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Product Quality, Nutrition Label, And Purchase Decision of Nutrition Bars: The Mediating Role of Healthy Lifestyle Within the Stimulus–Organism– Response Framework

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ABSTRACT: This study examines how product quality and nutrition labels influence purchase decisions of nutrition bars, with healthy lifestyle orientation positioned as a mediating mechanism within the Stimulus–Organism–Response (S–O–R) framework. Using a quantitative approach, data were collected from 105 consumers of nutrition bar products in Surakarta and analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM). The results indicate that product quality has a positive and significant direct effect on purchase decisions, while nutrition labels influence purchase decisions both directly and indirectly through healthy lifestyle orientation. Furthermore, healthy lifestyle orientation significantly mediates the relationship between nutrition labels and purchase decisions but does not mediate the effect of product quality, indicating a selective mediation mechanism. These findings suggest that functional product attributes operate through a utilitarian pathway, whereas informational cues such as nutrition labels shape consumer behavior through internalized health values. The study contributes to consumer behavior literature by extending the application of the S–O–R framework in the healthy Nutrition context and offers practical insights for Nutrition producers and policymakers on integrating product quality enhancement with effective nutritional communication to promote sustainable healthy consumption.

KEYWORDS: Product Quality; Nutrition Label; Healthy Lifestyle; Purchase Decision; S–O–R Theory

I. INTRODUCTION

The healthy Nutrition industry has experienced rapid growth in recent years as public awareness of health risks and the importance of nutritious consumption patterns increases, especially among urban consumers of productive age. However, various studies have shown that increased health awareness does not always lead to consistent purchasing decisions for healthy products, resulting in an attitude–behavior gap in healthy Nutrition consumption behavior (Okpiaifo et al., 2023; Chung et al., 2022). In the context of practical products such as nutrition bars, consumers are faced with two main stimuli: product quality and nutritional information on the nutrition label, whose mechanisms of influence on purchase decisions are not yet fully understood. Recent studies show that product quality—which includes taste, texture, and functional benefits—tends to be evaluated directly and rationally, while nutrition labels are more often processed through cognitive mechanisms related to understanding and interpreting health information (Mehta et al., 2024; Tian et al., 2023). Although front-of-pack nutrition labeling has been shown to increase the selection of healthier products, its effectiveness greatly depends on the consumer context, nutrition literacy levels, and individual health value orientations (Trieu et al., 2023; Zepeda et al., 2024). On the other hand, a healthy lifestyle is considered an important psychological factor that can bridge the influence of external stimuli on purchasing behavior, yet empirical findings indicate that the mediating role of a healthy lifestyle does not always work uniformly across all influence pathways, as consumers are often more influenced by the utilitarian benefits of the product than by internalizing longterm health values (García-Salirrosas et al., 2025; Li & Shan, 2025). In addition, there is still a lack of research integrating product quality, nutrition labels, healthy lifestyle, and purchasing decisions into a single comprehensive framework based on the Stimulus–Organism–Response model and Theory of Planned Behavior, particularly in the context of healthy Nutrition consumers in mid-sized Indonesian cities, which underscores the importance of this research in clarifying the psychological and behavioral mechanisms underlying nutrition bar purchase decisions among urban communities.

To address these research issues, this study employs an integrated conceptual framework that combines Stimulus– Organism–Response (S–O–R) Theory and the Theory of Planned Behavior (TPB), reinforced by the concept of a health-oriented lifestyle in modern consumer behavior. Within the Stimulus–Organism–Response (S–O–R) framework, product quality and nutrition label are positioned as external stimuli received by consumers. Product quality represents a rational–utilitarian stimulus directly related to consumption experience, such as taste, texture, ingredient safety, and functional benefits, which can theoretically trigger direct evaluations of product value (Mehta et al., 2024). Meanwhile, the nutrition label functions as an informational stimulus that conveys health cues and encourages consumers' cognitive processes in assessing product alignment with personal health goals (Tian et al., 2023; Zepeda et al., 2024). These two stimuli are not assumed to operate in the same way but rather through different psychological pathways. The organism component in the S–O–R model is represented by a healthy lifestyle, understood as the values orientation, attitudes, and individual habits in maintaining health through consumption patterns, physical activities, and product choices. This concept explains how external stimuli are internalized into more stable motivation and preferences. Recent literature shows that consumers with a strong healthy lifestyle tend to respond more to nutrition information than merely to sensory attributes, so a healthy lifestyle serves as a selective mediating mechanism, particularly in the nutrition label pathway (García-Salirrosas et al., 2025; Li & Shan, 2025).

Furthermore, the Theory of Planned Behavior (TPB) is used to reinforce the understanding of the decision-making process. In TPB, a healthy lifestyle reflects a combination of attitude toward healthy consumption and perceived behavioral control in selecting nutritious products. Consumers who hold positive attitudes toward healthy living and feel able to control their Nutrition choices are more likely to translate intentions into actual purchase decisions (Ajzen, 1991; Chung et al., 2022). TPB integration helps explain why product quality can directly influence purchase decisions—through the evaluation of utility and satisfaction—while nutrition labels are more effective when processed through health awareness and orientation.

Thus, the concepts used in this study allow the research problem to be solved systematically by explaining the differences in the mechanisms of influence between product quality and nutrition labels, as well as placing a healthy lifestyle as a key psychological mechanism that bridges external stimuli and behavioral responses. This approach not only provides a more comprehensive theoretical explanation of healthy Nutrition purchasing behavior but also offers an empirical framework relevant to understanding the dynamics of healthy Nutrition consumption in the context of Indonesia's urban society. The distinctiveness of this study compared to previous studies lies in its conceptual approach, analytical mechanisms, and empirical context used to explain healthy Nutrition purchasing behavior. First, this research not only examines the direct influence of product quality and nutrition labels on purchasing decisions but also explicitly differentiates the psychological mechanism pathways of these two stimuli. Product quality is treated as a utilitarian stimulus that works directly through sensory and functional evaluations, while nutrition labels are positioned as informational stimuli requiring cognitive processing and internalization of health values before influencing purchasing decisions. This approach goes beyond previous studies, which generally examine product attributes partially or assume homogeneous mechanisms of influence (Mehta et al., 2024; Tian et al., 2023).

Second, the main uniqueness of this study lies in testing the role of a healthy lifestyle as a selective mediator, rather than as a universal mediator. Unlike many previous studies that positioned healthy lifestyle or health consciousness as a direct variable or moderator, this research demonstrates that a healthy lifestyle only mediates the effect of nutrition labels on purchase decisions, but does not mediate the influence of product quality. This finding provides a significant theoretical contribution by showing that internal consumer processes are stimulus-specific, thereby enriching the development and refinement of the Stimulus–Organism–Response (S–O–R) theory in the context of healthy Nutrition consumption (García-Salirrosas et al., 2025; Li & Shan, 2025).

Third, this study operationally integrates the Stimulus–Organism–Response (S–O–R) framework and the Theory of Planned Behavior (TPB) into a comprehensive empirical model. This integration allows for a deeper explanation of how attitudes, value orientation, and perceived behavioral control—as reflected in a healthy lifestyle—may or may not bridge the relationship between external stimuli and behavioral responses. Such an integrative approach is still relatively rarely applied simultaneously in healthy Nutrition research, especially in the context of developing countries (Chung et al., 2022; Sun et al., 2022).

Fourth, from an empirical context, this study focuses on Nutrition bar products in a medium-sized Indonesian city (Surakarta), which has different market characteristics, levels of nutritional literacy, and consumption dynamics compared to large metropolitan cities or developed countries that dominate the international literature. Most previous research has focused on organic or healthy Nutrition products in developed countries, making empirical evidence from the local Indonesian context still limited (Trieu et al., 2023; Zepeda et al., 2024). Thus, this study makes an important contextual contribution to the global literature by showing that healthy Nutrition consumer behavior mechanisms can be contextual and are not always universal.

Overall, the novelty of this study lies in its ability to explain the differences in the influence pathways of product

attributes and nutritional information, asymmetrically test psychological mediation, and ground modern consumer behavior theory within the context of healthy Nutrition in Indonesia. This contribution not only enriches the development of consumer behavior theory, but also provides more precise strategic implications for industry players and policymakers in designing healthy consumption interventions based on the latest empirical evidence. Based on the background and problem identification described above, this research focuses on understanding how product quality and nutrition labels influence the purchase decisions of Nutrition bar products among consumers in Surakarta, both directly and through the psychological mechanism of a healthy lifestyle. The main issues examined are the extent to which product quality and nutrition labels play a role in shaping consumers' healthy lifestyles, and how those healthy lifestyles drive the purchase of healthy Nutritions. Therefore, this study aims to analyze the influence of product quality and nutrition labels on purchase decisions, to test the effect of these two variables on a healthy lifestyle, as well as to...assess the influence of a healthy lifestyle on the purchase decisions of Nutrition bar products. In addition, this study specifically aims to test the role of a healthy lifestyle as a mediating variable in the relationship between product quality and purchase decisions, as well as between nutrition labels and purchase decisions. By integrating the research questions and objectives into a single analytical framework, this study is expected to provide a comprehensive empirical understanding of the mechanisms of healthy Nutrition consumer behavior within the Stimulus–Organism–Response framework and the Theory of Planned Behavior, while also offering both theoretical and practical contributions to the development of marketing strategies for healthy Nutrition products in the context of urban Indonesian society.

II. LITERATURE REVIEW

A. Stimulus–Organism–Response (S–O–R) Theory

This study uses the Stimulus–Organism–Response (S–O–R) Theory as the foundational theory underlying the entire model of inter-variable relationships. The S–O–R theory explains that external stimuli (stimulus) received by individuals influence their internal psychological state (organism), which in turn shapes certain behavioral responses (response) (Mehrabian & Russell, 1974; Liu et al., 2020). In the context of this study, product quality and nutrition label act as external stimuli received by Nutrition bar consumers in Surakarta City. Product quality represents a utilitarian stimulus evaluated through sensory experience and functional benefits, while nutrition label serves as an informational stimulus providing health cues and triggering cognitive processing in consumers (Sun et al., 2022; Mehta et al., 2024). These two stimuli are then processed psychologically and reflected in a healthy lifestyle as the organism, representing value orientation, attitude, and consumer awareness regarding the importance of maintaining health through consumption choices (García-Salirrosas et al., 2025; Okpiaifo et al., 2023). A healthy lifestyle serves as an internal mechanism bridging the influence of product attributes and nutritional information on actual consumption behavior. At the final stage, this internal process results in a response in the form of a purchase decision for Nutrition bar products, reflecting consumers' actual actions in choosing products they consider aligned with their health goals (Chung et al., 2022; Li & Shan, 2025). Thus, the S–O–R theory provides the most comprehensive theoretical framework for explaining the dynamics of the influence of product quality and nutrition label on purchase decisions, while also allowing an understanding of the different pathways of stimulus influence mechanisms in healthy Nutrition purchasing behavior among urban Indonesian consumers.

B. Purchase Decision

Purchase decision is the final result of the consumer's evaluation process in assessing and selecting the product that best fits their needs, preferences, and personal goals. In the context of healthy Nutritions such as nutrition bars, purchase decisions are influenced not only by price and convenience considerations, but also by perceptions of health benefits, product quality, and trust in the nutrition information provided by producers. Recent studies show that consumers are increasingly rational and reflective in making healthy Nutrition purchase decisions by balancing functional benefits, health value, and consumption satisfaction (Chung et al., 2022; Nguyen et al., 2022).

Within the Stimulus–Organism–Response (S–O–R) framework, purchase decisions are positioned as the response that occurs after consumers process external stimuli through their internal psychological states. Purchase decisions can be directly influenced by utilitarian stimuli such as product quality, as well as indirectly through the internalization of health values reflected in a healthy lifestyle, especially when consumers evaluate the nutrition label (García-Salirrosas et al., 2025; Li & Shan, 2025). In this study, purchase decisions are measured using indicators such as confidence that the nutrition bar is a healthy Nutrition choice, purchasing because of health benefits, satisfaction with the purchase, intention to repurchase, and the tendency to recommend the product to others as positive word-of-mouth (Chung et al., 2022; Li & Shan, 2025).

C. Product Quality

Product quality is an important determinant in consumer purchasing behavior, especially for healthy Nutrition

products such as nutrition bars. Conceptually, product quality reflects a product's ability to meet consumer expectations through sensory, functional, and reliability attributes. Empirical studies show that consumers assess the quality of healthy Nutritions not only by taste and texture, but also by nutritional content, ingredient safety, and product consistency, which ultimately increase perceived value and reduce perceived risk (Mehta et al., 2024; Nguyen et al., 2022).

Within the S–O–R framework, product quality is positioned as a utilitarian stimulus that tends to directly influence purchase decisions as product benefits are tangibly felt during consumption. Sensory and functional attributes have often been proven to be the main triggers for purchase without having to go through a complex value internalization process (García-Salirrosas et al., 2025; Rai, 2023). Therefore, product quality is measured through indicators such as consistent taste and texture, the suitability of nutritional content with claims, safety and naturalness of ingredients, attractive and hygienic packaging, and the alignment of quality with price (Mehta et al., 2024; Sun et al., 2022).

D. Nutrition Label

Nutrition label functions as an informational tool that communicates a product's nutritional content and health benefits to consumers. For healthy Nutrition products, the nutrition label helps consumers understand the nutritional composition such as calories, sugar, protein, fiber, and fat, thus enabling more informed and rational decision-making. International studies show that labels that are clear and easy to understand can increase nutrition literacy and strengthen perceptions of product transparency and credibility (Tian et al., 2023; Trieu et al., 2023).

Within the S–O–R framework, the nutrition label is positioned as an informational stimulus operating through consumers' cognitive and evaluative processes. Nutritional information acts as a health cue that triggers consumers to reflect on the alignment of the product with their healthy lifestyle orientation (Zepeda et al., 2024; Sun et al., 2022). The effectiveness of nutrition labels is often mediated by psychological factors such as health consciousness and a healthy lifestyle before influencing purchase decisions (García-Salirrosas et al., 2025; Li & Shan, 2025). Accordingly, nutrition labels are measured through indicators of information clarity, completeness of nutritional data, information credibility, ease of product comparison, and the belief that the product supports a healthy lifestyle (Afroza et al., 2024; Tian et al., 2023; USDA FAS, 2024).

E. Healthy Lifestyle

A healthy lifestyle reflects the orientation of values, attitudes, and behaviors of individuals that focus on efforts to maintain and improve health through dietary patterns and physical activity. In consumer behavior, a healthy lifestyle indicates an individual's commitment to transforming health consciousness into tangible actions, including choosing Nutrition products that support long-term well-being. Recent studies show that consumers with a strong healthy lifestyle are more selective and sensitive toward nutritional content and the health benefits of products (Okpiaifo et al., 2023; GarcíaSalirrosas et al., 2025).

Within the S–O–R framework, healthy lifestyle is positioned as the organism mediating between external stimuli and behavioral response. A healthy lifestyle affects how consumers interpret product quality and the nutrition label before making purchase decisions. Recent studies show that a healthy lifestyle tends to strengthen the influence of the nutrition label on purchase decisions, while for utilitarian attributes such as the product's sensory quality, its influence is not always dominant (Li & Shan, 2025; Zepeda et al., 2024). Healthy lifestyle is measured through attention to nutritious intake, the habit of reading nutrition labels, avoidance of Nutritions high in sugar and fat, regular physical activity, and prioritizing a healthy life (García-Salirrosas et al., 2025; Sun et al., 2022; Okpiaifo et al., 2023).

III. METHODOLOGY

A. Methodology

This research utilizes a quantitative approach with an explanatory research design that is causal in nature, aimed at examining the influence of product quality and nutrition labels on purchasing decisions of Nutrition bars, with a healthy lifestyle as a mediating variable. This approach was chosen as it is suitable for explaining the mechanism of influence between variables within the Stimulus–Organism–Response (S–O–R) framework, widely used in contemporary consumer behavior research to explain how marketing stimuli are psychologically processed before resulting in behavioral responses (Zhang et al., 2021; Cai et al., 2023; Roh & Park, 2024). The research population consists of Nutrition bar consumers in Surakarta City who have purchased and consumed the product in the past six months. Sample collection is done using purposive sampling, with criteria including respondents being at least 17 years old, residing or active in Surakarta, and having experience purchasing Nutrition bars. The sample size is set at 150 respondents, in accordance with the latest recommendations for PLS-SEM analysis for mediation models with more than 15 indicators (Hair et al., 2022: 18; Sarstedt et al., 2022).

Data was collected using a structured questionnaire with a five-point Likert scale. The research instrument is based

on indicators of product quality, nutrition label, healthy lifestyle, and purchase decision variables, adapted from the latest healthy Nutrition consumer behavior studies (Mehta et al., 2024; Tian et al., 2023; García-Salirrosas et al., 2025). Data collection was conducted online to reach respondents more broadly and efficiently. Data analysis was performed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with the help of SmartPLS 4.0. This method was chosen due to its ability to analyze complex causal relationships, including mediation effects, and its lack of requirement for normal data distribution (Hair et al., 2022: 20; Kock & Hadaya, 2023).

B. Measurement Model Testing (Outer Model)

The outer model testing was conducted to assess the validity and reliability of latent constructs. Convergent validity was evaluated through a loading factor value ≥ 0.70 and Average Variance Extracted (AVE) ≥ 0.50. The construct's reliability was tested using Composite Reliability and Cronbach's Alpha, with a minimum value of 0.70 as the eligibility criterion. Discriminant validity was evaluated using the Fornell–Larcker criteria and cross-loading to ensure conceptual differences between constructs (Hair et al., 2022: 112; Henseler et al., 2021).

C. Structural Model Testing (Inner Model)

The inner model testing aims to assess the strength and direction of relationships between latent variables. Inner model evaluation includes path coefficient analysis, coefficient of determination (R^2), and predictive relevance (Q^2). The R^2 value indicates the proportion of variation in the endogenous construct that can be explained by the exogenous construct, while a Q^2 value > 0 indicates that the model has good predictive capability (Sarstedt et al., 2022; Roh & Hong, 2024).

D. Hypothesis and Mediation Effects Testing

Hypothesis testing was conducted using the bootstrapping procedure, with the significance criteria t-statistics > 1.96 and p-value < 0.05. Mediation analysis was performed by comparing direct and indirect effects to determine whether a healthy lifestyle serves as partial or full mediation (Zhao et al., 2024).

E. Model Suitability Test

Model suitability was evaluated using the Standardized Root Mean Square Residual (SRMR), with an SRMR < 0.08 criterion as an indicator of a good and suitable model for hypothesis testing (Hair et al., 2022: 200; Ran & Ding, 2023).

IV. RESULTS AND DISCUSSION

A. Respondent profile

Based on the diagram of MSME respondent characteristics, it is known that the majority of respondents come from micro, small, and medium enterprises categories with a relatively balanced proportion, indicating representation of all MSME scales in this study. In terms of business duration, the majority of respondents have been running their business for 1–3 years, indicating that many MSME players are in the early business development phase that still requires adaptation and capacity strengthening. Based on the number of employees, most businesses still employ 1–2 people, reflecting the characteristics of micro-scale MSMEs with a simple organizational structure. In terms of the last education, the respondents are dominated by high school graduates, followed by diploma and bachelor's degree holders, indicating a middle education level as the primary background of business actors. Meanwhile, in terms of owner age, the age group of 36–45 years dominates, reflecting a productive age with work experience and maturity in business decision-making. Overall, these characteristics describe an MSME profile relatively mature in terms of owner age but still developing regarding business scale, making it relevant for analysis in the context of performance improvement and adaptation to business development strategies.

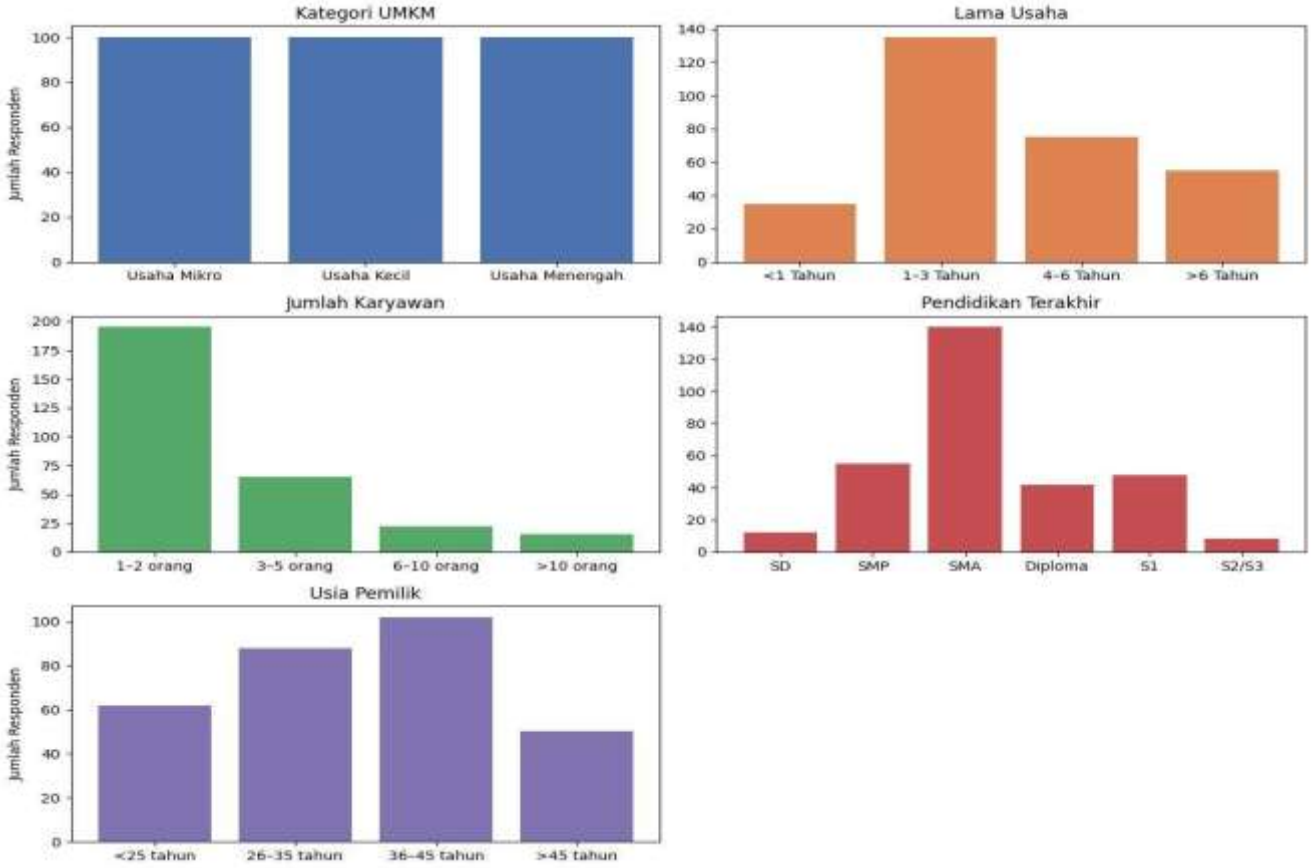


Diagram 1: Respondent Profile
Source: PLS Output Data, 2025

B. Validity and Reliability Tests

This section presents the empirical results obtained from the PLS-SEM analysis and discusses their theoretical and practical implications within the context of healthy Nutrition consumption behavior, particularly in the nutrition bar market. The findings are systematically organized to address the direct and mediating relationships proposed in the research model, providing a comprehensive evaluation of how product quality and Nutrition labels function as external stimuli, how healthy lifestyle orientation operates as an internal psychological mechanism, and how these factors collectively influence purchase decision. The results encompass an analysis of respondent characteristics, validity and reliability assessments, structural model estimation, and hypothesis testing. Each empirical finding is subsequently interpreted by integrating relevant insights from contemporary consumer behavior and healthy Nutrition literature, enabling a critical assessment of how the evidence supports, refines, or extends existing theoretical perspectives, particularly within the Stimulus– Organism–Response (S–O–R) framework. The following subsections elaborate these results in a structured manner, highlighting the study's contributions to both theory and managerial practice in the healthy Nutrition sector.

1. Convergent validity and reliability testing results

The results of the convergent validity and reliability tests show that all indicators on the variables of product quality, Nutrition label, healthy lifestyle, and purchase decisions have factor loading values above 0.70, thus strongly representing latent constructs and meeting the criteria for convergent validity. The Composite Reliability (CR) values for all constructs are also above the minimum threshold of 0.70, indicating a very good level of internal consistency. Additionally, the Average Variance Extracted (AVE) values for each variable have exceeded the threshold of 0.50, indicating that the constructs can explain more than half of the variance in their indicators. The Variance Inflation Factor (VIF) test results, all below the value of 5, confirm the absence of multicollinearity issues among the indicators. Overall, these findings confirm that the measurement model in this study is valid and reliable, making it suitable for further inner model analysis and hypothesis testing within the Stimulus–Organism–Response (S–O–R) framework.

Table 1: Convergent Validity and Reliability Testing Results

Construct / Latent Variable	Indicator (Code)	Factor Loading	CR	AVE	VIF
Product Quality (X1)	X1.1 – X1.6	0.740 – 0.847	0.921	0.660	1.748 – 2.609
Nutrition Label (X2)	X2.1 – X2.5	0.756 – 0.845	0.892	0.623	1.689 – 2.176
Healthy Lifestyle (MED)	MED1 – MED5	0.817 – 0.894	0.929	0.724	2.319 – 3.294
Purchase Decision (Y)	Y1 – Y5	0.712 – 0.879	0.910	0.671	1.562 – 3.279

Source: PLS Output Data, 2025

2. Discriminant validity testing results

The results of discriminant validity testing using the Fornell–Larcker criterion show that all constructs in the research model have met the criteria for discriminant validity. The square root value of the Average Variance Extracted (AVE) for each construct—which is indicated by the diagonal values—is higher than the correlation values between the other constructs. This indicates that each variable, namely product quality, food label, healthy lifestyle, and purchase decision, has a clear conceptual uniqueness and is able to explain its own indicators more strongly compared to the other constructs. Thus, it can be concluded that there are no issues of construct overlap in the research model, and each latent variable empirically measures a different concept, so the measurement model is declared to have discriminant validity and is suitable for further structural analysis.

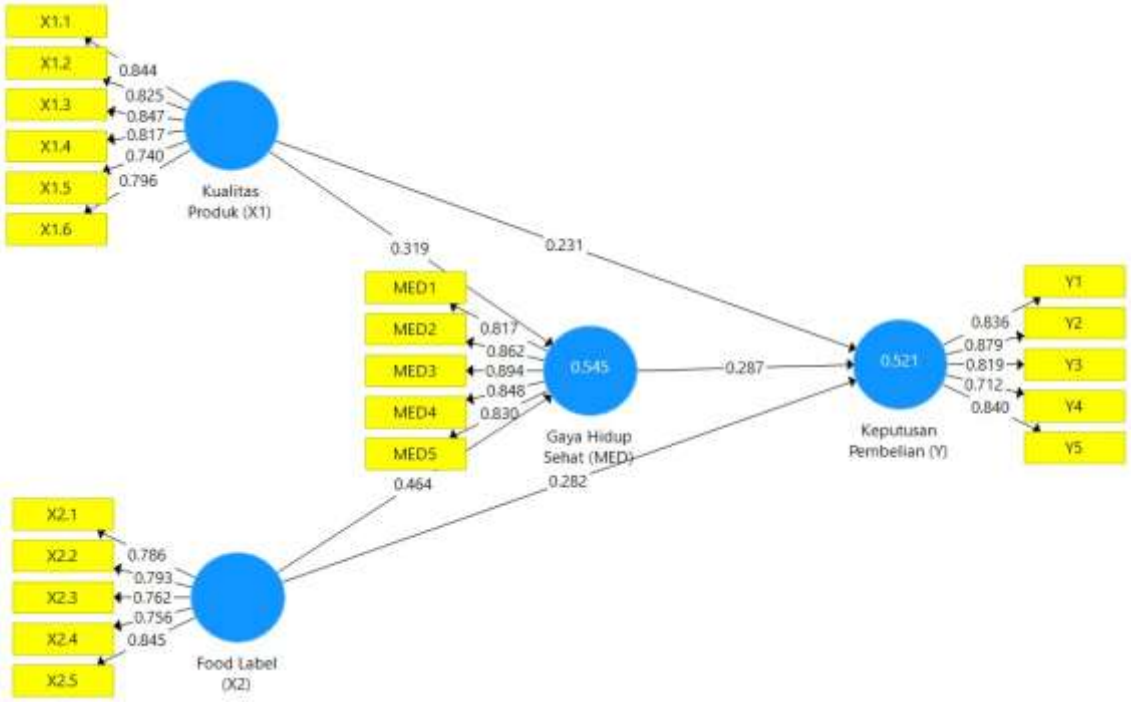
Table 2: Discriminant Validity Testing Results

Variable	Mean (M)	Std. Dev. (Stdev)	1	2	3	4
Nutrition Label (X2)	0.465	0.124	**0.789**			
Healthy Lifestyle (MED)	0.281	0.115	0.710	**0.851**		
Purchase Decision (Y)	0.287	0.105	0.665	0.644	**0.819**	
Product Quality (X1)	0.317	0.123	0.772	0.677	0.643	**0.812**

Source: PLS Output Data, 2025

3. Analisis model persamaan struktural

In PLS, the testing of each influence is carried out using simulation with the Bootstrapping method on the sample, which aims to minimize issues of non-normal distribution in the research data.



Gambar 1. ***Bootstrapping***

Source: PLS Output Data, 2025

The predictive model in structural model testing can be seen from the t-statistic values between independent variables and dependent variables in the table of direct and indirect effects (Direct Effect-Indirect Effect).

4. Analysis of correlations among variables

The results of the analysis of relationships between variables show that all direct effects tested in the model have a positive direction and most are statistically significant. Food labels have a positive and significant relationship with a healthy lifestyle (β = 0.464; p < 0.001) as well as with purchase decisions (β = 0.282; p = 0.011), indicating that the clarity and credibility of nutritional information play an important role in shaping a healthy lifestyle orientation and in driving nutrition bar purchase decisions. Furthermore, a healthy lifestyle also shows a positive and significant relationship with purchase decisions (β = 0.287; p = 0.005), which emphasizes that consumers with a strong healthy lifestyle orientation tend to be more consistent in choosing healthy food products.

Table 3: Structural Path Analysis Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Nutrition Label (X2) -> Healthy Lifestyle (MED)	0,464	0,462	0,132	3,523	0,000
Nutrition Label (X2) -> Purchase Decision (Y)	0,282	0,291	0,110	2,567	0,011
Healthy Lifestyle (MED) -> Purchase Decision (Y)	0,287	0,280	0,101	2,837	0,005
Product Quality (X1) -> Healthy Lifestyle (MED)	0,319	0,324	0,131	2,424	0,016
Product Quality (X1) -> Purchase Decision (Y)	0,231	0,231	0,091	2,534	0,012
Nutrition Label (X2) -> Healthy Lifestyle (MED) -> Purchase Decision (Y)	0,133	0,130	0,062	2,139	0,033
Product Quality (X1) -> Healthy Lifestyle (MED) -> Purchase Decision (Y)	0,092	0,090	0,050	1,834	0,067

Source: PLS Output Data, 2025

In addition, product quality has a positive and significant relationship with a healthy lifestyle (β = 0.319; p = 0.016) as well as with purchase decisions (β = 0.231; p = 0.012), indicating that the sensory and functional attributes of the product directly influence consumer health consciousness and purchasing behavior. The analysis of indirect effects shows that a healthy lifestyle significantly mediates the relationship between the food label and purchase decisions (β = 0.133; p = 0.033), while the mediation of a healthy lifestyle in the relationship between product quality and purchase decisions is not significant (β = 0.092; p = 0.067). These findings indicate that the correlation between the food label and purchase decisions operates through an internal psychological mechanism in the form of a healthy lifestyle orientation, whereas the influence of product quality is more direct. Overall, these results confirm the existence of a consistent yet distinct pattern of relationships among variables within the Stimulus–Organism–Response (S–O–R) framework, in which informational and utilitarian stimuli affect behavioral responses through mechanisms that are not entirely the same.

C. Main Findings

The results of this study reveal that product quality exerts a positive and statistically significant effect on purchase decision (β = 0.231; p < 0.05). This finding indicates that consumers' evaluations of sensory attributes, product reliability, ingredient safety, and value-for-money play a crucial role in shaping their decision to purchase *nutrition bar* products (see Table X). The result confirms that utilitarian product attributes remain a dominant determinant in healthy Nutrition consumption, where consumers seek tangible benefits and risk reduction. This finding aligns with Mehta et al. (2024), who emphasize that perceived product quality is a primary driver of purchase decisions in functional Nutritions, and Nguyen et al. (2022), who demonstrate that sensory satisfaction and nutritional reliability significantly enhance consumers' confidence in choosing healthy Nutrition products. Product quality also shows a positive and significant influence on healthy lifestyle orientation (β = 0.319; p <

0.05), suggesting that high-quality *nutrition bar* products can reinforce consumers' health-oriented values and routines (see Table X). This result implies that quality products are not merely consumed for convenience, but can become embedded within consumers' broader lifestyle choices. The finding supports García-Salirrosas et al. (2025), who argue that repeated exposure to high-quality healthy Nutrition products strengthens consumers' health consciousness, and Sun et al. (2022), who highlight the role of functional Nutrition quality in shaping long-term healthy consumption patterns.

Furthermore, the analysis demonstrates that Nutrition label has a strong, positive, and statistically significant effect on healthy lifestyle ($\beta = 0.464$; $p < 0.001$). This result indicates that clear, credible, and informative nutritional labeling serves as a powerful informational stimulus that encourages consumers to internalize health values (see Table X). Nutrition labels function not only as decision aids but also as educational tools that enhance consumers' awareness of dietary choices. This finding is consistent with Tian et al. (2023), who show that transparent nutrition labeling improves health literacy, and Trieu et al. (2023), who report that front-of-pack nutritional information significantly influences consumers' lifestyle-oriented Nutrition choices.

Nutrition label also directly influences purchase decision in a positive and significant manner ($\beta = 0.282$; $p < 0.05$), indicating that consumers rely on nutritional information to validate product suitability before purchasing *nutrition bar* products. This result supports Zepeda et al. (2024), who find that nutrition labels increase perceived product credibility, and Li and Shan (2025), who demonstrate that informational cues on packaging reduce uncertainty and strengthen purchase confidence in healthy Nutrition markets.

In addition, healthy lifestyle orientation positively and significantly affects purchase decision ($\beta = 0.287$; $p < 0.05$), confirming that consumers who prioritize health in their daily lives are more inclined to consistently choose products that align with their lifestyle goals. This finding reinforces Okpiaifo et al. (2023), who highlight lifestyle orientation as a key predictor of healthy Nutrition purchasing behavior, and García-Salirrosas et al. (2025), who show that lifestyle-driven consumers translate health values into concrete buying decisions.

Regarding indirect effects, the results indicate that healthy lifestyle significantly mediates the relationship between Nutrition label and purchase decision ($\beta = 0.133$; $p < 0.05$). This finding suggests that nutrition labels influence purchase decisions not only directly but also indirectly by shaping consumers' health-oriented lifestyles. In contrast, healthy lifestyle does not significantly mediate the relationship between product quality and purchase decision ($\beta = 0.092$; $p > 0.05$), indicating that the effect of product quality operates primarily through a direct utilitarian pathway. These findings highlight the differentiated mechanisms through which informational stimuli (Nutrition label) and functional stimuli (product quality) affect consumer behavior within the Stimulus–Organism–Response (S–O–R) framework.

Overall, the findings of this study corroborate prior research emphasizing the interplay between product attributes, informational cues, and psychological processes in healthy Nutrition consumption. Nutrition label emerges as a central stimulus that shapes healthy lifestyle orientation, while product quality remains the strongest direct driver of purchase decision. The results reinforce the relevance of the S–O–R framework in explaining consumer behavior in the healthy Nutrition sector and demonstrate that effective strategies should integrate both high product quality and informative nutritional communication to foster sustainable consumer engagement.

VI. CONCLUSION

This study concludes that purchase decisions for nutrition bar products are shaped by the interplay between functional product attributes, informational cues, and consumers' internal health orientation, as explained within the Stimulus–Organism– Response (S–O–R) framework. Product quality emerges as a strong and direct determinant of purchase decisions, confirming that sensory satisfaction, ingredient safety, and value-for-money remain critical in reducing perceived risk in healthy Nutrition consumption (Mehta et al., 2024; Nguyen et al., 2022). At the same time, nutrition labeling plays a dual role by directly influencing purchase decisions and indirectly shaping behavior through the development of a healthy lifestyle orientation, highlighting the importance of clear and credible nutritional information as an informational stimulus (Tian et al., 2023; Trieu et al., 2023). The significant mediating role of healthy lifestyle in the relationship between Nutrition label and purchase decision indicates that consumers internalize nutritional information into enduring health values that subsequently guide their buying behavior (Okpiaifo et al., 2023; García-Salirrosas et al., 2025), whereas the influence of product quality operates primarily through a direct utilitarian pathway. Overall, the findings reinforce contemporary consumer behavior literature by demonstrating that effective strategies in the healthy Nutrition sector require not only superior product quality but also transparent nutritional communication capable of fostering sustainable health-oriented consumption patterns (Zepeda et al., 2024; Li & Shan, 2025).

VII. IMPLIKASI A. POLICY IMPLICATIONS

The findings of this study indicate that nutrition labeling can serve as an effective policy instrument to encourage healthier Nutrition consumption. Policymakers and Nutrition safety authorities should therefore strengthen regulations related to the clarity, accuracy, and standardization of nutrition labels, ensuring that nutritional information is easy to understand and comparable across products. Supporting small and medium Nutrition enterprises through technical assistance, labeling guidelines, and monitoring mechanisms can enhance compliance and reduce information asymmetry in the healthy Nutrition market (Tian et al., 2023; Trieu et al., 2023). In addition, public education programs aimed at improving nutritional literacy are essential so that consumers can effectively interpret Nutrition labels and integrate nutritional information into healthier lifestyle choices (Okpiaifo et al., 2023; García-Salirrosas et al., 2025).

B. Managerial Implications

From a managerial perspective, the results highlight the importance of maintaining high and consistent product quality as a primary driver of purchase decisions in the nutrition bar market. Managers should prioritize quality control, product innovation, and the use of safe and reliable ingredients to strengthen consumer trust and reduce perceived risk (Mehta et al., 2024; Nguyen et al., 2022). Furthermore, managers are encouraged to view nutrition labels as a strategic communication tool, not merely a regulatory obligation. Clear and credible labeling can enhance brand transparency, reinforce a health-oriented brand image, and foster long-term consumer engagement by aligning product attributes with consumers' healthy lifestyle aspirations (Zepeda et al., 2024; Li & Shan, 2025).

VIII. LIMITATIONS AND FUTURE RESEARCH

Despite its contributions, this study has several limitations that should be acknowledged and addressed in future research. First, the research design is cross-sectional, which limits the ability to capture changes in consumers' perceptions and behaviors over time. Future studies could employ longitudinal designs to examine how sustained exposure to product quality improvements and nutrition labeling influences the development of healthy lifestyles and repeat purchase behavior. Second, the study focuses on consumers in a single urban context, namely Surakarta, which may limit the generalizability of the findings to other regions with different socio-cultural, economic, or regulatory environments. Comparative studies across cities or countries would provide deeper insights into contextual variations in healthy Nutrition consumption behavior.

In addition, the model incorporates a limited set of variables, emphasizing product quality, nutrition labeling, and healthy lifestyle orientation. Future research could extend this framework by examining moderating variables such as nutritional literacy, trust in Nutrition regulation, price sensitivity, or cultural health beliefs that may condition the strength of the observed relationships. Methodologically, future studies may also benefit from integrating mixed-methods approaches, combining survey data with qualitative interviews or experiments to better capture the cognitive and affective processes underlying Nutrition choice decisions. Overall, addressing these limitations would allow future research to refine the application of the Stimulus–Organism–Response framework and further advance understanding of consumer behavior in the healthy Nutrition sector.

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