

Tofu Goodies: A Strategic Business Plan for the Production and Marketing of Plant-Based Nuggets with Homemade Sauces

Mr. Jonny Tepase., Dr. Glenda Lagarile

Card Mri, Pateros, NCR, Philippines

DOI: <https://doi.org/10.51583/IJLTEMAS.2026.150600085>

Received: 14 June 2026; Accepted: 19 June 2026; Published: 07 July 2026

ABSTRACT

This study evaluated the market acceptability and consumer perception of Tofu Goodies—an innovative, plant-based nugget paired with signature homemade sauces—in Barangay Paciano Rizal, Bay, Laguna. Using a descriptive-quantitative research design, data were gathered from 289 purposively selected respondents, primarily composed of students and young professionals aged 18–24 (43.25%) operating on limited budgets. The empirical findings revealed a high level of overall market acceptability (Mean = 3.03), driven primarily by excellent product quality (Mean = 3.10) and an affordable pricing structure ranging from ₱11.00 to ₱55.00 (Mean = 3.06).

While respondents highly praised the health benefits (Mean = 3.25) and eco-sustainability (Mean = 3.07) of the product, sensory imitation benchmarks scored lower (Mean = 2.77). Inferential analysis via One-Way ANOVA confirmed no statistically significant difference in product acceptability across diverse demographic cohorts ($p > 0.05$). Crucially, Pearson correlation analysis revealed no significant relationship between consumer perception and actual market acceptability ($r = -0.0186$, $p = 0.7534$), mathematically proving that intellectual appreciation for healthy food does not automatically drive purchasing decisions. Market competition (Mean = 2.87) and localized geographical accessibility (Mean = 2.67) were identified as the primary operational challenges. Based on these insights, a Strategic Marketing Action Plan utilizing a hub-and-spoke distribution model and sensory-focused digital marketing is proposed to optimize business sustainability and local market penetration.

Keywords: Tofu plant-based nuggets, Market acceptability, Consumer perception, Marketing mix, Strategic marketing, Bay Laguna.

INTRODUCTION

Background and Context

The intersection of nutritional awareness, ecological ethics, and socio-economic shifts has accelerated a global and local "protein transition" away from traditional meat-heavy diets toward sustainable, plant-based alternatives. Globally, the retail market for plant-based sectors has reached \$7.9 billion, with plant-based chicken nuggets alone capturing a \$2.6 billion market share and experiencing a compound annual growth rate (CAGR) of 9.8%.

In the Philippines, the plant-based food industry has reached approximately USD 58.0 million, fueled by urban and semi-urban populations seeking preventive dietary measures against chronic lifestyle diseases such as obesity and cardiovascular disorders. However, a distinct market gap exists: while multinational plant-based meat alternatives (PBMA) are increasingly available in high-end supermarkets, their premium pricing renders them virtually inaccessible to low-to-middle-income Filipino consumers, particularly students and daily wage earners.

The Innovation of Tofu Goodies

To bridge this gap, Tofu Goodies was conceptualized as a specialized micro-enterprise focused on producing and marketing affordable, air-fried plant-based nuggets served with custom homemade sauces (Cheese, Katsu, and Gravy). Tofu, a historical staple in East Asian and Filipino culinary traditions, was selected as the raw structural material due to its rich nutritional architecture—being low-calorie, cholesterol-free, and dense in plant proteins, iron, and calcium. Furthermore, tofu possesses a unique physical versatility, allowing it to transform from a smooth, neutral block into a savory snack that mimics the mechanical mouthfeel of chicken nuggets when optimized with appropriate binding and cooking techniques. By offering a familiar product archetype at a localized price point of ₱11.00 to ₱55.00, the venture establishes a niche that reframes tofu from a mundane household ingredient into a standardized, high-value "guilt-free indulgence".

Conceptual Framework and Research Objectives

This study is grounded in the Resource-Based Concept of entrepreneurship and the extended Theory of Planned Behavior, which posits that while food value (pricing) and perceived quality drive consumer purchase intentions, localized accessibility and sensory satisfaction ultimately govern brand sustainability. The primary objective of this research was to evaluate the market acceptability and consumer perception of Tofu Goodies in Bay, Laguna, to establish an empirical foundation for a Strategic Marketing Action Plan. Specifically, the study sought to: profile respondents across demographic and psychographic variables; evaluate market acceptability based on the 4Ps marketing mix (Product, Price, Place, Promotion); gauge consumer perceptions regarding health, sensory quality, and sustainability; identify primary barriers to consumer adoption; and uncover any significant differences or correlations between profile groups, perceptual metrics, and product acceptability.

METHODOLOGY

This study employed a descriptive research design with a quantitative approach to map out market characteristics, consumer buying habits, and acceptability scores in a natural setting without environmental manipulation. The geographical focus was strictly delimited to Barangay Paciano Rizal in Bay, Laguna, targeting the immediate vicinity of Purok 1, Sampaguita Street. This location serves as an ideal semi-urban micro-market characterized by high foot traffic from students (e.g., from the nearby Rural High School), tricycle drivers, factory workers, and local commuters.

The target population encompassed local residents and transient individuals aged 15 and above. Due to operational constraints in accessing the entire census population of the municipality, a purposive sampling technique was deployed to select high-potential snack consumers who purchase finger foods on a daily or weekly basis. A total sample size of $N = 289$ respondents was successfully secured. High-income cohorts were intentionally excluded from the primary target segment, as preliminary market mapping indicated that luxury consumers exhibit distinct purchasing patterns that deviate from the affordable, street-level positioning of this micro-venture.

The primary data gathering tool was a highly structured, researcher-developed survey questionnaire validated by the entrepreneurship faculty of the CARD-MRI Development Institute (CMDI). The instrument comprised three thematic components: Part I focused on demographic and psychographic metrics; Part II assessed the Marketing Mix (the 4Ps) using a 4-point Likert scale; and Part III evaluated consumer perceptions and challenges. To ensure scientific rigor, the data collection procedure integrated a Sensory Evaluation and Pilot Production phase. Prior to completing the questionnaire, respondents participated in live "free tasting" sessions during a campus bazaar and area assessment. This allowed participants to experience the actual organoleptic properties (aroma, appearance, and mouthfeel) of the air-fried tofu nuggets alongside the signature homemade sauces, transforming purely speculative responses into evidence-based sensory evaluations.

Data were analyzed using both descriptive and inferential statistical methodologies: Frequency Distribution and Percentage were used to profile consumers; Weighted Mean tracked the 4-point Likert matrices (3.50–4.00: Strongly Agree/Highly Acceptable; 2.50–3.49: Agree/Acceptable; 1.75–2.49: Disagree/Unacceptable; 1.00–1.74: Strongly Disagree); One-Way ANOVA mapped variances across demographic groups; and the Pearson Product-Moment Correlation Coefficient (r) checked the link between consumer perception and product acceptability.

RESULTS AND DISCUSSION

Demographic and Psychographic Profile of Respondents

Profile Variable	Category	Frequency (f)	Percentage (%)
1.1 Age	17 and below	44	15.22%
	18 – 24	125	43.25%
	25 – 34	72	24.91%
	35 – 44	35	12.11%
	45 and above	13	4.50%
1.2 Sex/Gender	Male	121	41.87%
	Female	158	54.67%
	Prefer not to say / Others	10	3.46%
1.3 Occupation	Student	128	44.29%
	Employee (Public/Private)	89	30.80%
	Driver / Transport Worker	24	8.30%
	Self-employed / Business Owner	28	9.69%
	Unemployed / Homemaker	20	6.92%
1.4 Monthly Income	Below ₱5,000	104	35.99%
	₱5,000 – ₱10,000	63	21.80%
	₱10,001 – ₱20,000	59	20.42%
	₱20,001 – ₱40,000	52	17.99%
	Above ₱40,000	11	3.81%
1.5 Purchase Freq.	Daily	34	11.76%

	2 to 3 times a week	81	28.03%
	Weekly	102	35.29%
	Monthly	42	14.53%
	Rarely / Never	30	10.38%
1.6 Lifestyle Orient.	Health-conscious	56	19.38%
	Active / On-the-go	83	28.72%
	Budget-conscious	109	37.72%
	Food Explorer	41	14.19%

Table 1. Demographic and Psychographic Distribution of Respondents (N=289)

Level of Market Acceptability of Tofu Goodies

Marketing Mix Variable & Items	Mean Score	Descriptive Interpretation
2.1 Product Quality		
1. Textures satisfy 'soft inside and crispy outside.'	3.11	Agree / Acceptable
2. Homemade sauces complement the nuggets.	3.15	Agree / Acceptable
3. Overall taste and presentation are appealing.	3.05	Agree / Acceptable
Sub-Composite Mean	3.10	Agree / Acceptable
2.2 Price		
1. Price range of ₱11.00 to ₱55.00 is highly affordable.	3.08	Agree / Acceptable
2. Offers great value for money and serving portions.	3.06	Agree / Acceptable
3. Pricing justifies switching from meat street foods.	3.03	Agree / Acceptable
Sub-Composite Mean	3.06	Agree / Acceptable
2.3 Place		
1. Physical stall in Brgy. Paciano Rizal is accessible.	2.97	Agree / Acceptable
2. Travel-friendly packaging is convenient for on-the-go.	2.93	Agree / Acceptable

3. Store layout allows a hassle-free experience.	2.92	Agree / Acceptable
Sub-Composite Mean	2.94	Agree / Acceptable
2.4 Promotion		
1. Social media posts (FB, TikTok, IG) are engaging.	3.01	Agree / Acceptable
2. Online materials communicate prices/location clearly.	3.02	Agree / Acceptable
3. Digital marketing convinces me to purchase.	3.07	Agree / Acceptable
Sub-Composite Mean	3.03	Agree / Acceptable
OVERALL ACCEPTABILITY MEAN	3.03	Agree / Acceptable

Table 2. Level of Market Acceptability by Marketing Mix Category

Consumer Perception Towards Plant-Based Nuggets

Perception Dimension & Specific Indicators	Mean Score	Descriptive Interpretation
3.1 Health Benefits		
1. Favored due to high protein and zero cholesterol.	3.24	Agree / Favorable Perception
2. Plant-based options are vital for my long-term health.	3.22	Agree / Favorable Perception
3. Perceived as a cleaner alternative to meat snacks.	3.29	Agree / Favorable Perception
Sub-Composite Mean	3.25	Agree / Favorable Perception
3.2 Sensory Attributes		
1. Replicates the chew and mouthfeel of chicken nuggets.	2.77	Agree / Moderate Perception
2. Plant seasonings satisfy my palate as much as meat.	2.80	Agree / Moderate Perception
3. Aroma and visual appearance are highly appetizing.	2.74	Agree / Moderate Perception
Sub-Composite Mean	2.77	Agree / Moderate Perception

3.3 Sustainability		
1. Willing to purchase to support eco-conscious options.	3.09	Agree / Favorable Perception
2. Cruelty-free values heavily influence my food choices.	3.09	Agree / Favorable Perception
3. Shifting to tofu snacks benefits local sustainability.	3.04	Agree / Favorable Perception
Sub-Composite Mean	3.07	Agree / Favorable Perception
OVERALL PERCEPTION MEAN	3.03	Agree / Favorable Perception

Table 3. Consumer Perception Summary

Inferential Analyses: Variances and Correlations

Profile Group	Degrees of Freedom (df)	F-Statistic	p-Value	Decision on H0
Age Group	(4, 284)	1.1179	0.3482	Accept Null (H0)
Sex / Gender	(2, 286)	0.7071	0.4939	Accept Null (H0)
Primary Occupation	(4, 284)	0.1358	0.9690	Accept Null (H0)
Monthly Allowance	(4, 284)	0.7373	0.5672	Accept Null (H0)
Purchase Frequency	(4, 284)	1.2470	0.2912	Accept Null (H0)
Lifestyle Orientation	(3, 285)	0.5224	0.6672	Accept Null (H0)

Table 4. One-Way ANOVA: Demographic Profiles vs. Product Acceptability

Correlated Composite Variables	Pearson r	p-Value	Decision on H0
Composite Perception vs. Composite Acceptability	-0.0186	0.7534	Accept Null (H0)

Table 5. Correlation Analysis: Consumer Perception vs. Market Acceptability

5. Challenges Encountered by Consumers in Plant-Based Product Adoption

Challenge Sub-Category & Item Indicators	Mean Score	Descriptive Interpretation
5.1 Product Awareness		
1. Lack of clear info on the health benefits of tofu.	2.55	Agree / Moderate Challenge
2. Limited education on plant preparation prevents buying.	2.66	Agree / Moderate Challenge

Sub-Composite Mean	2.61	Agree / Moderate Challenge
5.2 Market Competition		
1. Fall back on meat brands because they are highly familiar.	2.85	Agree / Moderate Challenge
2. Difficult to choose tofu when meat is aggressively advertised.	2.89	Agree / Moderate Challenge
Sub-Composite Mean	2.87	Agree / Moderate Challenge
5.3 Accessibility / Convenience		
1. Inconvenient when delivery choices are unavailable.	2.74	Agree / Moderate Challenge
2. Traveling to Paciano Rizal limits buying frequency.	2.60	Agree / Moderate Challenge
Sub-Composite Mean	2.67	Agree / Moderate Challenge
5.4 Taste Skepticism		
1. Hesitation on whether tofu can taste as good as meat.	2.49	Disagree / Low Challenge
2. General social stigma that tofu snacks are bland.	2.52	Agree / Moderate Challenge
Sub-Composite Mean	2.51	Agree / Moderate Challenge
OVERALL CHALLENGES COMPOSITE MEAN	2.66	Agree / Moderate Challenge

Table 6. Evaluated Challenges in Plant-Based Product Adoption

CONCLUSIONS

1. Target Market Architecture: The primary consumer ecosystem for casual street snacks in Bay, Laguna is structurally anchored by low-budget students and highly active young professionals, ensuring a stable, highly recurring volume of weekly purchases.

2. Homogeneity of Acceptability: Because comprehensive ANOVA testing proved that demographic, socio-economic, and lifestyle variations cause no statistically significant differences in product acceptability ($p > 0.05$), the business can confidently deploy a singular, standardized marketing mix.

3. Pragmatism Over Ideology: The near-zero correlation ($r = -0.0186$) between general perception and market acceptability reveals that while consumers value green and healthy choices, they will not compromise on taste, physical convenience, or cost.

4. Primary Growth Bottlenecks: The true bottlenecks limiting market penetration for Tofu Goodies are not consumer resistance to tofu itself, but the aggressive advertising and familiarity of established meat brands (Mean = 2.87) combined with physical friction.

Recommendations and Strategic Marketing Action Plan

Core Findings / Barriers	Proposed Strategic Program	Operational Mechanism	Target KPI
Sensory Gaps & Taste Skepticism	The 'Flavor-First' Initiative	Incorporate natural plant binders to improve the internal chewiness of the tofu; optimize air-frying protocols to preserve the texture; launch rotating monthly sauce variations.	Achieve a 15% increase in repeat trial scores during consumer testing sessions.
Market Competition & Familiarity	'Shift the Snack' Campaign	Shift the brand's digital narrative away from restrictive diet or health-food labels; position the product as a fun, affordable alternative using student discounts.	Secure a 20% share of voice across localized student communication networks.
Location & Delivery Limits	Hub-and-Spoke Distribution Model	Expand beyond the physical storefront; partner with local tricycle networks to establish designated order drop-off points near major schools during peak hours.	Reduce customer travel times; secure 30% of total revenue from remote orders.
Promotion Realities	Hyperlocal Content Engine	Produce high-definition, short-form video content on TikTok, Instagram, and Facebook Reels that showcases the frying process, crunch factor, and genuine reactions.	Double social media engagement rates and inquiries within 90 days.

Table 7. Strategic Marketing Action Plan Matrix

REFERENCES

- Aschemann-Witzel, J., Gantriis, R. F., Fraga, P., & Perez-Cueto, F. J. (2020). Plant-based food innovation: Consumer insights, sustainability and health. *Trends in Food Science & Technology*, 101, 34-42.
- Bosson Research. (2025). Global Plant-Based Chicken Nugget Market Status and Outlook. *International Industry Reports*.
- Chandran, S., et al. (2023). Utilization of tofu in nutritional and sensory improvement of plant-based nuggets. *Journal of Food Science and Technology*, 60(4), 1120-1129.
- GlobeScan. (2024). Grains of truth: Global barriers to plant-based diets. *Retail Insights Forum*.
- Gyeongsang National University. (2023). Sensory evaluation of plant-based meat: Bridging the gap. *Foods*, 12(8), 1642.
- IMARC Group. (2025). Philippines Plant-Based Food Market: Size, Trends, and Industry Forecast (2026-2034). *Market Report Series*.
- MDPI: Sustainability. (2023). The perception of food quality and food value among the purchasing intentions of street foods in the Philippines. *Sustainability*, 15(12), 9410.
- Philippine Journal of Science. (2025). Assessment of nutritional quality of plant-based meat alternatives sold in the Philippines. *Philippine Journal of Science*, 154(1), 45-56.

9. PMC Bibliometric Review. (2025). Digital marketing strategies for sustainable food brands. *Journal of Cleaner Production*, 412, 137-149.
10. QAssurance. (2026). The challenge of plant-based foods: Safety and consumer barriers. *Food Quality and Safety Journal*.
11. Sorout, R., & Singh, A. (2026). Consumer behavior towards sustainable products: The SEE framework. *Atlantis Press Open Proceedings*, 78-89.
12. The Good Food Institute (GFI). (2025). *State of the Industry Report: Plant-based meat, seafood, eggs, and dairy*. Washington, D.C.
13. University of the Philippines Los Baños (UPLB) Repository. (2021). Consumer perception and purchase intention on plant-based meat brands among selected residents from Quezon City. Undergraduate Thesis Collection.