

Development and Acceptability Level of Kare-Kare Sushi

Charles Allen R. Martin¹ martincharles023@gmail.com¹, Tomas Claudio Colleges, Taghangin, Morong, Rizal, Philippines

Melanie Jane G. Pascual elaniejanepascual10@gmail.com², Tomas Claudio Colleges, Taghangin, Morong, Rizal, Philippines

Elmer James P. Sagun³, elmerjamessagun46@gmail.com³, Taghangin, Morong, Rizal, Philippines

Dr. John Kelvin SL. Pantaleon, johnkelvinpantaleon@ymail.com, Taghangin, Morong, Rizal, Philippines

Rachel Ann S. Dumlao, itzel0423@gmail.com, Taghangin, Morong, Rizal, Philippines

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ABSTRACT

Kare-kare Sushi is a fascinating combination of the best Filipino and Japanese cuisines. Kare-Kare Sushi, a unique fusion of ingredients from Filipino and Japanese cuisines, with a pleasant, non-fishy scent of alamang, and delicious peanut sauce as a dipping sauce that adds a unique taste to the traditional sushi roll. This study aimed to determine the process of developing Kare-Kare Sushi, measure the acceptability level, and explore expert-evaluators' comments and suggestions for improving the research-based product. This study used descriptive research to define what it wanted for the outcome. Also, the researchers utilized developmental research design, which allows them to solicit answers and incorporate criticisms and ideas from the respondents to improve and enhance Kare-Kare Sushi. A total of ten (10) expert-evaluators were purposely selected as research respondents from various food establishments around the Province of Rizal. Responses from the respondents were statistically treated using weighted mean, rank distribution, and narrative documentation. Based on the findings, the study emphasized the complex creation process of Kare-kare Sushi, which entailed much trial-and-error to arrive at a standardized formula that combines the tastes of traditional Kare-kare fused with sushi-cooking technique. The dish's overall acceptability was scored Much Acceptable. Expert comment was mostly focused on improving the flavor, showing a solid foundation with space for development. Future recommendations include experimenting with ingredient ratios and preparation methods to achieve a better balance between the distinct flavors and textures, conducting a thorough nutritional analysis to assess health implications, and encouraging culinary innovation that honors both Filipino and Japanese traditions in the evolving landscape of fusion cuisine.

Introduction

Kare-kare is a savory Philippine stew derived from curry and featuring a thick and savory peanut sauce. It is a popular Filipino dish traditionally served during special occasions or Filipino fiesta celebrations were only marked as complete with Kare-kare recipe offerings on the food selection. The main ingredients included were oxtail, peanut sauce, vegetables, and bagoong.

Sushi, on the other hand, is a Japanese dish made of vinegared rice mixed with sugar and salt, as well as various ingredients such as vegetables and meat, most commonly seafood. Sushi is made from medium-grained white rice. Many varieties of sushi are vegetarian. It is commonly served with wasabi and soy sauce.

Kare-kare is more than just a meal; it has cultural significance in Filipino society. It is frequently associated with holidays and special occasions, making it a popular comfort food. Kare-kare is frequently served at holiday celebrations and family gatherings. It is typically served with steamed rice and shrimp paste on the side, allowing diners to mix in the bagoong to their liking. Sushi is a traditional Japanese dish that has gained international popularity. It is well-known for its distinct flavor and texture combinations, which frequently include vinegared rice and a variety of ingredients. Sushi is more than just a meal; it's a cultural experience. Traditional sushi-making focuses on craftsmanship and precision, and sushi chefs frequently train for years. Sushi dining can also include rituals such as using chopsticks and dipping sushi in soy sauce. While traditional sushi has deep roots in Japanese culture, many countries have created their own versions that incorporate local ingredients and flavors.

The researchers created Kare-kare Sushi as a food fusion that many consumers seek; most consumers are always looking for new or creative foods to try. With that, the researchers came up with a combination of Filipino and Japanese cuisine: Kare-kare and Sushi. According to the Republic Act. No. 11293 also known as the Philippine Innovation Act, section 2A declares that:...the State shall place innovation at the center of its development policies, guided by a clear and long-term set of goals that will take into consideration the key advantages of the country and the opportunities in the regional and global economic arena. As such, it shall harness innovation efforts to help the poor and the marginalized and to enable micro, small, and medium enterprises (MSMEs) to be a part of the domestic and global supply chain.

To promote economic growth, RA 11293 will make it easier for MSMEs to participate in domestic and international supply chains. This will lead to better strategic planning for the development and use of new goods. The relationship among these was rooted in innovation, adaptability, and the effective utilization of local resources to create benefits. Thus, Kare-kare Sushi was able to solve the issue of vegetable waste for farmers and market vendors.

Vegetable waste will be decreased and a more sustainable and just food system will be promoted by putting strategies into place that improve sustainable production, streamline supply chain management, and increase consumer awareness. Kare-kare Sushi will promote sustainable manufacturing and reduce vegetable waste while motivating customers to recognize the need of preventing vegetable waste.

To address this issue and promote the consumption of the product, researchers developed Kare-kare Sushi will provide a way to sustain the issue of the farmers and market vendors to prevent vegetable waste.

This Kare-kare Sushi research study was conducted in the Province of Rizal during the School Year 2024 – 2025.

Rizal as one of the Philippines' first-class provinces that belongs to Region IV-A CALABARZON in the island of Luzon. The province enjoys the natural beauty of nature and was a perfect setting for investments, business establishments, and settlements. At present, under the territorial jurisdiction of the Province of Rizal has 13 Municipalities and one City, namely: Angono, Baras, Binangonan, Cainta, Cardona, Jalajala, Morong, Pililla, Rodriguez, San Mateo, Teresa, Tanay and Taytay, and Antipolo. Baras, officially the Municipality of Baras, is a 4th class municipality in the province of Rizal, Philippines, located 49 kilometers from Manila, 12 kilometers from Ynares Center, Antipolo City, 14 kilometers from SM Taytay, 40 kilometers from NAIA, Pasay City, 47 kilometers from Alabang, Muntinlupa City, 25 kilometers from Pasig City and 20 kilometers from Sta. Maria, Laguna. Binangonan, officially the Municipality of Binangonan, is a 1st class urban municipality in the province of Rizal, Philippines.

According to the 2020 census, it has a population of 313,631 people. Cardona, officially the Municipality of Cardona, is a 3rd class municipality in the province of Rizal, Philippines. According to the 2020 census, it has a population of 50,143 people.

Morong is a second-class municipality in the province of Rizal, Philippines. The town is also known for featuring the balaw-balaw side dish, as well as for having education as its priority-“Una Ang Edukasyon” (Education first), that is why during the early-1970s and early-1990s, it became the center of education. Pililla is a first-class municipality in the Province of Rizal and is also known as its Green Field town. Originally established as an agricultural lakeshore locality, Pililla later became known as the host of the Malaya Thermal Power Plant and Pilipinas Shell's Bitumin Plant.

Tanay's economy has been boosted by its natural resources and nature's allure. Post-pandemic period, many restaurants popped up along Marilaque Highway with majestic views of Sierra Madre mountains and Laguna de Bay.

Furthermore, the researchers decided to conduct the study in the Province of Rizal, namely in Baras, Binangonan, Cardona, Morong, Pililla, and Tanay to evaluate the Kare-kare Sushi. Rizal Province was presently recognized for the growth of numerous dining places.

Statement of the Problem

This study aimed to measure the acceptability level of Kare-kare Sushi in the Province of Rizal.

Specifically, it sought answers to the following research questions:

1. How was the Kare-kare Sushi developed?
2. What is the level of acceptability level of Kara-kare Sushi in terms of:
 - 2.1 appearance;
 - 2.2 aroma;
 - 2.3 taste; and
 - 2.4 texture?

3. What improvements were done based on the comments and suggestions of the experts on Kare-kare Sushi?

2. Review of Literature

As shared by Black (2023), food serves as both a source of sustenance and a reflection of a society's socioeconomic and historical environment. Each culture has its culinary traditions that reflect its beliefs, values, and customs. Food is often used as a symbol of identity and tradition, with a significant role in socializing and celebration. In many cultures, cooking and sharing food is fundamental to family and community life, and mealtimes allow people to bond and socialize. Geography, climate, religion, and history frequently influence the materials, flavors, and cooking methods utilized in various recipes.

Based on Jiang, S. et. al. (2022), the impact of cooking procedures on bioactive components is critical for increasing the health benefits of cooked seaweeds for consumers. As a result, choosing appropriate cooking methods is critical to reducing the loss of bioactive nutrients and quality during cooking. According to the findings of this study, blanching and boiling seem to be healthier.

In addition, Wallace (2015) argues that taste or aroma does not only affect the perceived flavor as an independent modality; the combination of taste and aroma can also change the intensity and quality of the perceived flavor as a result of cross-modal association.

The Kare-kare Sushi study proves the cultural significance, health benefits, and sensory experiences associated with food. The article illustrates the integration of Filipino and Japanese culinary traditions while accommodating contemporary health considerations. The cooking techniques of blanching and boiling effectively preserve the nutritional value of ingredients and respect cultural practices. The interaction of taste and aroma significantly improves the dining experience, fostering greater appreciation for the dish. The study of Kare-kare Sushi highlights the complex characteristics of culinary practices, emphasizing the significance of cultural identity expression and health promotion.

As coined by Nacua et. al. (2019), highlighted when Filipinos prepared food in the kitchen, it was a common practice that loads of vegetable waste go in the trash bin. In the market, vendors get rid of the discarded vegetable wastes such as plant leaves, roots and stems. Specifically, on the case of Pechay, they cut the petiole with leaves and discarded the stem but does not realize it can be re-planted.

Furthermore, Mopera (2016) shared that, In the Philippines, agriculture contributes about 8.6% of the country's Gross Domestic Product (GDP). Agricultural products are high volume, low value and highly perishable. These products are generally wasted during the process of food distribution in the supply chain. Major contributors to huge losses are the inherent nature of these produce, the tropical setting of the country, lack of post-harvest infrastructure and facilities, the way of handling and the multi-layered distribution system. In the Philippines, substantial post-harvest losses of up to 50% was recorded from the initial harvesting, grading, packaging and transportation from field to storage and distribution to the consumers.

Moreover, Fransico (2023) cited that the Philippine food manufacturing and processing industry is well-positioned for growth and success in the future. Companies that invest in innovation, technology, and sustainable practices will be well-positioned to compete in the global market and seize the opportunities presented by the growing demand for food products. With continued government support and the development of a robust and efficient

infrastructure, the Philippine food manufacturing and processing industry has the potential to become a major player in the global food market. Companies that are able to adapt to the changing market and invest in innovation, technology, and sustainable practices will be well-positioned for success.

The articles discuss food production, distribution, and waste management in the Philippines. It highlights waste in Filipino kitchens, challenges in agriculture's GDP, and growth potential in the food manufacturing and processing industry. To suggest ways to improve efficiency and sustainability, requiring government support and efficient infrastructure.

As illustrated by Villar (2019), it was all about the kare-kare dish that originated in Pampanga. In Southeast Asia, there is also called 'kari' which is also known as Kare-kare in the Philippines and based in this study the dish is originated in the birthplace of their adversaries, but that didn't stop them from considering everything that didn't meet their high standards inferior due to their arrogant disposition.

Additionally, Barrion et al., (2023) shared that, the food industry also plays a vital role in reducing waste, and some identified recommendations are creating a weekly menu to avoid buying too much, storing food properly and strict practice of first-in-first-out to minimize spoilage, promoting food preservation processing to utilize and extend shelf life of in-season fruits and vegetable and reducing the serving sizes.

In support of this, Visperas (2019) stated that Consumers' demands keep changing over time. These changes range from basic considerations such as improving food safety, shelf life, and reducing wastage, to demands for increasingly sophisticated foods having special characteristics in terms of nutritional value, palatability, and convenience.

The report mentioned above argues that the food industry should focus on innovation and sustainability. To address sustainability concerns and meet consumer demand for healthy and convenient food options, researchers are looking into the origins of Kare-kare, implementing waste reduction strategies, and improving food safety. After that, researchers are introducing new product, such as Kare-kare Sushi, to the market to make continuous improvements.

3. Research Methodology

The study utilized descriptive and developmental methods of research. The descriptive method of research as stated by McCombes (2019), answers the needs of the study since the study attempted to characterize the profile of the respondents and examine their safety and sanitation practices. Descriptive research aims to describe a population, situation, or phenomenon accurately and systematically. It can answer what, where, when, and how questions, but not why questions. A descriptive research design can use various research methods to investigate one or more variables. Developmental research design cited by Crompton et. al. (2021), a design-based research approach that involves multiple cycles of design, implementation, analysis, and revision to develop instructional technology standards for educators.

The study's primary purpose was to discuss the development process, measure the acceptability level, and discuss the inputs from the expert-respondents for the improvement of Kare-kare Sushi, thus, descriptive and developmental research methodologies were

utilized. A descriptive research design may be employed to examine one or more variables. Conversely, developmental research pursues a specific objective.

4. Analysis and Interpretation

The development of Kare-Kare Sushi represents an innovative fusion of Filipino and Japanese cuisines, combining the rich, savory peanut sauce of Kare-Kare with the artistry of sushi preparation. The researchers incorporated all Kare-Kare ingredients into the sushi roll, with the peanut sauce and shrimp paste provided as dipping condiments, preserving the essence of the traditional Filipino dish while aligning it with sushi's presentation.

Initial trials faced challenges, such as thick rice layers and the absence of a seaweed wrap, compromising structural integrity. Through iterative refinement and expert advice, adjustments were made, including increasing vegetable content, seasoning rice with salt and vinegar, and spreading it thinly. The use of raw peanuts for the sauce further enhanced authenticity.

Following traditional sushi techniques, Kare-Kare Sushi was meticulously prepared by layering seaweed, thinly spread rice, and Kare-Kare ingredients, then rolling it tightly. Blanching vegetables ensured optimal taste and presentation. Expert evaluators praised the uniqueness of the dish, acknowledging its successful blend of Filipino and Japanese flavors.

The positive reception and iterative development process highlight the dish's potential to cater to diverse palates and establish a unique culinary identity in Rizal.

Table 1: Level of Acceptability of Kare-kare Sushi as Evaluated by the Experts with Respect to Aroma

Aroma

The Kare-Kare Sushi, ...	Weighted Mean	Verbal Interpretation	Rank
gives a delicate smell that is subtle and flavors combine.	4.50	Very Much Acceptable	3.5
provides the senses with a delicious and fragrant experience.	4.30	Much Acceptable	5
has a distinct peanut aroma on its sauce.	4.90	Very Much Acceptable	1
has a fishy scent of shrimp paste.	4.60	Very Much Acceptable	2
possesses a fragrant quality that gives the Kare-kare Sushi a pleasing unique scent.	4.50	Very Much Acceptable	3.5
Overall Mean	4.38	Much Acceptable	

Table 1 presents the level of acceptability of Kare-Kare Sushi with respect to aroma, as evaluated by experts. Statement 2, describing the dish as offering a "delicious and fragrant experience," scored 4.30 and was classified as Much Acceptable. While the aroma was well-received, it was slightly less captivating compared to features like the distinct peanut scent.

The findings suggest that the aroma is appealing and contributes to the dish's overall acceptability, with potential for broad consumer appeal. Enhancing the fragrance's distinctiveness and addressing subtle concerns, such as a fishy smell, could further improve its marketability. Marketing strategies should emphasize the unique peanut aroma and fusion appeal to attract both adventurous eaters and fans of Filipino and Japanese cuisines.

Table 2: Level of Acceptability of Kare-kare Sushi as Evaluated by the Experts with Respect to Appearance

Appearance

The Kare-Kare Sushi, ...	Weighted Mean	Verbal Interpretation	Rank
is rolled into thin tubes and sliced into bite-sized pieces.	4.50	Very Much Acceptable	4
is attractive with the Kare-Kare adding a delicate touch.	4.20	Much Acceptable	5
is highlighted by the crispy and glossy seaweed wrap and fluffy cooked rice.	4.60	Very Much Acceptable	2.5
features a tightly wrapped rice with kare-kare filling using seaweed wrap.	4.70	Very Much Acceptable	1
is appealing and appetizing to the customer.	4.60	Very Much Acceptable	2.5
Overall Mean	4.52	Very Much Acceptable	

Table 2 shows the level of acceptability of Kare-Kare Sushi with respect to appearance, with Statement 2 scoring 4.20 and categorized as Much Acceptable. While the dish was generally found visually appealing, it lacked the detailed descriptions and visual impact of higher-rated statements, such as highlighting the tightly wrapped rice and crispy seaweed.

The findings suggest that Kare-Kare Sushi's appearance is pleasing and has the potential to attract a broader audience. Enhancing the dish's visual presentation, such as emphasizing its vibrant colors, textures, and bite-sized portions, could further elevate its appeal and marketability.

Table 3: Level of Acceptability of Kare-kare Sushi as Evaluated by the Experts with Respect to Taste

Taste

The Kare-Kare Sushi, ...	Weighted Mean	Verbal Interpretation	Rank
pleasures with sauces that perfectly match the whole flavor.	4.50	Very Much Acceptable	3
is delicious, mixing umami and aromatic qualities in an excellent way.	4.20	Much Acceptable	5
has a unique flavor that its kare-kare sauce and shrimp paste complement well.	4.50	Very Much Acceptable	3

is well-balanced (sweet, salty and peanut) and complements each other. 4.50 Very Much Acceptable 3

is pleasantly mild, and the sauces help to improve the flavors with each bite. 4.60
Very Much Acceptable 1

Overall Mean 4.46 Much Acceptable

Table 3 presents the level of acceptability of Kare-Kare Sushi with respect to taste. Statement 2, describing the dish as "delicious, mixing umami and aromatic qualities in an excellent way," scored 4.20 and is categorized as Much Acceptable. While positive, the statement lacked the detailed articulation of higher-rated evaluations, such as highlighting specific flavor combinations or the balance of sweet, salty, and peanut notes.

The results suggest that Kare-Kare Sushi's taste is appealing and likely to satisfy a wider audience. The unique flavor combination and well-balanced profile identified by experts indicate strong market potential and should be emphasized in promotional efforts targeting consumers who appreciate innovative and flavorful cuisine.

Table 4: Level of Acceptability of Kare-kare Sushi as Evaluated by the Experts with Respect to Texture

Texture

The Kare-Kare Sushi, ...	Weighted Mean	Verbal Interpretation	Rank
1. is firmly and wonderfully substantial.	4.60	Very Much Acceptable	1
2. is smooth on the outside and crunchy in the inside.	4.00	Much Acceptable	5
3. is sufficiently blended.	4.30	Much Acceptable	4
4. is delicately dry and crunchy.	4.40	Much Acceptable	3
5. is smooth and satisfying.	4.50	Very Much Acceptable	2

Overall Mean 4.40 Much Acceptable

Table 4 presents the level of acceptability of Kare-Kare Sushi with respect to texture. Statement 2, describing the texture as "smooth on the outside and crunchy on the inside," scored 4.00 and is categorized as Much Acceptable. While positive, the description lacks the specificity of higher-rated evaluations.

The results indicate that Kare-Kare Sushi's texture is generally appealing, offering a balance of firmness, smoothness, and crunchiness. This positive feedback highlights its market potential, particularly among consumers seeking unique culinary experiences. Texture significantly enhances food enjoyment, and the favorable expert evaluations suggest that Kare-Kare Sushi can attract a broad audience.

Table 5: Composite Table on the Level of Acceptability of Kare-kare Sushi as Evaluated by the Experts with Respect to Different Aspects

Aspect	Overall Mean	Verbal Interpretation	Rank
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Aroma	4.38	Much Acceptable	4
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Appearance	4.52	Very Much Acceptable	1
Taste	4.46	Much Acceptable	2
Texture	4.40	Much Acceptable	3
Composite Mean	4.44	Much Acceptable	

Table 5 presents the composite acceptability of Kare-Kare Sushi across different aspects. Aroma scored 4.38 (Much Acceptable), indicating a generally favorable but less distinctive impression compared to appearance, which ranked highest with 4.52 (Very Much Acceptable). Taste followed closely, showcasing well-balanced flavors.

The findings highlight appearance as the most accepted aspect, while aroma ranked lowest, suggesting room for improvement by enhancing its fragrance. Overall, Kare-Kare Sushi shows strong market potential, with appearance as a key strength. Prioritizing visual appeal and refining aroma can further boost consumer appeal and product quality.

Table 6: Improvements made based on the Comments and Suggestions of the Experts on Kare-kare Sushi

Aspects	Comments and Suggestions	Improvements Done
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Aroma	The shrimp paste does not smell fishy.	
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	To remove the fishy smell the researchers used aromatics like garlic, onions or citrus zest.	
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Appearance	Add more vegetables, as it gives a highlight inside.	
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	The dish was quite good, and unique in terms of combining the two cuisines	
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Make the peanut sauce filling to add color inside	The researchers add more vegetables to enhance the appearance of the Kare-kare Sushi.	
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	The researchers also tried the peanut sauce filling inside, but it would ruin the crispiness of the pork.	
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Taste	Make a unique peanut sauce, make it from scratch	
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	Add more salt and vinegar to the rice	
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Blanched the vegetables well to strengthen the taste of the vegetable	The researchers add more vinegar and salt to the rice to make it more tasty	
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	The vegetables are blanched to maintain the crispiness of the vegetables	
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Texture	It's better if the pork is crispy.	
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The vegetable is overcooked to maintain the crispiness	The researchers marinated the pork and deep-fried it to achieve the crispiness of the pork	
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	The vegetables are blanched to maintain their crispiness.	
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Table 6 outlines expert suggestions for enhancing Kare-kare Sushi. To improve aroma, adding garlic or citrus zest can enhance fragrance and eliminate any fishy smell. For appearance, incorporating more green vegetables and using a unique homemade peanut sauce could elevate visual and flavor appeal, while avoiding peanut sauce filling inside preserves the pork's crispiness.

To ensure a delightful texture, experts recommend proper marination and frying for crispy pork and blanching vegetables to maintain their crunch. Implementing these improvements can elevate Kare-kare Sushi as a unique fusion dish blending culinary traditions.

5. Findings

5.1 Development Process of Kare-Kare Sushi

The development of Kare-Kare Sushi successfully combines Filipino and Japanese culinary elements, blending the savory peanut sauce of Kare-Kare with sushi's artistic presentation. Despite initial challenges with thick rice layers and the lack of a seaweed wrap, the dish was refined through expert feedback and adjustments. These included increasing vegetable content, seasoning rice with salt and vinegar, and enhancing the peanut sauce with raw peanuts for added authenticity.

Following traditional sushi techniques, Kare-Kare Sushi was carefully prepared by layering seaweed, spreading rice thinly, and incorporating Kare-Kare ingredients. Blanching vegetables ensured optimal taste and texture. Expert evaluators praised the dish for its innovative fusion of flavors, indicating its potential to appeal to diverse tastes and establish a unique culinary identity in Rizal.

5.2 Level of Acceptability of Kare-Kare Sushi as Evaluated by the Experts with Respect to Appearance, Smell, Taste, and Texture

The evaluation of Kare-Kare Sushi across various aspects highlights its strong market potential with some areas for improvement. In terms of aroma, the dish scored 4.30 (Much Acceptable). The aroma was generally well-received but lacked the distinctiveness of other features, such as the peanut scent. Expert suggestions to enhance the fragrance, including adding garlic or citrus zest and addressing any fishy smell, could further elevate its appeal. Regarding appearance, Kare-Kare Sushi received a score of 4.20 (Much Acceptable), indicating a generally positive visual impression. However, it could benefit from more detailed descriptions of its vibrant colors, textures, and bite-sized portions. These enhancements would make the dish more visually striking and could attract a broader audience. For taste, the dish also scored 4.20 (Much Acceptable), with experts praising its well-balanced flavors. While the description of the taste could have been more detailed, the unique combination of umami, sweet, salty, and peanut notes suggests strong market potential, especially for consumers seeking innovative and flavorful culinary experiences. The texture of Kare-Kare Sushi, with a score of 4.00 (Much Acceptable), was positively reviewed for its balance of smoothness and crunch. However, the description lacked the specificity found in higher-rated evaluations, indicating that further refinement could enhance its appeal, particularly for consumers who prioritize texture in their food enjoyment.

The composite evaluation revealed that the appearance of Kare-Kare Sushi was the most accepted aspect, scoring 4.52 (Very Much Acceptable), while aroma ranked the lowest. This suggests that, while the dish has strong visual appeal and a well-balanced flavor profile, improving the fragrance could help align all aspects for a more consistent product. Experts also provided several suggestions for improvement. To improve aroma, they recommended incorporating garlic or citrus zest. For appearance, adding more green vegetables and using a unique homemade peanut sauce were advised to elevate the visual and flavor appeal. Additionally, avoiding peanut sauce filling inside would preserve the crispiness of the pork, and refining the marination and frying process could further enhance texture. Overall, while Kare-Kare Sushi demonstrates significant potential in both flavor and presentation, there are opportunities to improve the aroma and texture, which could enhance its marketability and consumer appeal.

5.3 Improvement made based on the Comments and Suggestions of the Expert-Evaluators on Kare-Kare Sushi

The expert suggestions for improving Kare-Kare Sushi highlight key areas for refinement to enhance its overall appeal. To improve the aroma, experts recommended adding garlic or citrus zest to enhance the fragrance and eliminate any undesirable fishy smell. For the appearance, incorporating more green vegetables and using a unique homemade peanut sauce were suggested to elevate both the visual and flavor appeal, while avoiding the inclusion of peanut sauce filling inside the sushi to maintain the pork's crispiness. For the texture, experts emphasized the importance of proper marination and frying to achieve crispy pork, along with blanching vegetables to preserve their crunch. Implementing these adjustments, Kare-Kare Sushi can be further elevated, offering a more enjoyable and balanced sensory experience. These refinements will help solidify the dish as a unique fusion of Filipino and Japanese culinary traditions, enhancing its marketability and consumer acceptance.

6. Implication

- Kare-Kare Sushi's development demonstrates the potential of blending Filipino and Japanese flavors, with successful refinements like improved rice texture and enhanced peanut sauce. The positive expert feedback indicates strong market potential, suggesting the dish can appeal to diverse consumers and establish a unique culinary identity.
- Kare-Kare Sushi shows strong market potential, with experts praising its appearance and taste. However, improvements in aroma and texture could enhance its overall appeal. Suggestions to refine the fragrance, such as adding garlic or citrus zest, and enhancing the visual appeal with green vegetables and homemade peanut sauce, could elevate the dish further. Addressing texture issues, particularly in the pork and vegetable preparation, will improve its marketability and consumer satisfaction.
- The expert suggestions provide clear guidance for enhancing Kare-Kare Sushi. Improving the aroma with garlic or citrus zest, enhancing appearance with green vegetables and homemade peanut sauce, and refining texture through proper marination and frying will elevate the dish's overall quality. These adjustments not only address specific areas of improvement but also help solidify Kare-Kare Sushi as a distinctive fusion dish, enhancing its marketability and appeal to a broader audience.

7. Conclusion

Kare-Kare Sushi successfully blends Filipino and Japanese culinary traditions, offering a unique fusion dish with strong market potential. Expert evaluations of the dish's aroma,

appearance, taste, and texture highlight its overall acceptability, though there are areas for improvement, particularly in aroma and texture. The suggestions provided, including enhancing the fragrance with garlic or citrus zest, improving the visual appeal with green vegetables and homemade peanut sauce, and refining the texture through proper marination and frying, offer clear pathways for elevating the dish. Implementing these improvements can further enhance its appeal, making Kare-Kare Sushi a standout culinary creation that attracts both adventurous eaters and fans of both Filipino and Japanese cuisines. With these refinements, Kare-Kare Sushi can establish a unique identity in the food market, offering a delightful sensory experience and strengthening its potential for success.

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Data Availability Statement: The data supporting the findings of this study are available upon request from the corresponding author. Due to confidentiality and ethical considerations, access to the data will be provided in compliance with institutional guidelines and relevant privacy regulations. Researchers and interested parties may contact the corresponding author directly to inquire about the data and any conditions under which it may be shared.

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Conflicts of Interest Statement: The authors hereby declare that there are no conflicts of interest associated with this study. All authors have disclosed any potential personal, financial, or professional interests that could have influenced the research process or outcomes. This statement affirms that the authors' objectivity, research integrity, and the conclusions drawn from the study were not influenced by any external or competing interests.

Ethics and Consent Statement: This study was conducted in full compliance with ethical standards, ensuring the protection of participants' rights and well-being. Prior to participation, informed consent was obtained from all participants, who were made aware of the study's purpose, procedures, and any potential risks. The research maintained the highest levels of confidentiality and anonymity throughout the process, with all personal identifiers removed to safeguard privacy. Ethical approval for the study was granted by the relevant institutional review board, ensuring that the research adhered to all applicable guidelines and regulations for conducting studies involving human participants.

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