



# Analysis of factors affecting purchase decision of protein powder products I-CON Nutrition in jabodetabek

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## ABSTRACT

This study aims to identify and analyze the factors that influence consumer purchase decisions for I-CON NUTRITION Protein Powder in the Jabodetabek area. The factors analyzed include product quality, price, promotion, lifestyle, electronic word of mouth (E-WOM), and service quality. Data were collected through an online questionnaire distributed to 228 respondents and analyzed using SmartPLS 4.0.9.9. The results show that product quality, price, promotion, and service quality have a positive and significant impact on purchase decisions, while lifestyle and E-WOM also play a significant role, albeit with a smaller effect. This study provides managerial implications for I-CON NUTRITION to enhance product quality, strengthen promotional strategies, and improve customer service quality to increase consumer purchase decisions. The findings also suggest that the company should focus more on consumers' healthy lifestyles and leverage the influence of E-WOM in their marketing strategies.

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## INTRODUCTION

Globalization has significantly transformed consumer preferences, particularly in the fields of health and wellness. In Indonesia, this health trend has been further accelerated by technological advancements and broad access to health applications that provide nutritional information to support a healthy lifestyle (Mordor Intelligence, 2024). One increasingly popular product is protein powder, which is widely used to build muscle mass and accelerate post-exercise recovery. With the global protein raw material market projected to reach USD 47.4 billion by 2032, protein powder is not only a nutritional solution but also a substantial business opportunity in the food and beverage sector (Shahbandeh, 2024). The supplements market holds a significant share of the protein market globally, driven primarily by the sports nutrition sub-segment, which is projected to grow at a compound annual growth rate (CAGR) of 2.65% during the forecast period (Mordor Intelligence, 2024). This growth is supported by the expanding popularity of fitness and sports culture, along with a rising number of sports clubs and training facilities.

I-CON Nutrition, a leading supplement brand in Indonesia, has capitalized on this opportunity by developing high-quality protein powder products. Products like I-CON NUTRITION Protein Powder are formulated with protein isolates and concentrates, along with added BCAAs and glutamine, to meet the needs of health-conscious active consumers (*I-CON Nutrition*, 2024). With effective marketing strategies and a variety of appealing flavors, I-CON has successfully built a strong market presence in Indonesia. However, research on the factors influencing purchasing decisions for such products remains limited, despite the growing interest in protein powder since the COVID-19 pandemic (Mayasari et al., 2020).

Factors influencing the purchasing decisions of protein powder in Indonesia include price, product quality, promotion, and consumer health awareness. Studies have shown that health-conscious consumers tend to prioritize high-quality products that offer tangible benefits, while effective promotional strategies enhance product appeal (Mordor Intelligence, 2024; Sari et al., 2021). Additionally, online reviews (E-WOM) play a crucial role in influencing purchasing decisions in the digital era (Arta & Yasa, 2019). With increasing consumer spending in Indonesia, products like I-CON Protein Powder hold substantial potential for further growth (Juhro & Iyke, 2020).

Various studies highlight that factors such as product quality, promotion, brand image, lifestyle, health awareness, and service quality significantly impact purchasing decisions across industries. Anwar et al. (2023) found that promotion was the dominant factor in Samsung smartphone purchases, while Geovanca et al. (2023) and Tran et al. (2020) emphasized the role of product development and health awareness in purchasing decisions for e-cigarettes and fresh fruits. Ida and Hidayati (2020) and Kusumaradya et al. (2021) demonstrated the importance of brand image and service quality in influencing purchasing decisions for beauty products and coffee shops. Rachmawati et al. (2019) identified location as the primary factor in residential property purchases, while Purwanti et al. (2023) highlighted the role of promotion and product quality in Chatime purchases. These findings underscore the relevance of combining these factors to shape consumer behavior and develop effective marketing strategies.

This study aims to explore the factors influencing purchasing decisions for I-CON Nutrition protein powder in Indonesia, with the goal of helping companies develop better marketing strategies. By understanding consumer behavior, the research seeks to offer insights that can benefit both I-CON Nutrition and the broader protein supplement industry in responding to health trends and market competition (Widiyanto et al., 2023).

## RESEARCH METHOD

This study investigates the factors that influence purchasing decisions in Indonesia's protein powder market, focusing on I-CON Nutrition. It analyzes variables like product quality, price, promotion, lifestyle, E-WOM, health consciousness, and service quality, with the purchase decision as the dependent variable. Previous research highlights that product attributes, such as quality and price, significantly impact consumer trust and awareness, which affect purchasing behavior (Sari et al., 2021). The study targets individuals in Jabodetabek who have purchased I-CON Nutrition protein powder, aged 17 and older, in accordance with Indonesia's legal definition of adulthood (Pasal 150 UU No. 1 Tahun 2023).

This quantitative study employs a descriptive approach to explore the relationships between variables in real-world contexts (Sugiyono, 2015). A survey methodology was used, featuring 36 questionnaire items designed to measure respondents' perceptions of the factors affecting their purchase decisions. The sample consists of 228 respondents, exceeding the minimum requirement determined by the inverse square root method (Kock & Hadaya, 2018). This ensures

robust statistical power for PLS-SEM, a method suitable for complex and exploratory research (Hair et al., 2022).

Data collection utilized primary and secondary sources. Primary data were obtained through an online survey distributed via Google Forms, targeting I-CON Nutrition customers who consumed the product within the last year. Secondary data, gathered from journals, books, and official websites, provided theoretical support and contextual insights (Sekaran & Bougie, 2016). Responses were measured using a five-point Likert scale, which captures the intensity of respondents' agreement or disagreement with statements related to the study variables (Sugiyono, 2015). This interval scale facilitated detailed comparisons and analysis of consumer preferences and behavior.

The analysis evaluated the validity and reliability of the data to ensure accuracy and consistency. Validity testing included content, convergent, and discriminant validity, with acceptable thresholds for Average Variance Extracted (AVE) and outer loading values (Hair et al., 2022). Reliability was measured using Cronbach's alpha and composite reliability, both exceeding the recommended minimum of 0.70 (Sekaran & Bougie, 2016). PLS-SEM analyzed variable relationships, assessing explanatory power ( $R^2$ ), effect size ( $F^2$ ), and predictive relevance ( $Q^2$ ).

The study's IPMA results highlight product quality, price, and promotion as key priorities for enhancing purchasing decisions in Indonesia's protein powder market. These insights enable I-CON Nutrition to refine marketing and product strategies, contributing to a deeper understanding of consumer behavior in emerging markets (Sarstedt et al., 2022).

## RESULTS AND DISCUSSIONS

This study follows the sampling guidelines of Hair et al. (2022) and Kock and Hadaya (2018), using a sample size of 228 respondents who had purchased I-CON NUTRITION protein powder in Jabodetabek. The demographic analysis shows that most respondents were male (80%), aged 25–34 years (55%), with 80% holding a bachelor's degree, and 49% were private employees. The majority (61%) resided in Jakarta. Descriptive statistics were used to analyze the data, with mean, standard deviation, and other measures providing insights into respondent perceptions. A Likert scale was employed to assess agreement levels on various factors related to purchasing behavior (Sekaran & Bougie, 2016).

### Descriptive Statistics of Research Variables

This study analyzed factors influencing consumer purchase decisions for I-CON NUTRITION protein powder, focusing on product quality, price, promotion, lifestyle, E-WOM, and service quality. Respondents generally had positive experiences, with the highest ratings for satisfaction (4.136) and meeting nutritional needs (4.031). Product quality (4.052), price (3.812), and promotion (4.066), particularly "Buy 1 Get 1" offers, were positively rated. E-WOM (3.773) also played a role, with high product ratings being most influential. Lifestyle (4.009) was positively rated, indicating it influenced decisions, while service quality (3.921) was rated well, though there was a minor gap in perceptions of production equipment (3.706). Standard deviations ranged from 0.913 to 1.093, reflecting variability across the variables.

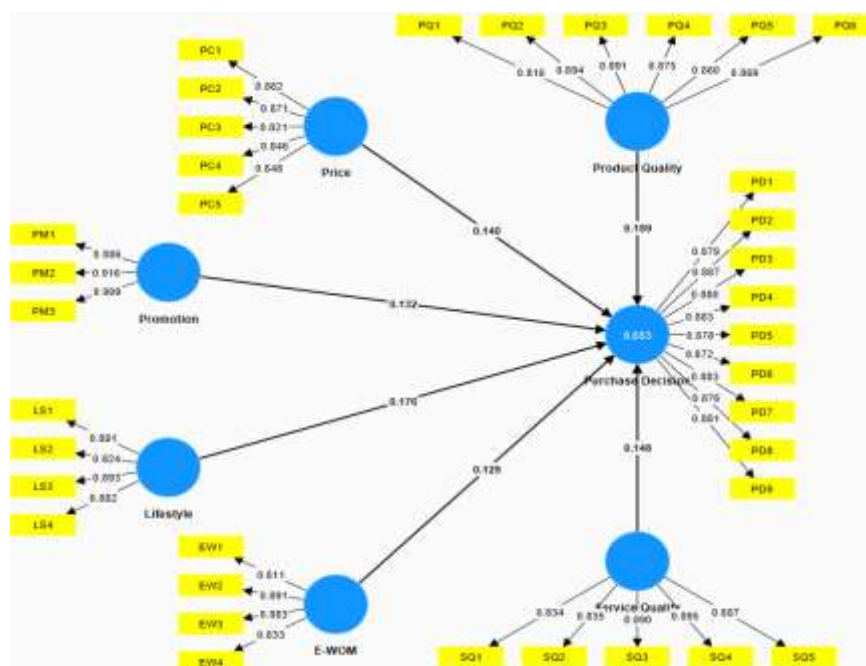
**Table 1.** Descriptive Statistics of Factors Influencing Consumer Purchase Decisions for I-CON NUTRITION Protein Powder

Variable	Average Score	Highest Indicator	Lowest Indicator	Standard Deviation (SD)
Purchase Decision	4.075	Satisfaction (4.136)	Fulfills Supplement Needs (4.031)	0.964 - 1.010
Product Quality	4.052	Meets Nutritional	Uses High-Quality	0.913 - 0.982

		Needs Quickly (4.167)	Raw Materials (3.759)	
Price	3.812	Consistent Value (4.096)	Fair Pricing (3.566)	0.945 - 1.037
Promotion	4.066	"Buy 1 Get 1" Offers (4.101)	Free Samples (4.022)	0.968 - 1.015
Lifestyle	4.009	Healthy Lifestyle Influence (4.120)	Minor Influence on Decision (4.032)	0.912 - 0.998
E-WOM	3.773	High Product Ratings (4.039)	Frequent Social Media Interactions (3.395)	0.950 - 1.093
Service Quality	3.921	Customer Support Satisfaction (4.070)	Quality of Production Equipment (3.706)	0.980 - 1.020

**Outer Model Evaluation**

The first step in the PLS-SEM data analysis was assessing the outer model for validity and reliability. All 36 indicators had outer loadings exceeding 0.7, confirming their validity. Variables such as E-WOM, Product Quality, Price, Promotion, and Purchase Decision displayed high outer loadings ranging from 0.8 to 0.9, indicating excellent measurement validity.



**Figure 1.** Outer Model Actual Test

Convergent validity was confirmed as AVE exceeded 0.5 and outer loadings surpassed 0.7. Discriminant validity was established through the Fornell-Larcker Criterion, showing construct correlations below the square root of AVE, and HTMT values below 0.9, ensuring construct distinctiveness.

Reliability was measured using both Cronbach's alpha and composite reliability. The results indicated that all constructs met the reliability threshold, with Cronbach's alpha and composite reliability values above 0.7. For instance, the composite reliability for Product Quality was 0.938, and for Purchase Decision, it was 0.964, indicating high internal consistency. These values suggest that the constructs are reliable, and repeated measurements on the same subjects

would yield consistent results. Composite reliability provided a more accurate estimate of internal consistency, overcoming the limitations of Cronbach’s alpha, especially with the varying number of items per scale.

**Inner Model Evaluation**

The internal model evaluation tested the relationships between latent constructs using several assessments: (1) R-Square for endogenous constructs, (2) path coefficients for hypothesis testing, (3) effect size (F-Square), and (4) predictive relevance (Q-Square). Hypothesis testing was performed using one-tailed tests and bootstrapping in SmartPLS, a non-parametric technique to assess path coefficient significance (Memon et al., 2021). Model fit was evaluated using Variance Inflation Factor (VIF) and R-Square to assess how well the model explains and predicts relationships between constructs (Hair et al., 2021).

**Table 2.** Multicollinearity Test Results

	E-WOM	Lifestyle	Price	Product Quality	Promotion	Purchase Decision	Service Quality
E-WOM						2.230	
Lifestyle						2.113	
Price						2.098	
Product Quality						2.228	
Promotion						1.757	
Purchase Decision							
Service Quality							2.201

Multicollinearity was assessed using VIF, with values above 5 indicating potential issues. The results showed no significant multicollinearity, as all VIF values were below 5, ensuring accurate and reliable path estimates (Hair et al., 2022).

The R<sup>2</sup> value for purchase decision was 0.553, indicating that 55.3% of the variance in purchase decisions was explained by factors like product quality, price, promotion, lifestyle, E-WOM, and service quality, suggesting moderate explanatory power (Hair et al., 2022).

**Table 3.** Effect Size

	F <sup>2</sup>
E-WOM → Purchase Decision	0.017
Lifestyle → Purchase Decision	0.033
Price → Purchase Decision	0.021
Product Quality → Purchase Decision	0.036
Promotion → Purchase Decision	0.022
Service Quality → Purchase Decision	0.022

The effect size (F<sup>2</sup>) analysis revealed that most independent variables had a small impact on purchase decisions. E-WOM, price, and service quality had F<sup>2</sup> values below 0.02, indicating no significant effect. Lifestyle, product quality, and promotion showed small effects (F<sup>2</sup> between 0.02 and 0.15), suggesting a minor influence on purchase decisions. These findings imply that while some factors affect purchasing behavior, their overall impact is limited, and other unexamined factors may play a more significant role.

The Q<sup>2</sup> value for the purchase decision variable was 0.424, indicating a moderate predictive relevance, as it falls within the 0.25–0.5 range (Hair et al., 2022).

**Table 4.** Summary of Hypothesis Test Results

Hipotesis	Original Sample	T-Statistics	P-Value	Result
H <sub>1</sub> : Product Quality → Purchase Decision	0,189	2,437	0,007	Supported

H <sub>2</sub> : Price → Purchase Decision	0,140	2,004	0,023	Supported
H <sub>3</sub> : Promotion → Purchase Decision	0,132	2,490	0,006	Supported
H <sub>4</sub> : Lifestyle → Purchase Decision	0,176	2,614	0,004	Supported
H <sub>5</sub> : E-WOM → Purchase Decision	0,129	2,382	0,009	Supported
H <sub>6</sub> : Service Quality → Purchase Decision	0,148	2,468	0,007	Supported

All hypothesized relationships – product quality, price, promotion, lifestyle, E-WOM, and service quality – exhibited significant positive effects on purchase decisions, with P-values ranging from 0.004 to 0.023, thereby supporting the proposed hypotheses (Hair et al., 2022).

### Importance-Performance Map Analysis

Based on the IPMA analysis, product quality (importance: 0.189, performance: 76.473) and lifestyle (importance: 0.176, performance: 75.631) fall into Quadrant 2 (high importance, high performance), making them key strengths that should be maintained and leveraged. Price (importance: 0.140, performance: 70.894), E-WOM (importance: 0.129, performance: 70.422), and service quality (importance: 0.148, performance: 73.584) are in Quadrant 3 (low importance, low performance), requiring focused improvements to enhance their impact. Meanwhile, promotion (importance: 0.132, performance: 76.631) lies in Quadrant 4 (low importance, high performance), indicating it is effective but not a priority for additional resources. Notably, no variables fall into Quadrant 1 (high importance, low performance), suggesting there are no critical weaknesses requiring urgent intervention. This analysis provides actionable insights for I-CON Nutrition to optimize strategies, focusing on improving weaker areas while maintaining high-performing variables (Sarstedt et al., 2022).



Figure 2. IPMA Construct Results

## CONCLUSION

The factors influencing consumer purchase decisions for I-CON Nutrition Protein Powder in the Jabodetabek area reveal the importance of product quality, price, promotion, lifestyle, electronic word-of-mouth (E-WOM), and service quality. Product quality and promotion emerge as the most significant drivers, highlighting the need for sustained excellence in these areas. While E-WOM and lifestyle show a lesser but still positive impact, they underline the growing importance of digital engagement and alignment with health-conscious consumer behaviors.

High product quality ensures that nutritional needs are met effectively, while promotional strategies attract and retain customers. Service quality, though positively rated, has room for improvement in areas such as production equipment to strengthen consumer trust further.

Lifestyle and E-WOM factors also shape purchasing decisions, emphasizing the importance of a strong digital presence and targeted marketing strategies that appeal to health-focused demographics.

The statistical analysis supports the reliability and validity of these findings, with a moderate explanatory power indicated by the R-squared value of 55.3%. Although product quality and promotion are strong drivers, smaller effect sizes for price, E-WOM, and service quality suggest that additional efforts in these areas could yield greater consumer impact. The findings imply that other unexamined factors may also play a role in purchase decisions.

I-CON Nutrition can enhance its market presence by maintaining a focus on high-performing factors while addressing areas with improvement potential. Prioritizing consistent product quality, leveraging promotions, and improving customer experiences will strengthen customer loyalty. Furthermore, capitalizing on digital platforms to amplify E-WOM and catering to health-conscious consumers will position the brand competitively in Indonesia's growing protein powder market.

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