

Market Survey and Consumer Acceptance Studies of Ready-To-Eat Chicken Pepes Sausage in Malaysia

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Abstract

The demand for the convenience of traditional food in ready-to-eat products is increasing, especially in today's busy modern lifestyle. However, ready-to-eat products that do not meet the needs and demands of consumers will fail in the market. This study explores the market potential and consumer acceptance of ready-to-eat chicken pepes sausage, combining the traditional appeal of pepes with the practicality of modern food products. The primary aim was to evaluate market potential, assess consumer acceptance and identify essential recipe components for this innovative product. The methodology involved a competitive analysis using observation techniques conducted in physical stores and online markets, a structured questionnaire distributed to 385 respondents across Malaysia and a recipe survey using semi-structured interviews and secondary research to identify key ingredients and preparation methods. The competitive analysis and recipe survey were analyzed using thematic analysis while, questionnaire was analyzed using SPSS. Results revealed that there are no similar products currently available, making it highly potential marketable with high interest among young adults aged 18-24 (34.81%) and adults aged 25-60 (32.99%). Key consumer preferences included a spicy flavor profile (60.8%), ease of preparation (35.6%), high protein (93.8%) and bite-sized version (52.2%). The recipe survey identified essential ingredients such as chicken breast, coconut milk, lemongrass and traditional spices as critical for product development. This study concludes that the ready-to-eat chicken pepes sausage has strong potential for commercialization in the Malaysian market.

1. Introduction

In today's fast-paced world, the demand for ready-to-eat food products has increased significantly especially among students and workers with hectic schedules. These products offer the convenience of quick, easy meals without the need for further preparation or cooking [1]. As consumer preferences shift towards foods that are both convenient and culturally relevant, the introduction of innovative products that combine traditional flavors with convenience of ready-to-eat formats become increasingly important. The ready-to-eat chicken pepes sausage combines the traditional dish pepes [2] with the popular Western styles [3], appealing to current Malaysian consumers' changing needs. However, producing ready-to-eat chicken pepes sausage will be fail if the product is not accepted by consumer [4]. Therefore, market survey studies are conducted before production of chicken sausage.

A market survey is an important technique for assessing consumer requirements and preferences before launching a new food product [5]. It facilitates the collection of first-hand consumer data, which is critical for making educated judgements about marketing strategies, product development, and consumer acceptance. For this study, both qualitative and quantitative research approaches were used to gain information about the possible acceptance of a chicken pepes sausage product [6]. Quantitative research used surveys to assess consumer demand and acceptance of this unique product concept [7]. In contrast, qualitative study enabled a competitive analysis of existing sausage products on the market, as well as an investigation into traditional chicken pepes recipes [8].

Consumer acceptance is critical to the success of any new food products [9]. It describes to the willingness of consumers purchase and recommend a product based on its preferences [10]. Therefore, understanding consumer opinions towards chicken pepes sausage, particularly in terms of taste, nutritional content, and convenience, is critical in establishing its market feasibility.

This study aims to determine the market potential and consumer acceptance of ready-to-eat chicken pepes sausage in Malaysia. This study uses a market survey and a consumer acceptance study to discover customer preferences for flavour profiles, nutritional content, and product appearance. The findings will provide essential information into the Malaysian market's preparation to embrace such new food products, with a focus on satisfying the needs of busy customers who want both convenience and cultural relevance in their meal options.

The significance of this study lies in its contribution to understanding the demand for new food products in the context of evolving consumer lifestyles. By identifying key factors that influence consumer acceptance, this research can guide good manufacturers and product developers in creating ready-to-eat products that meet the expectations of today's busy consumers, while also promoting traditional flavours in a modern and convenience format.

2. Materials and Methods

2.1 Data Collection

The quantitative and qualitative were used to obtain the data collection of the market survey [6]. The quantitative research used was a questionnaire [7] and qualitative research involved observation and interviews [8]. The design of the questionnaire was close ended question [7]. The observation of the competitive sausage products in the market was carried out to collect data and the semi-structured interview was used to gather the list of ingredients that are used in making chicken pepes [11].

2.2 Competitive Analysis

Observation techniques were used to conduct competitive analysis [8]. The observation was carried out at supermarkets, frozen marts, night markets, convenience stores and online markets [12]. The data obtained from this technique included the brand of the sausage product, types of the product, the ingredient used, price, the weight of the sausage, the types of packaging and manufacturing address [8].

2.3 Consumer Acceptance and Product Concept

Consumer acceptance and product concept was carried out using questionnaire [7]. The questionnaires were distributed to 385 respondents from various states across Malaysia [13]. The age range for respondents in this questionnaire was from 5 years old to above 61 years old. This method was primarily carried out to assess the market viability of the soon-to-be-launched product concept [14].

2.4 Questionnaire Development

The survey conducted had four segments as follows: A. Sociodemographic data, B. Existing chicken pepes food product, C. Knowledge about ready-to-eat products and D. New product concept of the ready-to-eat chicken pepes sausage. All questions were designed with closed ended and multiple-choice answers [7].

After the questionnaire was created, it was reviewed by three academic experts to ensure the questionnaire followed the guidelines of questionnaire design [15]. The questionnaire was then improved based on their comments and published. After that, a pilot study was conducted with 30 sample respondents to provide an advance warning about potential issues where the main research project could fail, or whether the proposed methods or instruments were inappropriate or too complicated [16].

2.5 Recipe Survey

The recipe of chicken pepes was carried out using semi-structured interview and secondary research [17]. The recipe obtained from secondary research such as the books and internet. The information was sourced from the recipe book such as *Kitab Resepi* by Chef Hanieliza and cooking make easy by Chef Sherson Lian. While from

internet such as MyResipi and Cookpad. The interviews were conducted in the Johor area, with individuals who were experts in cooking the chicken pepes [18]. The question about the list of recipes and the method used in the cooking preparation were recorded using the interview form and direct questions were asked to gather further information.

2.6 Quantitative Analysis

The quantitative data was analysed using the Statistical Package of Social Science (SPSS) version 24 [19]. Descriptive statistics were utilized to summarize and present the frequency and percentage distributions of respondents' demographic characteristics for providing a clear overview of the sample population. Additionally, descriptive statistics were applied to explore relationships between survey questions and demographic variables. A one-way analysis of variance (ANOVA) was employed to determine statistically significant differences between demographic variables and questionnaire responses. Furthermore, a chi-square test of independence was used to examine the relationship between two variables. Finally, crosstabulation was performed to study consumer acceptance by providing detailed cross-tabulated insights into the relationship between variables. All statistical analyses were conducted at a 0.05 significance level, ensuring the reliability and accuracy of the findings [20].

2.7 Qualitative Analysis

The qualitative data was analysed using thematic analysis [21]. The process of analysing qualitative data begins with the raw text, followed by transcribing the identifying relevant text, finding repeating ideas and grouping them into themes using Nvivo software [22].

3. Result and Discussion

3.1 Competitive Analysis

The observation technique was used to analyse the presence of products that are identical or similar to the ready-to-eat chicken pepes sausage. Table 1 revealed that ready-to-eat chicken pepes sausage is not yet available in the market meanwhile only chicken sausage, chicken pepes and ready-to-eat sausage only being competitive at the market platform. The absence of a ready-to-eat chicken pepes sausage in the market highlights a promising opportunity for innovation and make it high potential to marketed [51]. The ready-to-eat chicken pepes sausage combines the cultural significance of chicken pepes, the universal appeal of sausage and the ease of ready-to-eat sausage. Chicken pepes with their traditional seasonings and preparation wrapped in banana leaves are represent heritage [23]. On the other hand, Sausages provides mass-market adaptability with diverse flavours [24]. Ready-to-eat sausage is geared toward modern lives, emphasizing portability and quick consumption [25]. Thus, this new product can introduce a unique product that meet the needs of a wide range of consumers and has potential to enrich the ready-to-eat food market.

Table 1 Summaries of observation data

Codes/Themes	Chicken sausage	Chicken Pepes	Ready-to-Eat Sausage
Main Ingredients	Chicken meat (65%-87%), soy protein, starch additives.	Chicken meat or chicken breast, wrapped in banana leaves.	Chicken meat, soy protein, potato starch, vegetable oil.
Packaging	Vacuum packaging (most common), flow-wrap packaging for bulk	Wrapped in banana leaves for traditional aesthetic and flavor retention	Small vacuum-sealed portions (40g)
Pricing	RM3.05 to RM27.50 depending on size and brand	RM6.00 to RM25.00 depending on the number of pieces and brand	RM2.99 to RM4.00 per 40g
Weight Range	120g to 1kg	150g to 750g	40g
Producers	Popular brands include Ramly, Ayamas, Farm's Best, Marina, MaduBee	Popular brands include Fareezz Frozen Food, Mummy Lizkay, Dhuha Frozen Food, Pepes Warisan	Halal Dokkaebi, Kanzler, Bobo
Cultural Aspect	Mass-market appeal with diverse flavor profiles	Traditional preparation method, culturally significant ingredients, and localized recipes	Convenience-focused for immediate consumption

3.2 Consumer Acceptance and Product Concept

The details of the respondents involved in the questionnaire survey are provided in Table 2. The number of respondents in this survey was 385 from the population in Malaysia. Out of these respondents, (69.61%) came from females. Female have their own experiences based on their position as household decision-makers [26]. However, the number of males was relatively smaller representing 30.39% of the study. Study by [27], which reported that male may feel less motivated to respond to surveys that do not align with their interests or social norms.

For the aged group, 18-24 years old representing 34.81% of the study populations. This means that the research largely included responses from young adults, who are more likely to interested in novel products or products. This finding is in line with a study by [28], which reported that individuals aged 18 to 24 are substantially more likely to explore than older age groups. This tendency is due to their higher openness towards innovations new products. The 25-60 years old group come next, representing 32.99% of the sample. This group more likely to provide feedback on convenience goods due to their purchasing power and household responsibilities [29].

Next, the findings regarding race found that most Malays participated in this study with 92.73% respondents. This is because chicken pepes are a dish that aligns with traditional Malay cuisine and flavours, making it more appealing and familiar to the Malay population. This finding is in line with study by [30], which reported that food consumption patterns in Malaysia vary significantly across different ethnic groups due to cultural and religious beliefs.

From the employment data, 52.47% respondents came from students. Students are more willing to test new or creative food products, which makes them more likely to participate in surveys related to such items. This finding is in line with study by [31], which reported that students frequently express a desire for new food options, indicating an openness to experimenting with different food products. The second-largest profession is employees, who made up 30.39% respondents. Employees are interested in participating in this study because the product is suitable for their lifestyle, especially for those who are looking for convenient and quick meal due to their busy schedules. Many employees prioritize quick and easy meal solutions due to their hectic work schedules [32].

Table 2 Sociodemographic data

Sociodemographic particular	Category	Frequency (n)	Percentage (%)
Gender	Male	117	30.39
	Female	268	69.61
Age	5-12 years old	28	7.27
	13-17 years old	51	13.25
	18-24 years old	134	34.81
	25-60 years old	127	32.99
	Above 61 years old	45	11.69
Race	Malay	357	92.73
	Chinese	10	2.60
	Indian	17	4.42
	Other	1	0.26
Occupation	Student	202	52.47
	Employee	117	30.39
	Unemployed	66	17.14

The information presented in Table 3 indicates that the Pearson Chi-square test was used to analyse the relationship between the frequency of consume ready-to-eat products and the perception that cooking is time consuming. The study revealed a p-value of 0.019, which is lower than the usually accepted significance level of 0.05. According to the data, people who think cooking takes too long are more likely to eat ready-to-eat foods on a regular basis. This relationship is consistent with the convenience-driven behaviour commonly found among consumers who prefer saving time more than making meals at home. This statement supported by [33], revealed that busy lifestyles lead many consumers to favour quick meal than traditional cooking method. The

findings emphasize the significance of convenience in driving demand for ready-to-eat products, validating the notion that time constraints play an important role in defining consumer preferences in modern lifestyles.

Table 3 Relationship perception of cooking is time consuming

	df	Asymptotic significance (2-sided)
Pearson Chi-square	6	0.019

3.2.1 Consumer Acceptance for Ready-To-Eat Chicken Pepes Sausage

Table 4 shows the level of interest in trying chicken pepes across age groups, which is an accurate indication of potential demand. The highest levels of interest are 18-24 years old 35.3% and 25-60 years old 34.2%, accounting for roughly 70% of total interest. This concentration indicates a strong demand foundation, as these groups are not only interested in the products but also have purchasing power and market influence [31]. Overall, a level interest trying chicken pepes have high demand among young adults and adults aged group 18 to 60 years.

Table 4 Interested trying chicken pepes according to age

Interested trying chicken pepes	5-12 years old	13-17 years old	18-24 years old	25-60 years old	Above 61 years old
Count	23	44	127	123	43
Percentage (%)	6.4%	12.2%	35.3%	34.2%	11.9%

Table 5 provides information on how occupation affects the sense of need for chicken pepes, which aids in estimating demand. Students are the largest group accounting for 55.3% of responses. Ready-to-eat chicken pepes sausage are a good fit for students' eating preferences, which may include convenience and ease of preparation. This data suggests that there is a huge demand potential among the student group. This statement in line with [25], reported that students prefer convenient ready-to-eat products due to their hectic schedules and limited time for preparation food.

Employees are the second group, accounting for 39.0% of responses. This large proportion indicates that working people value the product, most likely due to their need for quick and easy meals that fit into their hectic schedules. The significant reaction from this demographic contributes to the demand potential for chicken pepes among the working population, who may look for ready-to-eat options during lunch breaks or after hours. Study by [34], also revealed that ready-to-eat meals have grown in popularity among working professionals due to their hectic schedules.

Table 5 Definitely need this new product according to occupation

Definitely need this new product	Student	Employees	Unemployed
Count	88	62	9
Percentage (%)	55.3%	39.0%	5.7%

Table 6 shows the age distribution of respondents who indicated that purchase chicken pepes on frequently. The 25-60 age group has the highest percentage of responds 41.3%. This age group is the most likely to buy chicken pepes on a regular basis, which is consistent with their great perceived need for the product. Adults in this category are often engaged consumers with established purchasing habits, giving them an important source of continuous demand [29].

The 18-24 category follows with 28.0%, contributing to the demand potential among young adults. This group is likely to appreciate ready-to-eat products since they are convenient and suitable for fast-paced lifestyles. The 18-24 and 25-60 age groups account for more than 70 percent of all frequency of purchase responses, underscoring their position as the key drivers of demand. The demand for quick meals is particularly strong among younger adults and those in family situations, validating the concept that these age groups dominate the market due to their lifestyle needs [35].

Table 6 Frequency purchasing according to age

Frequency purchasing	5-12 years old	13-17 years old	18-24 years old	25-60 years old	Above 61 years old
Count	20	23	40	59	1
Percentage (%)	14.0%	16.1%	28.0%	41.3%	0.7%

3.2.2 Analysis Product Concept of Ready-To-Eat Chicken Pepes Sausage

For the new ready-to-eat chicken pepes sausage product concept, four attributes are surveyed to ensure that this product is in line with consumer acceptance. Fig. 1 shows that criteria have an important effect consumer purchasing decisions for ready-to-eat chicken pepes sausage. The most important consideration is ease of consumption, which accounts for 35.6% of consumer choices. Consumers preferring items that are quick and easy to eat, especially with today's hectic lifestyles as reported by [36]. The other most important issue is affordable price, accounting for 26%. Consumers prefer cost-effective choices that fit their budgets while still providing good quality. This result in line with study by [37], reported that affordability is an important factor of consumer choice, as lower-cost products tend to attract more customers than higher-priced counterparts.

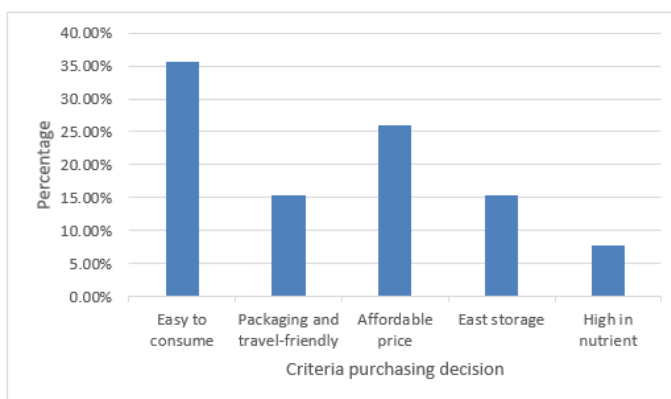


Fig. 1 The percentage criteria purchasing decision

Fig. 2 shows the analysing customer preferences for the nutritional content. When analysing customer preferences for the nutritional content of the new ready-to-eat (RTE) chicken pepes sausage, it is obvious that consumers prioritise high protein, low carbs, and low fat. A significant 93.8% of consumers prefer a high protein content, as protein is required for muscle development and repair, making this sausage an appealing option for individuals looking for a quick and healthy source of protein [38]. By providing a sausage with these nutritional properties, the chicken pepes sausage may meet the needs of health-conscious consumers looking a quick and healthy a meal.

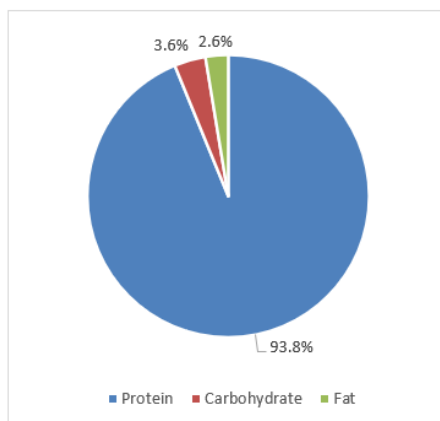


Fig. 2 The percentage preferences of nutritional content among consumers

Next, the popular flavour for the new ready-to-eat chicken pepes sausage among consumers, demonstrating a significant preference for spicy flavours. Approximately 60.8% of consumers select spicy as their top flavour, demonstrating that many people enjoy flavourful meals with a hint of spice. The spicy flavour appeals to those who prefer stronger, more adventurous flavours in their food. This finding in line with study by [39], which

reported that customers are becoming more attracted to spicy cuisine, with a noticeable increase in the introduction of chili-flavoured items. Meanwhile, 37.7% of customers prefer the original flavour, which has a softer taste but still showcases the savoury elements of the chicken pepes sausage without any extra spice. The different groups may have diverse tastes, with some choosing less hot and more traditional flavours in their food choices [40]. This means that, the spicy and original flavours are clearly the most popular, this result shows in Fig. 3.

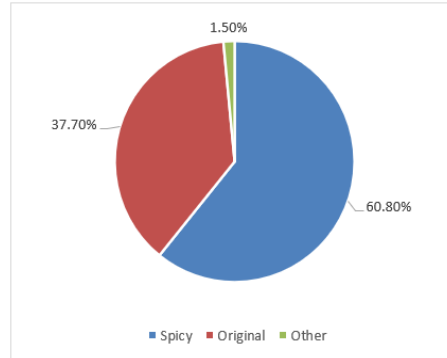


Fig. 3 The percentage of most preferred flavour among consumers

According to Fig. 4, about 47.80% of consumers prefer a long cylindrical shape, implying that classic sausages are still popular. This shape is common and is likely thought to be useful for grilling or presenting in meals [41]. A significantly higher percentage of consumers, 52.2%, prefer a mini cylindrical shape, or bite-size version. This preference for bite-sized sausages suggests that customers prioritize the ease of consumption. Mini sausages are easy to consume on the go, can be rapidly prepared, and are ideal for snacking or adding to meals without requiring cutting. The convenience has a big influence on purchase decisions said by [42]. Therefore, offering both shapes may attract more consumers, with the mini bite-size variant likely appealing to people looking convenience and the long cylindrical shape fulfilling traditional preferences.

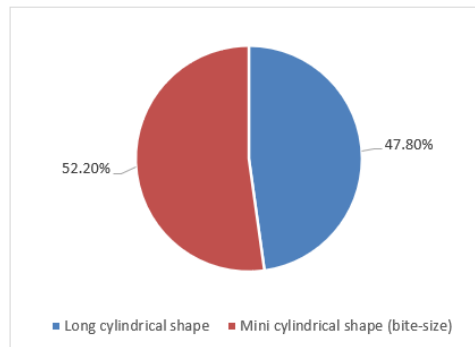


Fig. 4 The percentage of desired shape for ready-to-eat chicken pepes sausage

3.3 Recipe Survey

The recipe survey was obtained from an interview with a person who is an expert in preparing chicken pepes, recipe book and searching on the internet. Table 7 shows the elements obtained from the recipe survey were the lists of ingredients with their function, the method for preparing the chicken pepes and the additional tips for preparing chicken pepes.

Table 7 Summaries of recipe survey data

Themes	Code	Quotes	Source
Ingredients and their functions	Protein component	Chicken breast – the primary protein source, providing texture, flavor and nutritional value	(MyResipi,2023)
		Eggs – contributes to the overall texture of the filling	(MyResipi,2023)
	Aromatics and	Garlic – adds a savory, aromatic base	(MyResipi,2023)

	flavor enhancers	Lemongrass – adds a citrusy aroma	(MyResipi,2023)
		Shallots – adds sweetness and depth to the spice paste	Puan Fathimah
	Spices for heat and color	Dried chilies – provides heat and color	(MyResipi,2023)
		Red chilies – adds mild heat and vibrant color	Puan Suraya
	Textural additions	Candlenuts – adds creaminess and helps thicken the spice paste	(MyResipi,2023)
		Coconut milk – adds richness, creaminess and a subtle sweetness	(Cookpad,2021)
	Preparing spice paste	Blend the shallots, garlic, turmeric, ginger, lemongrass, dried chilies, red chilies, candlenuts into a smooth paste	Puan Suraya
	Preparing banana leaves	Cut the banana leaves into squares (approximately 20x20 cm)	Puan Suraya
Preparation methods		Briefly pass the leaves over an open flame to soften them, making them easier to fold	Chef Sherson Lian
		Cook the spice mixture. Heat a small amount of oil in a pan. Blend spice paste along with the lemongrass until fragrant	Chef Hanieliza
	Layering flavors	Mix the chicken with the egg. Mix the spice paste with the chicken. Mix and well until combined	Encik Razak
	Wrapping and cooking	Placed the pepes mixture on the banana leaf and wrap	(MyResipi,2023)
		Steam for 20 minutes and burn for a while on the stove	(MyResipi,2023)
Practical Cooking Tips	Storage and reheating	Pepes can be stored in the refrigerator and reheated by steaming or grilling	Puan Suraya
	Adjusting to preferences	For a spicier version, add more chili peppers to the spice paste	Puan Fadhlina

The finding shows that the main ingredient in this recipe is chicken breast, chosen for its lean and tender qualities and its role as the primary source of protein. Chicken breast contains approximately 23 to 32 grams of protein per 100 grams, making it one of the meats with the highest protein content [43]. After that, an egg is added to complete the chicken and ensure that the filling binds effectively during cooking. Eggs not only stabilize the mixture but also impart a soft and cohesive texture, allowing the final dish to hold its shape while remaining moist and tender. This finding is in line with study by [44], which reported that eggs play several essential roles in cooking, binding, emulsifying and imparting moisture.

Next, the spice blend is the centrepiece of the meal, where many components combine to create a distinct and delightful flavour. Garlic is a key component in this combination providing a strong aromatic base and savoury flavour that enhances the dish. Study by [45] reported that garlic imparts a substantially stronger flavour to dishes. Then, added Lemongrass imparts a fresh, citrusy aroma and flavour that balances the richness of the other components. These findings in line with a study by [46], which reported that lemongrass is widely used as a chicken marinade, resulting in a dish that is both flavourful and refreshing. Shallots contribute natural sweetness and a rich flavour. As mentioned by [47], shallots develop a rich and sweet flavour in cooking, making them an essential ingredient in many recipes. These aromatics of spice paste are further complemented by dried chilies, which add a strong spiciness and a deep red colour. While red chilies provide a vibrant red colour and a moderate heat. Together, these components create a rich and balanced aroma. This is in line with a previous study by [48], which found that combining dried and red chilies can create a balanced aroma that enhances overall taste experience.

This finding also shows that candlenuts are used to elevate the texture and richness of the spice paste. These are a common thickening agent in Southeast Asia Cuisine, ability to add creaminess and body to sauces and

pastes [49]. Lastly, coconut milk adds to the dish's richness by providing a creamy texture and a mild sweetness. This balances the strong heat and pungency of the chilies, providing a spice blend that is smooth, flavourful and perfectly balanced [50].

4. Conclusion

In conclusion, the market survey and consumer acceptance studies of ready-to-eat chicken pepes sausage show that this new product has a considerable market opportunity. The competitive analysis revealed there are no ready-to-eat chicken pepes sausage, despite the availability of chicken pepes, chicken sausages and ready-to-eat sausages in a variety of flavours. The proposed of studies aims to explores the market potential and consumer acceptance of ready-to-eat chicken pepes sausage, combining the traditional appeal of pepes with the practicality of modern food products. Positive feedback from young adults 18-24 years old and adults aged people 25-60 years old demonstrated a desire for easy-to-prepared, nutritious, and flavourful products. The recipe survey highlighted critical elements such as chicken breast, eggs, garlic, lemongrass and others that are required to preserve the authentic flavour of chicken pepes in sausage form. Overall, this study provides useful information about market potential, customer acceptance, and the ingredients and preparation methods required for the successful development of ready-to-eat chicken pepes sausage. For further research of this study, some recommendations are monitor the market trends and competitor products through comprehensive competitive analysis, to maintain a competitive edge, conduct a larger-scale survey with more various demographic groups to gain a better understanding of their preferences and possible demand for this product and conduct a pricing survey to determine the price range consumers are willing to pay for ready-to-eat chicken pepes sausage.

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Conflict of Interest

Authors declare that there is no conflict of interests regarding the publication of the paper.

Author Contribution

The authors confirm contribution to the paper as follows: **study conception and design:** Nabila Zulkepli, Norhayati Muhammad; **data collection:** Nabila Zulkepli; **analysis and interpretation of results:** Nabila Zulkepli; **draft manuscript preparation:** Nabila Zulkepli, Norhayati Muhammad. All authors reviewed the results and approved the final version of the manuscripts.

References

- [1] Temgire, S., Borah, A., Kumthekar, S., & Idate, A. (2021). Recent trends in ready to eat/cook food products. *The Pharma Innovation Journal*, 10(5), 211- 217.
- [2] Niraviona, F. P. E., & Putri, N. S. (2023). Management of Modification of Regional Typical Food" Pepes" to Develop an Entrepreneurial Spirit by Utilizing Digital Technology. *Jurnal Pendidikan Teknologi Informasi dan Komunikasi*, 2(1), 16- 22.
- [3] Pagthinathan, M., & Gunasekara, A. P. A. S. (2021). Physicochemical Properties and Sensory Evaluation of Non-Meat Ingredients Chicken Sausage. *European Journal of Agriculture and Food Sciences*, 3(1), 18-22.
- [4] Kessler, F., Nielsen, M. B. R., Tostesen, M., Duelund, L., Clausen, M. P., & Giacalone, D. (2019). Consumer perception of snack sausages enriched with umami-tasting meat protein hydrolysates. *Meat science*, 150, 65-76.
- [5] Gordon, W., & Langmaid, R. (2022). Qualitative market research. *A practitioner's andbuyer's guide*, 1, 28-38.
- [6] Bilgin, Y. (2017). Qualitative method versus quantitative method in marketing research: An application example at Oba restaurant. *Qualitative versus quantitative research*, 1-28.
- [7] Salbi, N., Muhammad, N., & Abdullah, N. (2021). Optimizing flavonoid-rich Quranic Mixed Food (QMF) formulation with simplex-centroid mixture design. *Food Research*, 5(2), 80-87.
- [8] Solahan, R. E. F. B. (2019). Development of fish flavoured spicy tamarind cube. <http://Archive.Uthm.Edu.My.Ezproxy.Uthm.Edu.My/Handle/123456789/893>
- [9] Siegrist, M. (2008). Factors influencing public acceptance of innovative food technologies and products. *Trends in Food Science & Technology*, 19(11), 603-608.
- [10] Siró, I., Kápolna, E., Kápolna, B., & Lugasi, A. (2008). Functional food. Product development, marketing and consumer acceptance—A review. *Appetite*, 51(3), 456-467.

- [11] Petrescu, M., & Lauer, B. (2017). Qualitative Marketing Research: The State of Journal Publications. *Qualitative report*, 22(9), 2248-2287.
- [12] Yi, Y. M., & Gim, T. H. T. (2018). What makes an old market sustainable? An empirical analysis on the economic and leisure performances of traditional retail markets in Seoul. *Sustainability*, 10(6), 17-79.
- [13] Kotrlik, J. W. K. J. W., & Higgins, C. C. H. C. C. (2001). Organizational research: Determining appropriate sample size in survey research appropriate sample size in survey research. *Information technology, learning, and performance journal*, 19(1), 43.
- [14] Nguyen, T. V. (2021). Market Analysis for Product Selection. A case study of the eCommerce business, *Zertta*, 3, 35-45.
- [15] Taherdoost, H. (2022). Designing a questionnaire for a research paper: A comprehensive guide to design and develop an effective questionnaire. *Asian Journal of Managerial Science*, 11(1), 8-16.
- [16] Van Teijlingen, E., & Hundley, V. (2002). The importance of pilot studies. *Nursing Standard (through 2013)*, 16(40), 33.
- [17] Artino Jr, A. R., La Rochelle, J. S., Dezee, K. J., & Gehlbach, H. (2014). Developing questionnaires for educational research: AMEE Guide No. 87. *Medical teacher*, 36(6), 463-474.
- [18] Prayag, G., Gannon, M. J., Muskat, B., & Taheri, B. (2020). A serious leisure perspective of culinary tourism co-creation: the influence of prior knowledge, physical environment and service quality. *International Journal of Contemporary Hospitality Management*, 32(7), 2453-2472.
- [19] Fatih, K. A. Y. A. (2023). Satisfaction Levels of Social Studies Teacher Candidates with Regard to Distance Education. *International Journal of Modern Education Studies*, 7(2), 45-56.
- [20] Wang, C., Adetola, S. H., & Abdul-Rahman, H. (2015). Assessment of BIM implementation among MEP firms in Nigeria. *International Journal of Advances in Applied Sciences*, 4(3), 73-81.
- [21] Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. *The SAGE handbook of qualitative research in psychology*, 2(20), 17-37.
- [22] Allsop, D. B., Chelladurai, J. M., Kimball, E. R., Marks, L. D., & Hendricks, J. J. (2022). Qualitative methods with Nvivo software: A practical guide for analyzing qualitative data. *Psych*, 4(2), 142-159.
- [23] Wijaya, S. (2019). Indonesian food culture mapping: a starter contribution to promote Indonesian culinary tourism. *Journal of Ethnic Foods*, 6(1), 1-10.
- [24] Chaney, M. T. (2023). Benchmarking Lamb Carcass Traits and Exploring Lamb Sausage Marketability (*Master's thesis, North Dakota State University*). 3, 32-54.
- [25] Rathee, R., Rajain, P., & Kuchhal, A. (2018). Ready-to-eat products: Perspective of working women. *International. Management. Technology. Engineering*, 8(7), 5985-6000.
- [26] Gundala, R. R., Nawaz, N., Harindranath, R. M., Boobalan, K., & Gajenderan, V. K. (2022). Does gender moderate the purchase intention of organic foods? Theory of reasoned action. *Heliyon*, 8(9) 149-163.
- [27] Becker, R. (2022). Gender and survey participation: An event history analysis of the gender effects of survey participation in a probability-based multi-wave panel study with a sequential mixed-mode design. *Methods, data, analyses: a journal for quantitative methods and survey methodology*, 16(1), 3-32.
- [28] Puhakka, R., Haskins, A. H., Jauho, M., Grönroos, M., & Sinkkonen, A. (2021). Factors Affecting Young Adults' Willingness to Try Novel Health-Enhancing Nature-Based Products. *Journal of International Consumer Marketing*, 33(5), 595-612.
- [29] Parment, A. (2013). Generation Y vs. Baby Boomers: Shopping behavior, buyer involvement and implications for retailing. *Journal of retailing and consumer services*, 20(2), 189-199.
- [30] Hasnah Hassan, S. (2011). Consumption of functional food model for Malay Muslims in Malaysia. *Journal of Islamic Marketing*, 2(2), 104-124.
- [31] Lee, K. E. (2019). Students' dietary habits, erfood svce satisfaction, and attitude toward school meals enhance meal consumption in school food service. *Nutrition Research and Practice*, 13(6), 555-563.
- [32] Jabs, J., Devine, C. M., Bisogni, C. A., Farrell, T. J., Jastran, M., & Wethington, E. (2007). Trying to find the quickest way: employed mothers' constructions of time for food. *Journal of nutrition education and behavior*, 39(1), 18-25.
- [33] Gopal, S., SB, I. A., & Humnekar, T. D. (2021). Consumer Perception Towards Ready-To Eat Food Products: Evidence from A Tier Ii City-Sale. *Turkish Online Journal of Qualitative Inquiry*, 12(4).
- [34] Sharma, G. (2012). A Study of Behavioral Pattern of the Customers for Ready to Eat Food Items. *SSRN*. 2(1), 41-192.
- [35] Meshram, S. R., Muralidharan, P., & Mulky, A. (2020). Consumer Behavior in the Ready to Eat Foods Category: An Exploration in an Emerging Market. 89-99.
- [36] Gogoi, B. J. (2020). Changing consumer preferences: Factors influencing choice of fast-food outlet. *Academy of Marketing Studies Journal*, 24(1), 1-17.
- [37] Zhao, H., Yao, X., Liu, Z., & Yang, Q. (2021). Impact of pricing and product information on consumer buying behavior with customer satisfaction in a mediating role. *Frontiers in psychology*, 12, 72-151.

- [38] Mohammed, H. (2024). Irish seaweed species in processed meat products (sausages): characterisation, fat and salt reduction, and sensory acceptability studies. *2*(2), 69-71.
- [39] Franzak, F., & Pitta, D. (2005). New product development at eastern spice & flavorings. *Journal of Product & Brand Management*, *14*(7), 462-467.
- [40] Chironi, S., Bacarella, S., Altamore, L., Columba, P., & Ingrassia, M. (2021). Consumption of spices and ethnic contamination in the daily diet of Italians-consumers' preferences and modification of eating habits. *Journal of Ethnic Foods*, *8*(1), 6.
- [41] Arildsen Jakobsen, L. M., Vuholm, S., Aaslyng, M. D., Kristensen, M., Sørensen, K. V., Raben, A., & Kehlet, U. (2014). Sensory characteristics and consumer liking of sausages with 10% fat and added rye or wheat bran. *Food science & nutrition*, *2*(5), 534-546.
- [42] Essien, E. (Ed.). (2003). *Sausage manufacture: Principles and practice*. Woodhead Publishing. 122-126.
- [43] Jung, D. Y., Lee, D., Lee, H. J., Kim, H. J., Jung, J. H., Jang, A., & Jo, C. (2022). Comparison of chicken breast quality characteristics and metabolites due to different rearing environments and refrigerated storage. *Poultry Science*, *101*(7), 101-953.
- [44] Dickinson, E. (2013). Stabilising emulsion-based colloidal structures with mixed food ingredients. *Journal of the Science of Food and Agriculture*, *93*(4), 710-721.
- [45] Sallam, K. I., Ishioroshi, M., & Samejima, K. (2004). Antioxidant and antimicrobial effects of garlic in chicken sausage. *LWT-Food Science and Technology*, *37*(8), 849-855.
- [46] Latoch, A., Czarniecka-Skubina, E., & Moczowska-Wyrwysz, M. (2023). Marinades based on natural ingredients as a way to improve the quality and shelf life of meat: A review. *Foods*, *12*(19), 36-38.
- [47] Shahrajabian, M. H., Wenli, S. U. N., & Cheng, Q. (2020). Chinese onion, and shallot, originated in Asia, medicinal plants for healthy daily recipes. *Notulae Scientia Biologicae*, *12*(2), 197-207.
- [48] Muangkote, S., Vichitsoonthonkul, T., Srilaong, V., Wongs-Aree, C., & Photchanachai, S. (2019). Influence of roasting on chemical profile, antioxidant and antibacterial activities of dried chili. *Food science and biotechnology*, *28*, 303-310.
- [49] Blancke, R. (2016). Tropical fruits and other edible plants of the world: An illustrated guide. *Cornell University Press*. 40-45.
- [50] Sanjana, K., Waded, K. N., Nalla, B. P. R., & Sinija, V. R. N. (2024). Shelf-Life Extension of Coconut Milk-Based Products. In *Preservation and Authentication of Coconut Products: Recent Trends and Prospects*. 85-104.