

---

**| RESEARCH ARTICLE**

## **The Acceptability Level of Rabbit Meat as an Alternative Meat used in Kapampangan Dishes**

**Prof. Gibs M. Panganiban, CHP, MSHTM<sup>1</sup>✉, Prof. Anna Marie R. Nepomuceno, CTP, LPT, MSHTM, CHCD<sup>2</sup>, Prof. Erika S. Pangan, MBA, CTMP<sup>3</sup>, Prof. Jim Enrico C. Balboa, CHP, MBA, CHCD<sup>4</sup>, and Prof. Noraing S. Uy, LPT, MAEd<sup>5</sup>**

<sup>12345</sup>*Our Lady of Fatima University, Pampanga*

**Corresponding Author:** Prof. Gibs M. Panganiban, **E-mail:** [gmpanganiban@fatima.edu.ph](mailto:gmpanganiban@fatima.edu.ph)

---

**| ABSTRACT**

This research aims to look at the acceptability level among the respondents on Rabbit meat as an alternative meat for processed and meat products such as Tocino, Sisig, and Morcon and its implication to the Market Success of Products among selected Kapampangan respondents in the City of San Fernando, Pampanga Specifically, this research would like to identify the following: 1.) Demographic profile of the respondents; 2.) Level of acceptability of the respondents on rabbit processed meat in terms of sensory characteristics, price, nutritional value, and culture; and 3.) Relationship of the respondent's demographic profile and its level of acceptability of rabbit meat as an alternative meat source. In order to see the general picture, a total of 65 researcher-made survey questionnaires were used. The first part was the demographic profile of the respondents, and the second part was their perception of the acceptability of rabbit meat as an alternative source for consumption. The study also used simple random sampling in determining the samples of the study. Kapampangan residents were the respondents to the study. Based on the results, the sensory characteristics of rabbit meat, price, and nutritional value in terms of Tocino, Sisig, and Morcon are acceptable to respondents; thus, there is a great potential to commercialize rabbit meat in the area, although culture-resulting indicators are slightly and somehow some were not acceptable. Pearson's  $r$  also covered a significant relationship in Age, Gender, and Educational Level towards the acceptance of the consumers since the  $p$ -value is greater than 0.05. This implies that based on the factors mentioned—Sensory, Price, Nutritional Value, and Culture, Rabbit meat is accepted as Tocino, Sisig, and Morcon servings by the general consumers which can be considered an alternative meat for the aforementioned local cuisine or as an alternative source of different nutritional values. It is recommended that breeders of rabbit meat should continuously educate the public on rabbit meat consumption through advertisements on social media focusing on the different ways to cook rabbit meat in different cuisines. To counter the declining consumption of this valuable meat, reassuring discourses are required to point out its historical merit in health and culture. Also, its distinctive sensorial traits, nutritional profile, and technological properties should be valorized. The need for consumer information, especially on the health benefits of rabbit meat, is crucial to eradicating negative notions about eating rabbit meat.

**| KEYWORDS**

Rabbit Meat; Kapampangan Dishes; nutritional value

**| ARTICLE INFORMATION**

**ACCEPTED:** 01 February 2024

**PUBLISHED:** 27 February 2024

**DOI:** 10.32996/jths.2025.3.1.1

---

### **1. Introduction**

The idea of meat quality is always evolving, and consumers nowadays. According to Wendt (2022), rabbit meat is very safe to eat when cooked thoroughly in the same way that anyone might cook other animal meats. But people around the world have drastically different opinions on the topic of using rabbits for food — despite the fact that this small animal has nearly always been eaten by humans.

**Copyright:** © 2025 the Author(s). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) 4.0 license (<https://creativecommons.org/licenses/by/4.0/>). Published by Al-Kindi Centre for Research and Development, London, United Kingdom.

As people lean more and more toward healthier diets, some are exploring the benefits of starting a plant-based diet. In the meantime, others are searching for healthier meat alternatives, although without adopting a wholly vegetarian habit. One option is rabbit meat, recognized for being a low-calorie, high-protein alternative, making it a good choice for those looking for a well-balanced diet (Pacho, 2023)

Llemit (2021) mentioned that the research "Rabbit Meat has the Potential of Being a Possible Alternative to Other Meats as a Protein Source: A Brief Review" published in the International Journal of Pharmacy and Biomedical Research, shed some light on the nutritive benefits and other characteristics of rabbit meat.

In its introductory note, the research article stated that rabbit meat is low in bad fats that can cause cancer and heart diseases: "Meat is in a major source of fat in the diet, especially of saturated fatty acids (SFA), which have been implicated in diseases associated with modern life, especially in developed countries.

The Department of Agriculture has long suggested using rabbit meat as a possible substitute for pig. Particularly last year, when it became clear that the ASF outbreak was becoming more difficult to control, this attracted attention. In this context, promoting rabbit meat intake will be in charge of or share the responsibility for household purchases.

On the other hand, Astudillo (2021) noted that although rabbits have long been part of many Philippine households, the lingering reluctance and perceived taboo on eating rabbit meat is the greatest hindrance to widespread rabbit production. But history tells us that rabbits were introduced to the country by missionary groups and the U.S. Peace Corps after the Second World War. They knew that rabbits are prolific, grow fast, and don't compete with humans or other animals for grain, making them an ideal protein source that could alleviate food scarcity resulting from the devastation of war. Soon after their introduction in the country, rabbits came to be cared for as pets instead of being produced as a meat source.

A rabbit can be roasted ("lechon"), or cooked the way Filipinos cook goat delicacies, such as kaldereta, pinapaitan, adobo, kilawin, and sinampalukan. Some cook it with curry powder.

Because rabbits were relatively small, animals slaughtered for consumption were generally eaten immediately in the past centuries. However, since a single rabbit would offer a little more product than could be consumed in one sitting, little effort was devoted to developing preserved rabbit products such as salted or dried meat, or sausages. For this reason, although there is a rich history of recipes using rabbit meat, there are few traditional processed products.

Nowadays, even though the processing industry is pushing towards the introduction of more attractive products, particularly ready meals or ready-to-cook meals for consumers with little time for meal preparation, most rabbit meat worldwide is still sold as a whole carcass or cut-up parts. Bearing in mind these considerations, it then describes the more promising processing technologies for raw meat materials to obtain added-value products like marinated, formed, emulsified, or coated by exploiting rabbit meat's intrinsic characteristics.

Wyatt (2019) highlighted that manufacturing rabbit meat into processed products describes that the first trend is the "ingredient phenomenon: snacking with health advantages," a more promising processing technology that focuses on the creation of "better-for-you" products for raw meat materials to obtain added value. While, Escriba-Perez (2019) said that, as advised by the World Health Organization, rabbit meat has nutritional and dietary qualities that make it suitable for youngsters.

The nutritional content of meat becomes an increasingly important factor in assessing meat quality and consumer acceptance. Rabbit meat was extremely valued for its nutritional and dietary contents. Rabbits have a lot to offer when it comes to health and long-term food.

In line with these concerns, the researchers would like to determine the acceptability level of rabbit processed meat as an alternative to meat in Kapampangan dishes. This study will be able to identify the most acceptable Kapampangan dishes in terms of appearance, taste, aroma, and texture and to conduct a series of studies on rabbit meat processing and implications to the development of new products as market success.

## **2. Literature Review**

This chapter presents a review of local and foreign literature and studies which are relevant to the study.

### **2.1 Foreign Literature**

According to Oluwatusin (2012), in the study about Social Acceptability of Rabbit Meat and Strategies for Improving Its Consumption in Ekiti State Southwestern Nigeria stated that rabbit production has not been comparable with that of other farm animals in the country.

Therefore, the meat is not as readily available in the open market as beef, pork, poultry, fish and other meat. In spite of this, research over time shows the growing interest in adopting rabbit production as a veritable means of economic initiatives for the poor and an alternative to high-cost meat products of other farm animals and bush meat

Based on Food and Agricultural Organization (FAO), in China and the Democratic People's Republic of Korea, record shows in 2017 that 73.3% contributed to the global volume of rabbit meat. This study states that China is at the top position in consuming rabbit meat the fourth is the Italy after France and Germany. This group has similarities because they have the same consumption volume of rabbit meat.

According to Li et al. (2018), manufacturing rabbit meat into processed products describes a more promising processing technology for raw meat materials to obtain added value such as marinated, formed, emulsified, and coated by exploiting rabbit meat's intrinsic characteristics.

## 2.2 Local Literature

According to Agriculture Secretary William D. Dar, rabbit meat could serve as an alternative to pork as the country grapples with high pork prices due to the devastation caused by ASF on hog farms. He noted that rabbit meat production has a shorter cycle than other livestock or poultry animals and could be cheaper than chicken meat.

Whereas Bureau of Agricultural and Fisheries (BAFS), a consultation on the initial drafts of the Philippines National Standard (PNS) happened last August 10, 2021, gathered to present the technical and commercial information on the slaughtering practices of rabbit. The objective is to promote rabbit meat as an alternative source of protein after the swine industry was devastated by the African swine fever (ASF).

According to Neri (2021), Rabbit meat can be used as an alternative to pork in the Philippines. Data reports show that due to the rising price of pork caused by the African Swine Fever (ASF) threat, Filipinos have long since shifted to chicken as alternative meat. This causes chicken meat prices to hike. Although, Esmail (2022) cited that eating rabbit meat is still considered taboo in the Philippines, but advocates are pushing to make rabbit meat a vital part of Filipino tables. She pointed out in her study entitled *Rabbit In, Rabbit Out: The Consumers' Acceptability of Rabbit as an Alternative Meat*, whether meat customers will embrace rabbit as alternative meat because rabbit meat is not yet known for its health benefits specifically in our locality. This will let meat consumers know that compared to other meats, rabbits have healthier nutrients than a human may acquire.

According to San Juan (2021) in his position paper, he has proposed long-term solutions like exploring alternative protein sources due to unfavorable circumstances such commodity is pork, which has become notoriously expensive even with the imposition of price caps. He also concluded that rabbit meat is normal to eat. The Department of Agriculture (DA) sees the rabbit industry as pork alternative, not only due to its price gap but also its healthy alternative. The agency is pushing for the production of rabbit for meat consumption. As the DA Secretary William Dar said the agency will provide the necessary backing to the massive production of rabbits.

### Acceptability Level on Rabbit Meat

In the study of Consumer Acceptability of Empanada stuffed with Rabbit meat (Lapanada) Using Baking and Frying Method of Cooking developed a healthier version of the empanada by using rabbit meat (lapan) and to determine its consumer acceptability through empanada stuffed with rabbit meat (lapanada). He explained an experimental research design in conducting the study (Gatdula, 2021).

Adique (2020) on the Acceptability of Rabbit as an alternative meat source for consumption in Cavite, cited that rabbit meat is acceptable to respondents and thus there is a great potential to commercialize rabbit meat. It is also recommended that breeders of rabbit meat should continuously educate the public on rabbit meat consumption through advertisements on social media focusing on the different ways how to cook rabbit meat in different cuisines. It means that it is encouraged to let people try rabbit meat and need for consumer information especially on the health benefits of rabbit meat which is crucial in eradicating negative notions about eating rabbit meat.

Murray (2003) mentioned that food acceptability is affected by many factors, which may be related to the individual, the food, or the environment in which the food is consumed. Acceptability is a subjective measure based on hedonics (pleasure), which means the influence may occur by the sensory properties of the food, previous exposure to it and subsequent expectations, contextual factors, an individual's culture, physiological status (i.e., hunger, thirst, and presence/absence of illness), and many other variables.

## **Sensory Evaluation**

Boutrolle (2010) cited the effects of context on liking implications for hedonic measurements in new product development promoted the use of tests under standardized tasting conditions in the assessment of food product acceptability. In addition, the effects of appearance and flavor on consumer acceptance of foods have been extensively studied.

### Aroma, Appearance, Taste and Texture

The research study on Consumers' Acceptability of rabbit meat, where Empanada stuffed was used as a processed product, identified the most acceptable method and determined in terms of appearance, taste, aroma, and texture using the Hedonic scale method.

Based on a study "A Review of Sensory and Consumer-related Factors Influencing the Acceptance of Red Meats from Alternative Animal Species", it aimed to provide a comprehensive summary of sensory and consumer-related factors influencing consumption of meats. It concluded that flavor is the key sensory attribute distinguishing these meats from conventional red meat and driving acceptance.

In like manners, Guerrero (2014), his research focused on features that might influence consumer behavior, preferences and their perception of meat and meat products with respect to psychological, sensory and marketing aspects. The approach includes evaluating sensory properties such as appearance, texture, flavor and odor. However, there are fewer studies dealing with the effect of texture attributes on food acceptability.

## **Nutrition**

Rabbit meat health benefits are plentiful. Like most animal products, rabbit meat is a great source of protein, but unlike beef, rabbit doesn't contain much fat. According to the dietary guidelines of the World Health Organization, it's OK to eat meat, but you should eat mostly lean meat and get most of your fats from plant sources like avocado and plant oils (Mikstas, 2022).

A 3-ounce serving of wild, uncooked rabbit has only 96 calories, according to the USDA. It also delivers about 18 grams of protein, fewer than 2 grams of fat and no carbohydrates. Compared to other meats, particularly beef, rabbit has very little fat (Halse, 2019).

## **Price**

In a study by Camargo about Consumption of Rabbit in Brazil mentioned that the resistance to rabbit meat consumption exists among consumers. As cited by Duarte (2011), rabbit meat is a different and unknown meat, a fact that results in a low demand and consequently, in low supply. While Machado (2012) explained there was a poor investment in research and the few breeding programs, government incentives and marketing strategies are other factors that limit the production of rabbits for meat in Brazil. This also applies in Philippines local. Adique (2020) said that there has been no formal research from the Philippine government on rabbit meat as another meat source in our country. Only private groups or individuals are actively pushing rabbit meat for consumption. These private groups were conducting seminars, making recipe books, and food tasting to spread awareness about the benefits of rabbit meat and that there is another alternative meat around.

Filipinos are looking into rabbit meat as an alternative due to the rising prices of pork products, since there are still fewer producers of rabbit meat, prices range from PHP380 to PHP400. Agriculture Secretary William Dar said they are looking into making rabbit meat as an alternative to pork meat since producing it is much easier and not time-consuming as the growth cycle is lesser.

## **Culture**

In the study "Rabbit meat in need of a hat-trick: from tradition to innovation (and back)" by Petracci (2018), tackled about the longstanding culinary value of Rabbit meat production, there was a discernible decline in the consumption of rabbit meat. As for all meat, he emphasized its relatively complexity assemblage of contemporary anxieties about health, animal welfare, and the environment. Also, specific categorical dynamics are at play because rabbits have superimposed roles for instance as pet animals. The aspect of cuteness seems to interfere with their acceptability as a food. To counter the declining consumption of this valuable meat, reassuring discourses are required to point out its historical merit in health and culture Also, its distinctive sensorial traits, nutritional profile, and technological properties should be valorized.

**Profile of the Respondents**

The study took into consideration the Age, Gender and Occupation as studies indicate the latter factors have a significant impact on the Acceptability level of Rabbit meat consumption based on three Kapampangan cuisines such as Sisig, Tocino, and Morcon.

Ryan (2014) explained that age is a contributory factor in evaluating and describing any particular. This means that individuals are likely bailing for opportunity may interested in the challenge and the environment. As age discrimination may be everywhere, some undoubtedly worry that older employees are necessarily overqualified.

Also, Alegado (2010) justified the effect of age on the performance of individuals. He asserted that age is accounted as a factor which determines the individual interpretations of situations and that individuals have different prepositions at different age levels.

**2.1 Theoretical Framework**

The study will be guided by the theory of New Product Development and Its Applications by Gurbuz (2018).

New Product Development (NPD) is a comprehensive process that involves multiple stages from ideation to commercialization. According to this theory, a product which can be a physical object, or a service should be functional and emotional to satisfy the customers’ needs.

The introduction of rabbit meat can be exemplified as a physical object that can be used in different meat dishes or processed products sold by Kapampangans in the market.

New products are the result of creative and unique ideas that will make the consumers satisfied. In the applications theory in the context of NPD integrates various concepts and frameworks to guide the successful development and market introduction of new products.

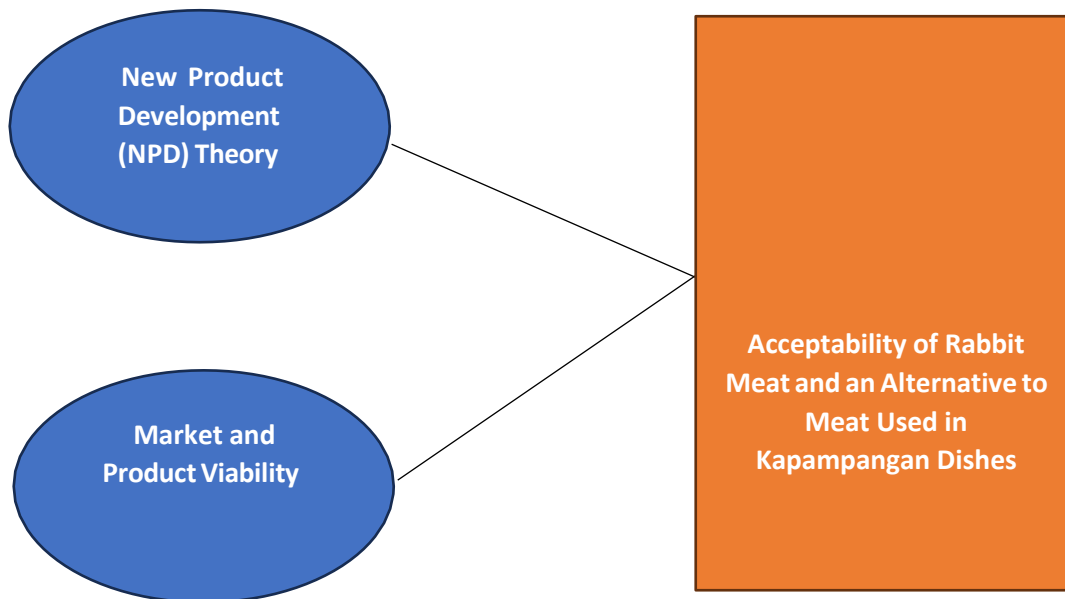


Figure 1: Shows the Theory of New Product Development and Its Applications

**2.2 Variable Discussion**

The thoroughly investigate the acceptability level of rabbit meat as an alternative to traditional meats in Kapampangan dishes, the researchers focused on the following variables that will help capture a comprehensive view of the factors influencing acceptability:

**Independent Variables:**

### 2.2.1 Sensory Characteristics

**Taste-** How appealing the taste of rabbit meat is compared to traditional meats used by Kapampangans like pork, beef and chicken.

**Texture-** Acceptance of the texture of rabbit meat in Kapampangan dishes.

**Aroma-** Impact of the aroma of rabbit meat on its acceptability.

**Appearance-** Visual appeal of rabbit meat in prepared dishes.

### 2.2.2 Price

**Cost-** Price consumption of rabbit meat with traditional meats.

**Consideration of Income Level-** Disposable income and willingness to pay for alternative meats.

**Market Availability-** Availability of rabbit meat in local markets.

### 2.2.3 Nutritional Value

**Nutritional Value-** Awareness and importance of the nutritional profile of rabbit meat.

**Health Risks-** concerns about potential health risks of consuming rabbit meat.

**Dietary Restrictions-** Suitability of rabbit meat for various dietary needs like low-fat, high-protein diets.

### 2.2.4 Culture

**Cultural Heritage-** Importance of traditional ingredients in Kapampangan cuisine.

**Culinary Traditions-** Flexibility in adapting new ingredients into traditional dishes.

**Cultural Norms-** General acceptance of consuming unconventional meats.

### Dependent Variable:

#### Acceptability Level

The weighted value assigned to the factors on level of acceptability such as sensory characteristics, price, nutritional value, and culture was patterned after Likert Scale in consumer research for capturing liking data.

### 2.3 Problem Statement and Hypothesis

#### *Problem Statement*

The main purpose of the study is to evaluate the acceptability level on Rabbit meat as an alternative for meat products such as *Tocino*, *Sisig* and *Morcon* and its implication to market success of products among selected Kapampangan respondents in City of San Fernando, Pampanga.

Specially, the study sought to answer the following questions:

1. How may the demographic profile of the respondents be described in the terms of:
  - 1.1. Gender,
  - 1.2. Age and,
  - 1.3. Educational level
2. How can the acceptability level of the respondents on Rabbit meat be categorized under *Tocino*, *Sisig* and *Morcon* based on the degree of liking be evaluated in terms of:
  - 2.1 Sensory characteristics
  - 2.2 Price,

2.3 Nutritional value and,

2.4 Culture

3. Is there a significant relationship on the respondent’s demographic profile and its level of acceptability on rabbit meat processed as *Tocino, Sisig and Morcon*?

**Hypothesis**

**Ho:** There is no significant difference in the acceptability level of rabbit meat compared to traditional (such as pork, beef, or chicken) in Kapampangan dishes.

**H1:** There is a significant difference in the acceptability levels of rabbit meat compared to traditional meats in Kapampangan dishes.

**2.4 Research Paradigm**

The researchers will adapt the Input-Process-Output (IPO) model to illustrate the process that will be carried out throughout the study:

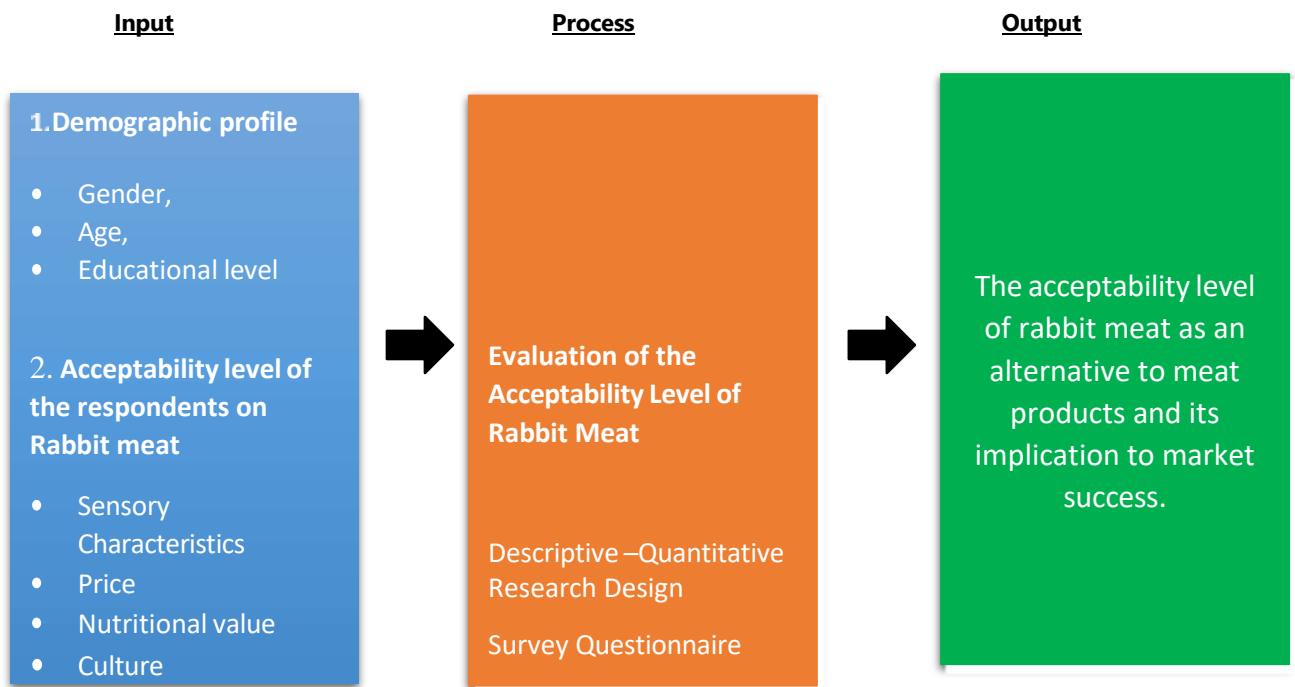


Figure 2: Shows the Paradigm of the Study

In this approach inspired by the I-P-O Model, will meticulously select a diverse group of respondents placing a special emphasis on the 65 Kapampangans based on their specific personal attributes and potential capabilities in performing specific sensory tasks. This initial step sets the stage for a systematic process that will prioritize data collection methods such as the distribution of survey questionnaires in a “descriptive-quantitative approach”. Subsequently, through data analysis techniques, relevant data will be collected. Through this methodical approach, the researchers aim to uncover the acceptability level of rabbit meat that correlates to the variables of the study: Sensory Characteristics, Price, Nutritional Value and Culture that will lead to valuable conclusions and decipher implications to market success.

### 3. Research Methods

#### 3.1 Research Design

The research design refers to the overall strategy that the researchers choose to integrate the different components of the study coherently and logically, thereby ensuring that the researchers will effectively address the research problem. Additionally, it involves specifying the procedures and strategies for gathering the necessary information.

The researchers will utilize descriptive-quantitative research study. According to Espiritu (2021), it is a scientific discipline that applies principles of quantitative research design and statistical analysis, with the use of human senses such as sight, smell, taste and touch to introduce a cuisine version of rabbit meat as alternative main ingredient.

#### 3.2 Research Locale

The target locale of the study is in the City of San Fernando, Pampanga, where simple random sampling technique will be utilized.



Figure 3: Map of City of San Fernando, Pampanga

#### 3.3 Population and Sampling/ Key Informant Selection

The population of the study consisted of selected 65 Kapampangan respondents based on their specific personal attributes and potential capabilities in performing specific sensory tasks. The study presents the number of respondents from City of San Fernando, Pampanga. They are the local residents that were randomly selected during their market day routine. In a simple random sample, every member of the population has an equal chance of being selected. With sampling, the frame should include the whole population. In conducting this type of sampling, a use tools like random number generators or other techniques that are based entirely on chance.



Inclusion Criteria:

*Participants*- Local residents of the City of San Fernando, Pampanga that were randomly selected during their market day routine.

*Age*- Participants must be between 18-65 years old.

*Educational Attainment*: those who have knowledge about meat and meat products.

*Willingness to Participate*: Participants must express willingness to take part in study voluntarily.

Exclusion Criteria:

*Participants*: Those who are out of the coverage of the City of San Fernando, Pampanga and are not legitimate local residents.

*Minors*: Individuals below age

These criteria were designed to ensure that the sample would consist of individuals who have at least a knowledge or vast knowledge between traditional and newly introduced meat and meat products to be used in Kapampangan dishes. Exclusion criteria help to control the factors that could potentially confound the results or limit the generalizability of the findings.

### 3.4 Research Ethics

Confidentiality and informed consent are paramount in this study, adhering to ethical and legal mandates (Alkaraki et al., 2020). To ensure that the study will be conducted as thoroughly and ethically as possible, the respondents and concerned persons for this study will be made aware that their identities and answers will remain confidential. Furthermore, the respondent's cooperation will be eagerly sought after, with the assurance that the data gathered from them would be treated with the strictest confidence, so that they would be more open. This will be done with the hope that this would promote trust between the researchers and the respondent.

The respondents and concerned persons will be provided with an informed consent form that clearly explains the purpose of the study, the data collection procedures, the potential risks and benefits of participation, and their right to withdraw from the study at any time without penalty. The identities and answers of all respondents will remain confidential, and the data will be anonymized during analysis and reporting. To ensure voluntariness, participation in the study is free of undue inducement, and no form of token will be given for participation.

The research protocol will identify any potential risks associated with participation, such as psychological discomfort from certain survey questions. Steps will be outlined to mitigate these risks, such as providing resources for support and ensuring participants have the right to withdraw at any point. All collected data, both digital and physical, will be securely stored in accordance with the Data Privacy Act of 2012. Upon study completion, all digital data, including backups and shared files, will be securely deleted. Any hard copies will be destroyed through shredding.

Conducting an onsite and online survey are the most effective methods to gather suitable respondents. The language that will be used to communicate research findings is clear, precise and suitable for the intended audience. Information will be used and presented through written reports and presentations.

This proposal will be reviewed and approved by the Our Lady of Fatima University - Institutional Ethics Review Committee (OLFU - IERC) which is a committee whose task it is to make sure that research participants are protected from harm.

### 3.5 Research Instrument

The research instrument is used to measure variables in obtaining data on the research subject's topic of interest. A descriptive and sensory evaluation questionnaire in checklist form was used for the survey. Furthermore, sensory tests or product taste methods are used to evaluate rabbit meat as an alternative meat for Kapampangan dishes like tocino, sisig and morcon also to describe the attributes toward the acceptability of the processed rabbit meat products.

Part I- Contains the description of individual profile of the respondents such as age, gender, and educational level.

Part II- combine information for the level of acceptability of the respondents using survey questionnaire in terms of the degree of liking and product screen action. The respondents requested to put check on the appropriate information to evaluate whether they able to distinguish the acceptability on the presented cuisine. This technique is used to collect respondents' opinions on the proposed product using the hedonic scale, indicators of acceptability of variant aroma, taste, appearance, and texture and Likert scale, indicators of acceptability on Price, Nutritional Value and Culture.

The validated descriptive questionnaire will be composed of 16 characteristics based on the sensory evaluation and 12 statements to screen the potential acceptance in the market.

### **Statistical Treatment**

The data obtained through the survey questionnaire were encoded and statistically processed using Data analysis in Excel. To answer the research questions raised in the Statement of the Problem, statistical tools such as frequency counts, percentage, and mean for group data will be utilized.

Frequency and percentage will be employed to describe the profile of the respondents.

Also mean for group will be utilized to reveal the acceptability level based on the degree of liking and product screen.

One-way Analysis of Variance (One-way ANOVA) will be used to evaluate the mean of the responses of the respondents for the sample dishes made out of rabbit meat in terms of taste, appearance, aroma and texture.

Statistically significant findings indicate not only that the researchers' results are unlikely the result of chance, but also that there is an effect or difference between the variables being studied in the larger population. The researchers will adopt a significance level of 5%.

### **3.6 Data Collection**

To determine the acceptance level of rabbit meat as an alternative to meat used in Kapampangan dishes, the researchers will employ a quantitative data collection approach. The data collection process will involve the use of survey questionnaires to gather information from the residents of the City of San Fernando, Pampanga.

A structured survey questionnaire will be created by the researchers and will cover topics such as Sensory Characteristics, Price, Nutritional value and Culture. The respondents will receive the survey onsite or online. Likert Scale questions pertaining to the factors on acceptance level will be included in the questionnaire to gauge respondents' acceptability with the statements. In order to collect data on age, gender, and educational attainment, the survey will also include demographic-related questions.

To ascertain the results of the study, Pearson-r, frequency count and weighted mean were utilized. But before resorting to them, the weighted mean will be computed first in order to determine the overall value of the respondents relative to the acceptability level.

Furthermore, since there is an option to do face-to-face data gathering, health protocols will be strictly followed such as maintaining social distancing, frequent hand sanitizing, and sanitation of writing materials to ensure the safety of both of both the researchers and respondents.

### **3.7 Data Analysis**

Researchers used surveys questionnaires to carry out investigations and collect data. Surveys questionnaires are the typical methods used for data collection. This method enables the researchers to gain insights and develop a deeper knowledge from the gathered data. The weighted value assigned to the factors on level of acceptability such as sensory characteristics, price, nutritional value, and culture was patterned after Likert Scale in consumer research for capturing liking data (Stone and Siddel, 1985) as follows:

Four-point Likert scale	Response	Range	Verbal Interpretation
4	Like a little	3.51 - 4.00	Highly Acceptable
3	Neither like nor dislike	2.51 – 3.50	Acceptable
2	Dislike a little	1.51 – 2.50	Slightly Acceptable
1	Dislike a lot	1.00-1.50	Not Acceptable

Table 1: Likert Scale used for the study

In this study, Pearson-r, frequency count and weighted mean were utilized. But before resorting to them, the weighted mean will be computed first in order to determine the overall value of the respondents relative to the acceptability level.

The weighted mean was used to determine the average acceptability of the respondents about the given variables.

Using Pearson Correlation to calculate the significant relationship of the respondents' demographic profile and their attitudes toward rabbit meat and different factors, the p-value will be interpreted as follows: if the p-value is 0.05, it means that two or more factors have a significant relationship, or reject the null hypothesis. However, if the p-value is greater than 0.05, there is no significant relationship or accept the null hypothesis.

The procedure in obtaining the level of significance was the t-test. The hypothesis to be tested will be accepted or rejected depending upon the obtained values. That is, if the computed t – test value is equal to or greater than the tabular critical value at 5% level of significance, the result is said to be significant. The null hypothesis shall be rejected.

If the computed value of t – test is lesser than the critical value, the result is not significant therefore the tested null hypothesis is accepted.

#### 4. Results

The researchers aimed to evaluate the acceptability level among the respondents on Rabbit meat as an alternative meat for processed meat products such as *Tocino*, *Sisig* and *Morcon* and its implication to Market Success of Products among selected Kapampangan respondents in City of San Fernando, Pampanga. The findings of the research are as follows:

##### Part 1. The Profile of the Respondents

#### Table 1. PROFILE OF THE RESPONDENTS

Table 1.1 Frequency Distribution of Respondents According to Sex

Gender	Frequency	Percentage
Female	39	60
Male	26	40
<b>Total</b>	<b>65</b>	<b>100%</b>

Table 1.1 shows the frequency distribution of the respondents according to Gender Majority of the respondents were female which is thirty-nine or 60% of the total population and the male counterpart were only twenty-six taking up 40 % of the population.

Table 1.2 Frequency Distribution of Respondents According to Age

Age Bracket	Frequency	Percentage
18 - 25 years old	14	21.5
26 – 30 years old	25	38.5
31 - 35 years old	13	20
36 - 40 years old	13	20
<b>Total</b>	<b>65</b>	<b>100%</b>

Table 1.2 Indicates the frequency distribution of respondents according to Age

The majority of the respondents fall in the age bracket between 26-30 years old which covers twenty-five or 38.5% and the least goes to the older bracket, 31 above years old with thirteen or 20% of the total population.

**Table 1.3 Frequency Distribution of Respondents According to Educational Level.**

<b>Educational Level</b>	<b>Frequency</b>	<b>Percentage</b>
High School	18	27.7
College Undergraduate	14	21.5
College Graduate	31	47.7
Others	2	3
<b>Total</b>	<b>65</b>	<b>100%</b>

Table 1.3 shows in terms of the educational background, the respondents from the locality of City of San Fernando, Pampanga were given the chance to answer this portion. It showed that the majority of the respondents with thirty-one or 47.7% were college graduates, while 2 or 3% were neither of the given category.

**Part 2. Acceptability level of the respondents on rabbit meat processed products categorized as *Tocino*, *Sisig* and *Morcon* based on the degree of liking**

**Table 2. Mean Distributions of Respondents on Degree of Liking Categorized as *Tocino*, *Sisig*, and *Morcon*.**

**2.1 Sensory Characteristic**

<b>Indicator</b>	<b>Mean</b>		<b>Descriptive Rating</b>
Appearance	<i>Tocino</i>	3.44	Acceptable
	<i>Sisig</i>	3.64	Highly Acceptable
	<i>Morcon</i>	2.88	Acceptable
Aroma	<i>Tocino</i>	2.18	Slightly Acceptable
	<i>Sisig</i>	2.62	Acceptable
	<i>Morcon</i>	2.17	Slightly Acceptable
	<b>Tocino</b>	3.63	Highly Acceptable
	<b>Sisig</b>	3.68	Highly Acceptable
	<b>Morcon</b>	3.49	Acceptable
	<b>Tocino</b>	3.43	Acceptable
	<b>Sisig</b>	3.66	Highly Acceptable
	<b>Morcon</b>	3.69	Highly Acceptable
	<b>Tocino</b>	3.17	Acceptable
	<b>Sisig</b>	3.40	Acceptable
	<b>Morcon</b>	3.06	Acceptable

Table 2.1 indicates that in terms of appearance, *Tocino* and *Morcon* share the same acceptable rating while *Sisig* received a highly acceptable rating. For aroma, *Sisig* dominates more with 2.62 mean compared to *Tocino* and *Morcon* scoring 2.18 and 2.17, respectively. In terms of taste, *Tocino* and *Sisig* are more highly favorable. For texture, *Sisig* and *Morcon* are more highly accepted by the general consumer than *Tocino*. Overall, *Tocino*, *Sisig*, and *Morcon* share the same overall "Acceptable" ratings in terms of sensory characteristics.

**2.2 Price**

<b>Indicator</b>	<b>Mean</b>		<b>Descriptive Rating</b>
I will buy the product if the price goes down	<i>Tocino</i>	3.58	Highly Acceptable
	<i>Sisig</i>	3.58	Highly Acceptable

	<i>Morcon</i>	3.58	Highly Acceptable
I can afford a kilo of the product at least once a month	<i>Tocino</i>	2.88	Acceptable
	<i>Sisig</i>	2.91	Acceptable
	<i>Morcon</i>	2.88	Acceptable
The price of the product doesn't matter as long as it's delicious	<i>Tocino</i>	2.23	Slightly Acceptable
	<i>Sisig</i>	1.68	Slightly Acceptable
	<i>Morcon</i>	2.23	Slightly Acceptable
The price of product greatly affects my decision on buying it.	<i>Tocino</i>	3.20	Acceptable
	<i>Sisig</i>	3.49	Acceptable
	<i>Morcon</i>	3.25	Acceptable
<b>Price Overall Mean</b>	<i>Tocino</i>	2.97	Acceptable
	<i>Sisig</i>	2.915	Acceptable
	<i>Morcon</i>	2.99	Acceptable

Based on Table 2.2, respondents acquired the three processed rabbit meat cuisine as highly recommended if the price of the product goes down regardless if the rabbit meat cuisine is delicious showing that consumer responded slightly accepted. While the three processed rabbit meat cuisine received the same "Acceptable" ratings, indicating that the rabbit meat is accepted as an alternative to regular staple meat products with its price.

### 2.3 Nutritional Value

Indicator	Mean	Percentage
I think the product has a lot of protein.	<i>Tocino</i>	3.58 Highly Acceptable
	<i>Sisig</i>	3.58 Highly Acceptable
	<i>Morcon</i>	3.58 Highly Acceptable
I think the product is not fatty.	<i>Tocino</i>	3.23 Acceptable
	<i>Sisig</i>	3.23 Acceptable
	<i>Morcon</i>	3.23 Acceptable
I think the product can be consumed on a daily basis.	<i>Tocino</i>	2.95 Acceptable
	<i>Sisig</i>	2.43 Slightly Acceptable
	<i>Morcon</i>	2.83 Acceptable
No knowledge on the nutritional contents of the product.	<i>Tocino</i>	2.41 Slightly Acceptable
	<i>Sisig</i>	2.92 Acceptable
	<i>Morcon</i>	2.41 Slightly Acceptable
<b>Nutritional Value Overall Mean</b>	<i>Tocino</i>	3.32 Acceptable
	<i>Sisig</i>	3.04 Acceptable
	<i>Morcon</i>	3.29 Acceptable

Table 2.3 displays the mean distribution of respondents on the nutritional value of rabbit meat. Based on the results, the three processed rabbit meat dishes, *Tocino*, *Sisig* and *Morcon* received the same rating which is "Acceptable" with a mean average of 3.32, 3.04 and 3.29 respectively. It can be examined that in the indicator on protein content got the highest mean of 3.58 which has a corresponding descriptive rating. It can be understood from the table that indicator implying that the products can be consumed on a daily basis, *Tocino* and *Morcon* obtained a mean of 2.95 and 2.83 respectively with "Acceptable" as their descriptive rating while *Sisig* significantly got the lowest rating with 2.43 mean.

### 2.4 Culture

Indicator	Mean	Percentage
My cultural belief doesn't forbid me from eating the rabbit meat.	<i>Tocino</i>	2.17 Slightly Acceptable
	<i>Sisig</i>	2.49 Slightly Acceptable
	<i>Morcon</i>	2.17 Slightly Acceptable

I prefer the rabbit meat than chicken or pork products.	<i>Tocino</i>	2.22	Slightly Acceptable
	<i>Sisig</i>	2.22	Slightly Acceptable
	<i>Morcon</i>	2.22	Slightly Acceptable
The product is readily available in our open market. Same as beef, pork, poultry, and fish	<i>Tocino</i>	1.48	Not Acceptable
	<i>Sisig</i>	1.32	Not Acceptable
	<i>Morcon</i>	1.34	Not Acceptable
I want the product to be part of my diet meal.	<i>Tocino</i>	1.8	Slightly Acceptable
	<i>Sisig</i>	1.8	Slightly Acceptable
	<i>Morcon</i>	1.8	Slightly Acceptable
<b>Culture Overall Mean</b>	<i>Tocino</i>	1.92	Slightly Acceptable
	<i>Sisig</i>	1.96	Slightly Acceptable
	<i>Morcon</i>	1.88	Slightly Acceptable

Table 2.4 shows the mean distribution of respondents on Culture. It can be analyzed more indicators among the three processed rabbit meat cuisines got slightly acceptable as majority of descriptive rating, suggesting that the general consumer's local culture in relation to the consumption of rabbit meat has yet to be fully accepted since its availability in the market and the personal preference of the consumers are yet to be fully immersed than the staple meat products.

**Part 3. Significant Relationship on the Acceptability Level of Three categories processed meat products of Rabbit Meat as an Alternative Meat.**

**Table 3 Test of Relationship**

**Table 3.1 *Tocino* Test of Correlation**

<b>Factors</b>	<b>P-Value</b>	<b>Interpretation</b>
Age and Acceptability of the Consumers	0.502**	Significant
Gender and Acceptability of the Consumers	0.336**	Significant
Educational Level and Acceptability of the Consumers	0.028*	Not significant

$p > 0.05$ \*\* Significant/reject null hypothesis

$p \leq 0.05$ \* Not significant/accept null hypothesis

Based on the interpreted data, Table 3.1 indicates that both Age, and Gender towards the Acceptability of the consumers have a significant relationship since p-value is greater than 0.05. However, Educational Level and Acceptability of the consumers suggest that there is no significant relationship since the p-value is less than 0.05.

**Table 3.2 *Sisig* Test of Correlation**

<b>Factors</b>	<b>P-Value</b>	<b>Interpretation</b>
Age and Acceptability of the Consumers	0.099**	Significant
Gender and Acceptability of the Consumers	0.552**	Significant
Educational Level and Acceptability of the Consumers	0.167**	Significant

$p > 0.05^{**}$  Significant/reject null hypothesis  
 $p \leq 0.05^*$  Not significant/accept null hypothesis

Table 3.2 indicates that Age, Gender, Educational Level towards Acceptability of the consumers have a significant relationship since p-value is greater than 0.05. This suggests that in regards to the factors indicated, Rabbit meat is preferred to be used in *Sisig* by the general consumers and as an alternative meat or an alternative source of nutrients.

**Table 3.3 Morcon Test of Correlation**

Factors	P-Value	Interpretation
Age and Acceptability of the Consumers	0.742**	Significant
Gender and Acceptability of the Consumers	0.939**	Significant
Educational Level and Acceptability of the Consumers	0.262**	Significant

$p > 0.05^{**}$  Significant/reject null hypothesis

$p \leq 0.05^*$  Not significant/accept null hypothesis

Table 3.3 shows that Age, Gender, and Educational Level towards Acceptability of the consumers have a significant relationship since p-value is greater than 0.05. This implies that based on the factors mentioned – Sensory, Price, Nutritional Value, and Culture, Rabbit meat is accepted for Morcon by the general consumers which can be considered as an alternative meat for the aforementioned local cuisine or as an alternative source of nutrients.

**5. Discussion**

Based on the findings of the study, the following were drawn.

1. The profile of respondent are Kapampangan residents from the City of San Fernando Pampanga where majority of the respondents are female, aged 26-30 years old, and college graduate.
2. Acceptability level of the respondents on Rabbit meat processed products categorized as Tocino, Sisig and Morcon.
  - a. Based on the degree of Sensory Characteristics each indicator is as follows: in terms of appearance, Tocino and Morcon shared the same acceptable rating while Sisig received a highly acceptable liking. For aroma, Sisig dominates higher mean compared to Tocino and Morcon. In terms of taste, Tocino and Sisig are more highly favorable. For texture, Sisig and Morcon are more highly accepted by the general consumer than Tocino. Overall, Tocino, Sisig, and Morcon share the same overall "Acceptable" ratings in terms of sensory characteristics.
  - b. Based on Price as a factor on each indicator: the three processed rabbit meat cuisine received the same "Acceptable" ratings, indicating that the rabbit meat is accepted as an alternative to regular staple meat products with its price.
  - c. In terms of Nutritional Value, the three processed rabbit meat cuisine received the same "Acceptable" ratings, signifying that rabbit meat can be consumed to provide a good source nutrients.
  - d. In terms of Culture, the three processed rabbit meat cuisines received the same slightly acceptable ratings, suggesting that the general consumer's local culture in relation to the consumption of rabbit meat has yet to be fully accepted since its availability in the market and the personal preference of the consumers are yet to be fully immersed than the staple meat products.
3. In terms of the significant relationship on the acceptability level of the three categories of processed meat products when rabbit meat was used as an alternative meat according to profile, the following test of correlation results were obtained:
  - a. Tocino: There was a significant relationship for both Age, and Gender towards acceptability of the consumers since p-value is greater than 0.05. However, Educational Level and Acceptability of the consumers suggest that there is no significant relationship since the p-value is less than 0.05.
  - b. Sisig: There was a significant relationship on Age, Gender, Educational Level towards Acceptability of the consumers since p-value is greater than 0.05. This suggests that in regards of the factors indicated, Rabbit meat is preferred for Sisig by the general consumers and as an alternative meat or an alternative source nutrients.

- c. Morcon: There were significant findings in this variable. The profile of the respondents such as Age, Gender, Educational Level towards the acceptability of the consumers since p-value is greater than 0.05. This implies that based on the factors mentioned – Sensory, Price, Nutritional Value, and Culture, Rabbit meat is accepted for Morcon by the general consumers which can be considered as an alternative meat for aforementioned local cuisine or as an alternative source of nutrients.

## **5.1 Conclusion**

This research is particularly significant in understanding the potential market success of rabbit meat products in the City of San Fernando, Pampanga where cultural preferences also play a crucial role in dietary choices.

The study revealed that rabbit meat has a generally positive acceptability among selected Kapampangan respondents in San Fernando, Pampanga, especially in terms of sensory characteristics and nutritional value. However, price sensitivity and cultural acceptance remain.

challenges that need to be addressed for market success. Efforts to lower the price, increase market availability, and educate consumers about the nutritional benefits of rabbit meat could enhance its acceptance and marketability.

To enhance market success, strategies should focus on competitive pricing, improving product availability, and educating consumers about the nutritional benefits and culinary versatility of rabbit meat. By addressing these factors, rabbit meat could become a viable and accepted alternative to traditional meats in the local market.

## **5.2 Recommendations**

Based on the results of the study, here are several recommendations to enhance the acceptability and market success of rabbit meat as an alternative to traditional meats in processed products such as Tocino, Sisig, and Morcon among Kapampangan respondents in the City of San Fernando, Pampanga:

### **1. Improve Market Availability**

- Work with local markets, grocery stores, and online platforms to make rabbit meat products more accessible. Visibility in multiple retail points can help normalize rabbit meat as a regular food item.
- Launch targeted marketing campaigns to raise awareness about the availability of rabbit meat products. Highlight the benefits and locations where these products can be purchased.

#### **2. Competitive Pricing Strategies**

- Collaborate with suppliers and breeders to reduce production costs, which can translate into lower prices for consumers. Economies of scale, improved farming techniques, and efficient processing can help achieve this.

#### **3. Nutritional Education**

- Educate consumers on the nutritional advantages of rabbit meat, such as high protein content and lower fat levels compared to traditional meats.
- Ensure that all rabbit meat products have clear and detailed nutritional labels that highlight the health benefits. Transparent labeling can build trust and inform purchasing decisions.

#### **4. Cultural Acceptance and Consumer Preferences**

- Develop recipes and cooking demonstrations that integrate rabbit meat into traditional Kapampangan cuisine. Showing how rabbit meat can be seamlessly incorporated into familiar dishes can help reduce cultural barriers.

#### **5. Enhancing Sensory Appeal**

- Invest in product development to improve the sensory characteristics of rabbit meat products, particularly aroma. Conduct taste tests and gather feedback to ensure products meet consumer expectations.



## 8. Sustainability

- Emphasize the sustainability of rabbit farming compared to traditional livestock. Position rabbit meat as an eco-friendly choice, appealing to environmentally conscious consumers.
- Promote farm-to-table concepts where consumers can trace the origin of their meat. This transparency can enhance trust and highlight sustainable farming practices.

## Acknowledgement

This research owes its success to the invaluable guidance and assistance of numerous individuals who generously contributed to its preparation, endured lengthy inquiries, and the completion of this study.

We would also like to take this opportunity to thank our participants who decided to take part, assisted with the study, and contributed to the accomplishment of our objectives as a whole by giving us their time and taking part in the study.

The researchers would also want to acknowledge our esteemed panelists and our statistician for sharing their insights and providing suggestions that will make the study better.

In addition, we would like to extend our sincerest gratitude to all of our faculty members for the constant encouragement and support they have provided, as well as to all of our friends outside or inside of the school for the time, guidance, and moral support they have given.

Also, we gave thanks to our family for their unwavering continuous encouragement during this endeavor. Without the presence of such hope, this paper could not have been written.

Most significantly, the researchers want to express their gratitude to the Almighty God for providing us with the power, wisdom, and comprehension necessary to successfully complete this study.

## References

- [1] Astudillo, Rene (2021) "Rabbit Meat, Anyone?" <https://www.positivelyfilipino.com/magazine/rabbit-meat-anyone>
- [2] Catula efal. (2021). *Cosumers Acceptability of Espanada Stuffed with rabbit meat (Lapanada) Using Baking and frying method of cooking.* Institute of Bulacan Agricultural state college Bulacan phil.
- [3] Esmail.Rheeza ef. Al (2022) *Rabbit in, Rabbit out: The consumers Acceptability of rabbit as an alternative meat.*
- [4] Guerrero ef.al (2014), *Consumer preference. Meat Products: An overview; Meat science* Meullenet 2004. *Consumers texture: Understanding Their Perception and preference; Texture in fond: solid fond*
- [5] Gurbuz, Esen (2018) "Theory of New Product Development and Its Applications" <https://www.intechopen.com/chapters/59751>
- [6] JM Murray ef.al. (2023) *Sensory Evaluation /Food Acceptability and Sensory Evaluate*
- [7] Li et. a; (2018), *Rabbit meat production and processing in china, (article).* Nicat Science.
- [8] Llemit, Kathleen A. (2021) "No pork? No problem: 5 reasons to get into rabbit diet" <https://www.philstar.com/lifestyle/food-and-leisure/2021/02/16/2076903/no-pork-no-problem-5-reasons-get-rabbit-diet>
- [9] Olu watusin, Michael (2012), *Social Acceptability of Rabbit meat and Strategies for improving its consumption in Ekifi state Soutwestern, Nigiria.* academia.au
- [10] Pacho, Rendell Ron (2023) "Understanding the health benefits of rabbit meat" <https://manilastandard.net/?p=314349830>
- [11] Popoola (2020). *A review of sesory and consumers- Related Factors Influencing the Acceptance of Red Meats from Alternative Animal Species, published online: December 31 2020: Journal*
- [12] Wendt, Taylor (2022) "What Are the Health Benefits of Rabbit Meat?" <https://www.webmd.com/diet/health-benefits-rabbit-meat>