very acceptable.
4	The structural features of the meat, including its packaging, significantly affect my purchasing decision.	3.42	Strongly Agree	The respondent viewed the statement as very acceptable.
5	I prefer buying semi-prepared and ready-made products.	2.85	Agree	The respondent viewed the statement as acceptable.
	Overall Weighted Mean	3.40	Strongly Agree	Very Acceptable
	Table 3. Con	sumers' affordab	ility of rabbit meat.	
	Affordability	Weighted Mean	Verbal Interpretation	Verbal Description

	Affordability	Weighted Mean	Verbal Interpretation	Verbal Description
1	I have a regular budget for rabbit meat.	3.27	Strongly Agree	The respondent viewed the statement as very affordable.
2	I compared the price of rabbit meat to other types of meat before making a purchase.	3.24	Agree	The respondent viewed the statement as affordable.
3	I am willing and able to pay a price premium for healthier food like rabbit meat.	2.77	Agree	The respondent viewed the statement as affordable.
4	I am willing and able to pay a higher price for cooked or processed meat.	2.54	Agree	The respondent viewed the statement as affordable.
	<b>Overall Weighted Mean</b>	2.96	Agree	Affordable

sumers. However, despite high awareness, occasional consumption patterns suggest that awareness alone does not translate into regular purchases. Accessibility remains a major factor, as rabbit meat is primarily available through online sellers rather than supermarkets or public markets. Limited access to physical stores may hinder spontaneous purchases, restricting rabbit meat consumption to planned, online-based transactions. Additionally, cultural perceptions still play a role, with many considering rabbit meat an exotic food rather than a staple, affecting both demand and purchasing frequency. These findings suggest that while awareness campaigns have been effective, increasing physical market availability could further boost consumption.

The reliance on digital platforms for rabbit meat purchases highlights the growing role of e-commerce and social media in food marketing. Most respondents reported learning about rabbit meat through social media groups, online advertisements, and direct seller interactions. Facebook groups and e-commerce platforms (e.g., Shopee, Lazada, and online farm stores) serve as major access points for rabbit meat, compensating for its absence in supermarkets and traditional wet markets. This shift suggests that digital marketing strategies such as influencer partnerships, live selling, and educational video content could further expand awareness

	Table 4. Consumers accessionity of Table meat.				
	Accessibility	Weighted Mean	Verbal Interpretation	Verbal Description	
1	Rabbit meat is mostly accessible online.	3.27	Strongly Agree	The respondent viewed the statement as very accessible.	
2	There is no rabbit meat that can be found in the supermarket and even in the public markets.	3.26	Strongly Agree	The respondent viewed the statement as very accessible.	
3	Processed and cooked rabbit meat are also available from private farmers/producers.	3.20	Agree	The respondent viewed the statement as accessible.	
4	Rabbit meat can be delivered through door-to-door delivery.	2.90	Agree	The respondent viewed the statement as accessible.	
5	There are only certain places in the province where rabbit meat can be bought.	2.54	Agree	The respondent viewed the statement as accessible.	
	Overall Weighted Mean	3.03	Agree	Accessible	

Table 4. Consumers' accessibility of rabbit meat.

and accessibility. However, consumer trust in online purchases is a concern, as respondents noted they only buy from well-reviewed sellers, indicating the need for quality assurance and branding efforts. Strengthening online credibility and incorporating traceability features (e.g., farm-to-table tracking) could enhance consumer confidence and stimulate higher purchase frequencies.

Table 6 shows the result of the Ordinary Least Squares (OLS) regression analysis, checking the connection between different factors—age, income, budget for rabbit meat, and education level—and how often people buy rabbit meat. Results show no strong connection between these factors and rabbit meat buying habits, because all predictors have high p-values, meaning they are not important in explaining purchase frequency.

The intercept, which means baseline purchase frequency when all factors are zero, has strong statistical importance (p = 0.0000) with a coefficient of 2.1653. This means that even without considering other factors, people still buy rabbit meat at a moderate level. The age coefficient is 0.002978, which is positive but not important (p = 0.6012), meaning age alone does not significantly change how likely people are to buy rabbit meat. This result goes against the common idea that young or old people may have a stronger liking for alternative meats like rabbit.

(0.000001) with a high p-value (0.7685), meaning financial situation does not really affect rabbit meat purchase. This finding matches the affordability data from Table 3, where people say rabbit meat is priced okay, but they are still careful with spending. Since income does not show a strong effect, this suggests that rabbit meat buying decisions do not only depend on financial factors but also on how people perceive its value and place in the market. Even if rabbit meat is often compared with common meats like chicken or pork, people seem to buy it more based on how they feel about the price, not whether they actually have money or not.

Interestingly, the budget for rabbit meat has a negative coefficient (-0.000192) with a p-value of 0.2314, meaning people who set aside more budget for rabbit meat do not actually buy it more often. This may mean that people who buy rabbit meat in large amounts do so only occasionally, treating it like a special food, not an everyday food. This supports the idea that rabbit meat is still seen as an alternative protein, not a main diet choice.

Education level has a weak positive coefficient (0.028361) but with a high p-value (0.7751), meaning higher education does not really make people buy more rabbit meat. This suggests that even if people know the health benefits of rabbit meat, just knowing them is not enough to make them buy it more. Findings show that Income also has an almost zero coefficient rabbit meat is still not a main part of a regular diet, and

	Awareness	Weighted Mean	Verbal Interpretation	Verbal Description
1	I am aware that rabbit meat is a healthy food.	3.83	Strongly Agree	The respondent is very much aware of the statement.
2	I can observe that rabbit meat can be prepared in the same way as any other Filipino dish.	3.63	Strongly Agree	The respondent is very much aware of the statement.
3	I am informed that rabbit meat is rarely exempted from religious dietary prohibitions, unlike pork or beef.	3.59	Strongly Agree	The respondent is very much aware of the statement.
4	I am knowledgeable that rabbit meat can be an alternative for pork, beef, and chicken.	3.56	Strongly Agree	The respondent is very much aware of the statement.
5	In the Philippines, rabbit meat is considered as an exotic food.	3.55	Strongly Agree	The respondent is very much aware of the statement.
	<b>Overall Weighted Mean</b>	3.63	Strongly Agree	Very Much Aware

Table 5. Consumers' awareness of rabbit meat.

 Table 6. Ordinary Least Squares regression results.

Variable	Coefficient	Std. Error	T-Statistic	P-Value
Intercept	2.165312	0.298573	7.252403	0.000000
Age	0.002978	0.005685	0.523657	0.601234
Income	0.000001	0.000002	0.294876	0.768456
Budget for rabbit meat	-0.000192	0.000160	-1.201034	0.231478
Education Level	0.028361	0.099213	0.286201	0.775145

people buy it more because of habit and personal perception of price, not just because of financial situation or knowledge.

## 4. Discussion

### 4.1. Profile of the Rabbit Meat Consumers

The profile of the consumers shows the varying levels of awareness and access to rabbit meat across different areas in Luzon, which can significantly impact consumption patterns. The data indicates that men may be more likely to consume rabbit meat. This behavior aligns with the findings of Szendrő et al.<sup>[18]</sup>, which revealed that most women felt sorry for the rabbits. Furthermore, the researcher found that younger to middle-aged consumers eat more rabbit meat, which can be the result of their lifestyle choices and increased exposure to a wider variety of dietary options. The findings also indicated that the general level of education may have an impact on their willingness to explore alternative protein sources like rabbit meat since the majority of the consumers attained a high level of education.

However, even consumers with substantial income, the majority of them only occasionally buy rabbit meat and only set aside a small amount of their budget for it. On the other hand, respondents' budget allocations for other types of meat are almost similar, which would indicate that the rabbit meat sector has an opportunity to adjust its pricing strategies to better reflect consumer spending patterns on other meats. Given that 60% of consumers allocate less than ₱500 per week for rabbit meat, pricing strategies should be optimized based on price elasticity. A tiered pricing approach could be implemented, offering smaller, budget-friendly packaging for price-sensitive consumers while marketing premium cuts and organic rabbit meat at higher price points for niche markets. Additionally, limited-time discounts, bundle deals, and loyalty programs may encourage repeat purchases, gradually normalizing rabbit meat consumption. The research also shows that other meats are bought more often than rabbit meat, which highlights the necessity of increasing efforts to improve customer demand. Lastly, the preference for rabbit meat as a celebratory dish indicates that it is not yet fully integrated into daily diets but is instead reserved for special occasions.

The study's findings align with global trends in alternative meat acceptance. Magalhães, Costa and Camargo<sup>[10]</sup> reported that rabbit meat consumption is higher among middle- to upper-income male consumers in Brazil, similar to findings in Central Luzon. Likewise, a study by Szendrő et al.<sup>[18]</sup> in Malaysia found that emotional attachment to rabbits as pets remains a significant barrier, reinforcing the gender disparity seen in this study. In contrast, European studies<sup>[19]</sup> suggest that higher consumer trust in sustainable and organic meat production contributes to greater acceptance in Western markets. These comparisons highlight the need for localized marketing efforts that address cultural perceptions while adopting best practices from international markets, such as sustainability branding and ethical farming transparency.

These findings are consistent with the study of Magalhães, Costa and Camargo<sup>[10]</sup>, which revealed that the greatest acceptance of rabbit meat occurred in the population of adult men with a higher income and educational level.

### 4.2. The Meat Preferences of the Customers Based on 4A's Model of Marketing

### 4.2.1. Acceptability

Most of the respondents confidently affirmed that they preferred rabbits because they provided tasty meat with multiple health benefits. In fact, one of the customers in the medical field said their patients typically ate rabbit meat. Likewise, another customer argued that rabbit lechon, one of the most famous rabbit dishes, has less cholesterol than other common meats such as pork and chicken. This was supported by the study of Muhammad<sup>[19]</sup>, who stated that rabbit meat is considered healthy as it is lower in fat, cholesterol, and sodium than other types of meat and is rich in protein. In addition, rabbit meat proteins can serve as a source of bioactive peptides with angiotensin-converting enzyme (ACE) inhibition properties.

The study also examined consumer preferences for different rabbit meat cuts and processed products. Survey data indicate that 53% of respondents preferred whole rabbit for home cooking, while 37% preferred precut portions (e.g., legs, loin) for easier preparation. Processed rabbit products such as longganisa, tocino, and sausage were favored by 42% of respondents, primarily for convenience. However, 28% expressed hesitation toward processed rabbit meat, citing health concerns related to preservatives. These findings suggest that diversifying rabbit meat product offerings—such as vacuum-sealed pre-cut portions and natural, minimally processed alternatives—could enhance consumer acceptance.

Moreover, many of the customers also agreed that they typically bought semi-prepared and ready-made products like tocino, longganisa, and sausage. Since most processed meats are flavored and ready for consumption upon purchase, these product innovations are created for the convenience of a rising population who does not have the time or willingness to prepare meals. These innovations are considered the basic solutions in an ever-faster-paced environment. However, it can also be observed that a small number of customers were still reluctant to buy semi-prepared and ready-made products. This resistance might be due to concerns about the high consumption of processed meat, which is generally associated with a risk of cancer in the digestive system<sup>[20]</sup>.

On the business market, a food hub owner from Pampanga stated that she took the opportunity to connect with consumers by highlighting the rabbit dishes on their menus. Meanwhile, a food business owner from Nueva Ecija confirmed that he is currently considering consigning or serving processed meat bought from local rabbit meat producers for his business because it assists in saving production time. When asked about the current demand for rabbit meat in the area, he said that it would probably take more years for the industry to be fully accepted by consumers.

### 4.2.2. Affordability

Since the respondents are current rabbit meat customers, it is expected that they have a budget for rabbit meat. However, based on the interviews, their weekly budget for rabbit meat is below ₱500, and they could not afford to buy it regularly since the price was higher compared to other types of meat. Customers' preferred viand for rabbit meat is mostly as a celebratory food. Furthermore, the given data also disclose that the customers agreed to be willing and able to pay a higher price for cooked or processed meat. However, the statistics are slightly lower. It infers that although they agreed to pay premium prices, some could not purchase due to budget considerations. Despite the fact that rabbit meat is regarded as the healthiest meat, evidence suggests that customers remain price-sensitive. Millions of people worldwide suffer from food insecurity and different forms of malnutrition because they cannot afford the cost of healthy diets<sup>[21]</sup>.

Similarly, in the business market, all the interviewees were hesitant to pay higher prices because it directly impacted their profit. They emphasized that rabbit meat was already expensive, and they considered the costs of dish production, believing that if the price rose, consumers would be unable to purchase them. The food business owner from Nueva Ecija said the rabbit dishes are currently made-to-order in the area, and the customers are typically male young adult professionals.

#### 4.2.3. Accessibility

Customers strongly agreed that they mostly bought rabbit meat online. This is an expected result since one of the strengths of the rabbit farming industry is that most of the producers are active online. In fact, there is a Facebook community that serves as an informationsharing platform where both sellers and buyers can join. The findings suggest that both the producers and customers somehow embrace the convenience of the technology. However, the customers emphasized that they made sure that the seller was well-known and had positive reviews before they actually bought the products online. The producers maximized the benefits of online platforms, which could be the case since there was no rabbit meat available in supermarkets or even public markets. The internet's direct marketing potential was derived from its ability to enhance the link between a business and its customers.

On the business market side, all the interviewees bought rabbit meat supplies from private farms or breeders. The interviewee from Pampanga revealed that she only purchased rabbits at live weight from her coproducer to assure quality and, more crucially, age accuracy, which directly affects the tenderness of the cooked meat. Since she is also reselling processed meat, she explained that quality control and standardization took place before a particular product could be added to the business menu.

The study found that 80% of rabbit meat consumers were male, suggesting a gender disparity in consumption. This aligns with previous research indicating that women are less likely to consume rabbit meat due to emotional attachment to rabbits as pets<sup>[18]</sup>. Marketing strategies should be adjusted to target female consumers by emphasizing rabbit meat's health benefits, lean protein content, and versatility in home cooking. Campaigns featuring testimonials from female health advocates, dietitians, or fitness influencers could help reshape perceptions. Additionally, marketing rabbit meat as a family-friendly, low-fat alternative to chicken or pork may encourage greater acceptance among female consumers.

#### 4.2.4. Awareness

Since the respondents are customers, and the producers currently apply a personal selling approach to them, they are expected to be fully aware of the health benefits of rabbit meat. They confirmed that they were educated about the health benefits of rabbit meat by the producers and that this was one of the key reasons why they tried to eat rabbit meat.

In addition to this, both the individual customers and the business market strongly agreed that, at present, rabbit meat is considered exotic food even though it has been widely accepted on a global scale. According to one of the interviewees in the business market, some of his customers bought rabbit dishes as food or snacks provided as an accompaniment to alcoholic drinks. Some customers have claimed that they were able to try or taste it without realizing it was rabbit meat. While exotic food may be inherent in most cultures, not all individuals are receptive to trying it, or if they are, they are simply curious. In line with this, raising awareness of what one eats and how food is presented on the plate is a matter of being informed. Increasing awareness of the nutritive value, positive health effects of rabbit meat consumption and production chain, development of processed meat products, and proper animal welfare compliance in rabbit production could improve consumer acceptance<sup>[3]</sup>.

This study is limited to descriptive analysis, summarizing consumer preferences rather than establishing causal relationships. Frequency, percentage, and weighted mean effectively capture trends in the 4A's Model. Additionally, snowball sampling may have introduced selection bias by overrepresenting consumers already aware of rabbit meat, potentially limiting generalizability.by overrepresenting consumers already aware of rabbit meat, potentially limiting generalizability.

Eating rabbit meat does not only depend on things like income or education. Many other factors affect why people do or do not buy it, like price, availability, and cultural perceptions. A study in Malaysia found that culture and health benefits are important for rabbit meat acceptance. Many people see rabbits as pets, not food, so they are not used to eating them<sup>[22]</sup>. This idea exists in many places, where people feel rabbit meat is not a normal daily food because of beliefs about animal welfare<sup>[23]</sup>.

Right now, the market needs to change how people see rabbit meat from a special food to a normal food. In Spain, producers have created different rabbit meat products, like sausage and pre-cut packs, and used smart marketing to change people's perception. This has made more people buy rabbit meat<sup>[24]</sup>. But in places where rabbit meat is not popular in the market, people buy less, showing that good marketing and better sales strategies can help more people accept and buy it<sup>[25]</sup>. Also, more ready-to-cook rabbit meat and wider availability in more places, not just online, can help people buy it easier and more often<sup>[26]</sup>.

Even if people know rabbit meat is good for health, the problem is still where to buy it. Studies show that selling it in big supermarkets and public markets can encourage more people to try and eat rabbit meat<sup>[25]</sup>. Rabbit meat has many health benefits, like being low in calories and high in protein, which is better than many other meats <sup>[23]</sup>. Because of this, marketing must focus not only on displaying rabbit meat in stores but also on making it easy to buy. It is necessary to tell people about its health benefits and show that it is a good food choice for an everyday meal.

Overall, making rabbit meat a normal food requires more than just looking at income or education; it requires changing cultural perceptions, improving sales strategies, and making people more used to buying it. If this is done, rabbit meat can become a more common food choice in the market.

These findings suggest that the industry's growth will depend on targeted interventions beyond demographic-based strategies. Pricing adjustments, product diversification, and enhanced retail availability are likely to have a more substantial impact on increasing demand compared to relying solely on consumer education or targeting higher-income or more educated individuals. The results reinforce the need for a strategic market shift, emphasizing affordability and ease of access rather than demographic segmentation, to drive greater acceptance and sustainability in the rabbit meat industry.

## 5. Conclusions and Recommendations

In conclusion, most existing customers are young men and professionals who can create demand. Most of them preferred rabbit meat as a celebratory food. Rabbit meat has the potential in the growing healthconscious market because the customers consider the nutritional content and are willing to pay a premium price for healthier food. Also, today's general market fully maximizes technology to meet their needs. Lastly, it can be determined that the activities promoting rabbit meat as a healthy food are effective because they are fully aware of its dietary value.

This study highlights key drivers and barriers to rabbit meat consumption, providing valuable insights for targeted marketing strategies. While consumers recognize rabbit meat's nutritional value, occasional purchasing habits indicate that awareness alone does not ensure market penetration. Marketing strategies should focus on price positioning to address affordability concerns and leverage digital platforms to enhance accessibility. Given the strong correlation between affordability and purchase frequency, offering smaller, budgetfriendly packaging or promotions could encourage more frequent consumption. Additionally, collaborations with online food delivery services and supermarkets could improve accessibility. Finally, shifting marketing narratives from rabbit meat as an "exotic" food to a "healthy, everyday protein alternative" through educational campaigns and influencer endorsements may reshape consumer perceptions and drive long-term demand. Consumers preferred rabbit meat for its taste and numerous health benefits. However, a small portion of customers expressed concerns over processed meat consumption due to its potential health risks, which may necessitate offering a range of products that balance convenience and health. Furthermore, the existing customers remain price-sensitive, even though rabbit meat is readily accessible, despite being fully aware of its health benefits.

To strengthen demand for rabbit meat, marketing strategies should align with successful approaches used in similar industries. The global success of plant-based and alternative meats provides a valuable reference for rabbit meat producers. Studies show that integrating educational campaigns, innovative product diversification, and strategic pricing adjustments can significantly impact consumer acceptance<sup>[24]</sup>. The poultry industry, for example, effectively overcame initial consumer resistance by introducing processed and conveniencebased products such as ready-to-cook meals and frozen items, making the transition to new protein sources easier for consumers<sup>[27]</sup>. Furthermore, the increasing use of digital marketing and influencer-driven promotions in the alternative protein sector demonstrates the importance of leveraging online platforms to create awareness and engagement<sup>[9]</sup>. By applying these strategies diversification, education, and digital marketing-rabbit meat producers can expand their market reach and improve overall acceptance. Also, considering how infrequently rabbit meat is purchased, there is an opportunity to expand its availability in local markets and of- investigation, data curation, writing-original draft

fer more reasonably priced packaging options. Strategic initiatives to raise product awareness, enhance distribution channels, and promote the health benefits of this product may increase the demand and support the long-term growth of the rabbit meat industry. Rabbit meat producers should focus on expanding retail presence by securing supply chain inclusion in supermarkets and wet markets. Diversifying product offerings with ready-to-cook and pre-marinated options can enhance convenience and attract more consumers. To build consumer trust, implementing farm-to-table traceability and obtaining organic certification will ensure quality assurance. Strengthening digital marketing strategies through targeted ads, live selling, and influencer collaborations can further increase awareness and engagement. Additionally, launching consumer education programs, including nutrition seminars, free sampling events, and partnerships with fitness communities, can help reposition rabbit meat from an "exotic" option to a mainstream protein source. These initiatives will drive greater acceptance and market growth for rabbit meat in the Philippines. To bridge accessibility gaps, targeted educational campaigns and expanded distribution channels should be prioritized. The findings indicate that most consumers purchase rabbit meat online due to limited availability in supermarkets and public markets. Introducing rabbit meat into mainstream retail channels, including grocery stores and wet markets, could normalize its consumption. Additionally, strategic partnerships with food service businesses, restaurants, and meal kit delivery services would enhance accessibility. Educational campaigns should focus on promoting rabbit meat as a healthy and sustainable protein alternative, utilizing cooking demonstrations, nutrition-focused advertisements, and influencer collaborations. Strengthening consumer knowledge about rabbit meat's affordability and ease of preparation could further encourage regular purchases, shifting it from a specialty product to an everyday food choice.

## **Author Contributions**

Conceptualization, methodology, formal analysis,

preparation, and project administration: C.L.D.L. Formatting, updating literature, writing—review and editing, visualization, and publication preparation: A.R.S. All authors have read and agreed to the published version of the manuscript.

# Funding

This work received no external funding.

# Institutional Review Board Statement

This study was approved by the Graduate School of Nueva Ecija University of Science and Technology, using Form Code NEUST-GSS-F008.

# **Informed Consent Statement**

Informed consent was obtained from all subjects involved in the study.

# Data Availability Statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

# **Conflicts of Interest**

The authors declare no conflict of interest.

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