

## Sugar-Related Claims, Perceived Healthfulness, and Brand Trust: Predicting Ready-to-Drink Tea Purchase

**Jevica, Christian Haposan Pangaribuan**

Universitas Bunda Mulia, Indonesia

E-mail: [jevicadeannekohar@gmail.com](mailto:jevicadeannekohar@gmail.com), [cpangaribuan@bundamulia.ac.id](mailto:cpangaribuan@bundamulia.ac.id)

\*Correspondence: [jevicadeannekohar@gmail.com](mailto:jevicadeannekohar@gmail.com)

---

### KEYWORDS

sugar content claims;  
purchase intentions;  
health perceptions; brand  
trust

### ABSTRACT

The purpose of this study is to understand how claims related to sugar content in products affect consumer perception of product health (perceived healthfulness), brand trust, and intention to buy the product (likelihood to purchase). The method used in this study is to use an experimental research design with hypothesis testing. The research method used was a survey with a questionnaire distributed to respondents in Jabodetabek who had bought and consumed ready to drink tea in the last three months. The analysis was carried out by the SEM method using the Smart PLS program. The results of this study show that claims related to sugar content in products have a positive and significant influence on perceived healthfulness and consumer trust in brands (brand trust). Claims that the product has a healthier sugar content can directly increase consumer purchase interest (likelihood to purchase). In addition to direct influence, these claims influence buying interest through a mediation mechanism of health perception and brand trust, strengthening the overall effect on consumers' purchasing decisions. This study emphasizes the importance of considering the role of mediation in understanding how product claims affect consumer behavior.

---

Attribution- ShareAlike 4.0 International (CC BY-SA 4.0)



### Introduction

The shift in modern lifestyle has triggered significant changes in the consumption patterns of Indonesians. One of the most noticeable changes is the increase in sugar consumption. Various packaged food and beverage products with high sugar content are increasingly accessible and popular with various age groups. Ease of access, lifestyle changes, and aggressive marketing have contributed to this increase in sugar consumption. Nevertheless, excessive sugar consumption has been implicated as a significant risk factor for a range of chronic diseases, including obesity, type-2 diabetes, and cardiovascular disease (Keller & Guyt, 2023; Schmidt & Bijmolt, 2020).

In Indonesia, regulations related to claims related to sugar content in food and beverage products are regulated in the Regulation of the Food and Drug Supervisory Agency (BPOM) Number 31 of 2018 concerning Processed Food Labels. This regulation

requires manufacturers to include information on sugar and sweetener content clearly and honestly on product labels. In addition, there are maximum limits on using certain artificial sweeteners and provisions on “low-sugar” or “sugar-free” claims. Data from the Ministry of Health of the Republic of Indonesia shows that the prevalence of diabetes in Indonesia continues to increase (Wahidin et al., 2024).

According to (Keller & Guyt, 2023), along with increasing awareness of the adverse effects of sugar on health, more and more consumers are looking for low-sugar or sugar-free product alternatives. This trend is driven by the desire to live healthier and reduce the risk of developing sugar-related diseases. The demand for healthier food and beverage products has sparked innovation in the food and beverage industry. Manufacturers began to develop and market products with low sugar claims or using alternative sweeteners such as stevia, sucralose, or aspartame.

Sugars and sweeteners have become an integral part of various food and beverage products, and their excessive consumption can have negative consequences for health. This encourages consumers to pay more attention to the sugar and sweetener content in their products. Claims related to sugar content in food and beverage products can influence consumers’ perception of the health of the product and their trust in the brand (Bauer & Reisch, 2019). (Paunisaari, 2019) shows that claims related to low sugar content can improve consumers’ perception of the health of products and increase their likelihood of purchasing them. Conversely, high sugar content claims can negatively impact product health perceptions, leading to lower purchase intentions (Baidya, 2020).

Claims related to sugar content in food and beverage product packaging are an important factor that affects consumers’ purchasing decisions. Claims such as “low sugar”, “sugar-free”, or “contains natural sweeteners” can attract the attention of health-conscious consumers. In reality, not all of these claims can be taken for granted. Some manufacturers may use such claims as a marketing strategy to attract consumers (Keller & Guyt, 2023), even though their products actually still contain significant amounts of sugar or use controversial artificial sweeteners (Collins & Lalor, 2024; Huaman-Ramirez & Merunka, 2019; Ikonen et al., 2020).

**Table 1 Average Sugar Consumption per Capita (Ministry of Agriculture, 2023)**

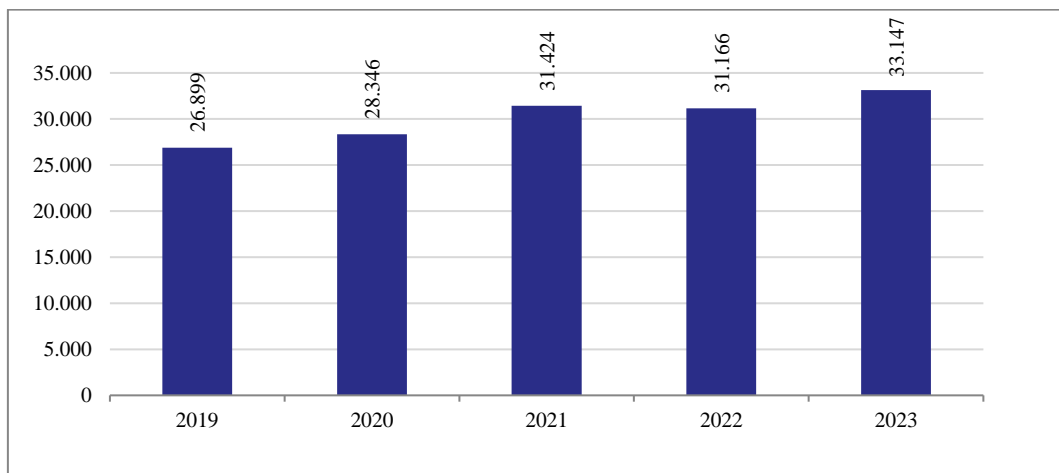
Sugar Consumption	2019	2020	2021	2022	2023	Growth 2022-2023 (%)
Consumption per Week (oz)	1.27	1.25	1.28	1.21	1.11	-8.27
Annual Consumption (kg)	6.634	6.539	6.677	6.319	5.797	-8.27

Based on data from the Food Consumption Statistics Report in 2023 released by the Ministry of Agriculture of the Ministry of Agriculture shown in Table 1, per capita sugar consumption in Indonesia has decreased over the past five years. The average Indonesia people consume 5.8 kilograms/capita/year of granulated sugar, which is the lowest record in the last 5 years. This consumption level decreased by 8.2% compared to 2022, indicating a decrease in sugar consumption by the population of Indonesia. Based on this data, on average, the consumption of granulated sugar in Indonesia is around 15.9 grams every day. While daily sugar consumption is currently below the WHO’s recommended limit of 50 grams, it is important to note that this figure excludes added sugars from other food and beverage sources.

## Sugar-Related Claims, Perceived Healthfulness, and Brand Trust: Predicting Ready-to-Drink Tea Purchase

The Indonesia Health Survey conducted by the Ministry of Health in 2023 shows that 33.7% of the Indonesian population consumes sweet foods at least 1 time a day and 47.5% of the Indonesian population consumes sweet drinks at least 1 time a day. This shows that sugary foods and drinks are one part of the daily intake of the Indonesia population. The study also showed that as many as 56.2% consumed sweet foods 1-6 times a week. In the same survey, it was also found that there was an increase in the prevalence of diabetes mellitus in the population over 15 years old from 10.8% in 2018 to 11.7% in 2023 where this survey was conducted.

Data from Innova Market Insight (2024) shows that new products launched to the market that use claims related to sugar and sweeteners, such as Low Sugar, No Added Sugar, Reduced Sugar, Sugar Free, have continued to increase over the past 5 years.



**Figure 1. Number of New Product Launches with Sugar Content Claims (Innova Market Insight, 2024)**

Perceived healthfulness is a consumer's subjective assessment of the extent to which a product or brand is considered healthy or beneficial to their health. This perception is influenced by various factors, such as nutritional content, health claims, product appearance, and consumer knowledge about nutrition (Ko & Phua, 2024). In the context of this study, perceived healthfulness refers to the perception of consumers about how healthy a product is with claims related to a certain sugar content. These claims can influence consumers' perception of the health benefits of the product, which in turn can influence their purchasing decisions.

Brand trust is consumer confidence or trust in the reliability, integrity, and competence of a brand in fulfilling their promises and expectations (Dam, 2020). Brand trust is an important factor in building long-term relationships between consumers and brands, as well as influencing consumer loyalty and purchase decisions (Konuk, 2021). In the context of this study, brand trust refers to the extent to which consumers believe that brands with claims related to a particular sugar content are reliable, honest, and competent in conveying the promised benefits of the product. Brand trust refers to consumer trust in a particular brand based on their previous experience, brand reputation, and information they receive about the brand (Ngo et al., 2020).

The extant literature investigating the impact of sugar-related claims on consumer purchase intentions remains limited in scope. While studies have consistently demonstrated that low sugar claims can enhance product health perceptions and

consequently drive purchase likelihood (Baidya, 2020; Chien et al., 2018; Ikonen et al., 2020; Musso et al., 2022; Paunisaari, 2019; Teng et al., 2021), the mediating roles of perceived healthfulness and brand trust in this relationship have been under-explored.

The purpose of this study is to understand how claims related to sugar content in products affect consumer perception of product health (perceived healthfulness), brand trust, and intention to buy the product (likelihood to purchase).

This study introduces a novel approach by exploring the mediating roles of perceived healthfulness and brand trust in the relationship between sugar-related claims on product packaging and consumer purchase intentions. While previous research has extensively examined the impact of low-sugar claims on enhancing product health perceptions and increasing purchase likelihood, there has been a significant gap in understanding how these perceptions translate into actual purchase decisions through the lens of brand trust. This research bridges that gap by offering a comprehensive analysis of how sugar content claims influence consumer behavior, not just through direct perceptions of health benefits but also through the trust consumers place in the brand. The inclusion of these mediating variables provides a deeper understanding of the mechanisms behind consumer decision-making in the context of health-related product claims, offering new insights that could be pivotal for marketers and policymakers aiming to influence healthier consumer choices.

## **Research Methods**

The research method used was a survey with a questionnaire distributed to respondents in Jabodetabek who had bought and consumed ready to drink tea in the last three months. The research design used is hypothesis testing using a structural equation model (*Structural Equation Model* - SEM) and SmartPLS software. SEM was chosen because of its ability to analyze the relationship between latent variables and observed variables simultaneously, as well as to test measurement models and structural models in an integrated manner (Eastern, 2021).

The independent variable in this study is the claims related to sugar content, while the dependent variable is the likelihood to purchase. The mediation variables used are perceived healthfulness and brand trust. Data collection will be carried out through an online questionnaire distributed to respondents. Employing SmartPLS, this study examines both the direct impact of sugar-related claims on purchase likelihood and the indirect effects mediated by perceived product healthfulness and brand trust. The results of SEM analysis will provide a comprehensive overview of the relationship between variables and the testing of research hypotheses. The steps of data analysis include validity and reliability tests, evaluation of measurement models (outer model), evaluation of structural models (inner model), and hypothesis testing.

## **Results and Discussions**

### **Instrument Validity Test Results**

The validity test in this study was carried out by looking at the outer loading value on each latent variable indicator. A variable is considered valid if the outer loading value is greater than 0.7. The higher the outer loading value, the stronger the relationship between the indicator and the latent variable it is measuring. Figure 4 shows the outer loading value of each indicator for exogenous (independent) and endogenous (dependent) variables using the Smart PLS program.

Based on Figure 1 which displays the complete SEM model, it can be concluded that all indicators in the model meet the set validity criteria, namely the outer loading > 0.7. This shows that each indicator is able to explain well the latent construct it is measuring.

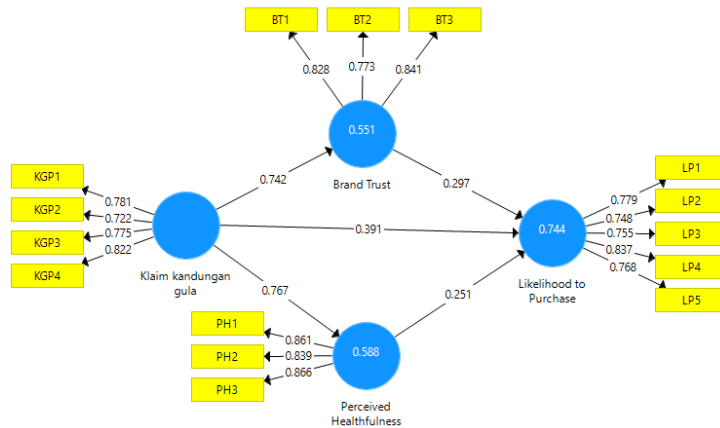


Figure 2. Complete SEM Model

**Sugar Content Claim (KKG):** The four KKG indicators (KGP1, KGP2, KGP3, KGP4) have an outer loading above 0.7, ranging from 0.722 to 0.822. This means that all four indicators are valid in measuring the Sugar Content Claim construct.

**Perceived Healthfulness (PH):** All three PH indicators (PH1, PH2, PH3) have an outer loading above 0.7, ranging from 0.839 to 0.866. This shows that all three indicators are valid in measuring the construct of Perceived Healthfulness.

**Brand Trust (BT):** All three BT indicators (BT1, BT2, BT3) also have an outer loading above 0.7, ranging from 0.773 to 0.841. This shows that all three indicators are valid in measuring Brand Trust constructs.

**Likelihood to Purchase (LP):** The five LP indicators (LP1, LP2, LP3, LP4, LP5) also have an outer loading above 0.7, ranging from 0.744 to 0.837. This shows that all five indicators are valid in measuring the Likelihood to Purchase construct.

The results of this validity test provide strong evidence that all indicators in the SEM model have good validity. Thus, the 15 indicators in this study can be used because they are valid for measuring the latent variables.

Table 2. Validity Test

Variable	Item Code	Outer Loading	Information
Sugar Content Claims	KKG1	0.781	Valid
Sugar Content Claims	KKG2	0.722	Valid
Sugar Content Claims	KKG3	0.775	Valid
Sugar Content Claims	KKG4	0.822	Valid
Perceived Healthfulness	PH1	0.861	Valid
Perceived Healthfulness	PH2	0.839	Valid
Perceived Healthfulness	PH3	0.866	Valid
Brand Trust	BT1	0.828	Valid
Brand Trust	BT2	0.773	Valid
Brand Trust	BT3	0.841	Valid
Likelihood to Purchase	LP1	0.779	Valid
Likelihood to Purchase	LP2	0.748	Valid

Likelihood to Purchase	LP3	0.755	Valid
Likelihood to Purchase	LP4	0.837	Valid
Likelihood to Purchase	LP5	0.768	Valid

**Reliability Test Results**

Reliability testing in this study is carried out by looking at the value of composite reliability on each latent variable. A variable is considered reliable if its composite reliability value is greater than 0.7 (Sarstedt et al., 2014). Composite reliability It measures the internal consistency of a latent variable, that is, the extent to which the indicators in the latent variable correlate with each other. Table 3 presents the results of the reliability test (composite reliability) for the four variables in this study.

**Table 3. Composite Reliability**

Variable	Composite Reliability	Information
Sugar Content Claims	0.858	Reliable
Perceived Healthfulness	0.891	Reliable
Brand Trust	0.855	Reliable
Likelihood to Purchase	0.885	Reliable

All variables showed a composite reliability value above 0.85, which exceeded the threshold used of 0.7. This shows that the research instruments used have good internal consistency, where the items in each measured variable consistently and accurately reflect the underlying construct. The composite reliability value that exceeds 0.85 also shows the strong internal consistency of the research instrument and the reliability of the research instrument is very reliable.

**Outer Model Test Results**

The discussion of the results of the outer model analysis in this study will review the validity and reliability of the research instruments used. The outer model analysis conducted using SmartPLS SEM aims to ensure that the indicators used have been measured validly and reliably in explaining the hypothetical latent construct. The outer model test in this study consisted of discriminant validity, Average Variance Extracted (AVE), and Cronbach’s Alpha.

**Results of the Validity Test of Discrimination**

The validity of discrimination is intended to ensure that each indicator in the model is not represented by any other indicator. Validity is determined by the cross loading value where if the cross loading value is greater than 0.7 and greater than the cross loading value on other variables. In other words, if the cross loading value of an indicator on its latent variable is greater than the cross loading value on other latent variables, then the indicator is considered valid to measure its latent variable (Sarstedt et al., 2014).

**Table 4. Discriminant Validity**

Item Code	Sugar Content Claims	Perceived Healthfulness	Brand Trust	Likelihood to Purchase
<b>KGP1</b>	<b>0.781</b>	0.542	0.523	0.596
<b>KGP2</b>	<b>0.722</b>	0.592	0.580	0.601
<b>KGP3</b>	<b>0.775</b>	0.585	0.576	0.667
<b>KGP4</b>	<b>0.822</b>	0.654	0.618	0.628
<b>PH1</b>	0.642	<b>0.861</b>	0.700	0.699
<b>PH2</b>	0.689	<b>0.839</b>	0.682	0.637
<b>PH3</b>	0.637	<b>0.866</b>	0.628	0.675
<b>BT1</b>	0.614	0.671	<b>0.828</b>	0.697
<b>BT2</b>	0.598	0.579	<b>0.773</b>	0.559
<b>BT3</b>	0.602	0.661	<b>0.841</b>	0.651
<b>LP1</b>	0.629	0.640	0.609	<b>0.779</b>
<b>LP2</b>	0.605	0.581	0.530	<b>0.748</b>
<b>LP3</b>	0.671	0.587	0.649	<b>0.755</b>
<b>LP4</b>	0.636	0.617	0.628	<b>0.837</b>
<b>LP5</b>	0.582	0.624	0.626	<b>0.768</b>

Table 4 presents the results of the discrimination validity test to ensure that each indicator (survey item) reflects the latent construct it is aiming for more than the other latent constructs. The test results show an ideal pattern for the validity of discrimination where the cross-loading value (unbolded number) for each indicator is lower than the factor-loading value (the bolded number) of the original construct. For example, the KGP1 indicator has a loading factor of 0.781 on the “Sugar Content Claim” construct, which is higher than its cross-loading value on other constructs (0.542 on “Perceived Healthfulness”, 0.523 on “Brand Trust”, and 0.596 on “Likelihood to Purchase”). Thus, the results of the discriminatory validity test show that each indicator is more strongly correlated with its original construct than other constructs so that it is better able to explain the variance of the construct it is intended for than the variance of other constructs.

**Average Variance Extracted (AVE)**

Average Variance Extracted (AVE) is a metric employed in outer model assessment to evaluate construct convergent validity, quantifying the proportion of indicator variance explained by the underlying latent construct. Essentially, AVE measures the degree of indicator convergence on a common construct, which is deemed valid if its AVE exceeds 0.5.

**Table 5. Average Variance Extracted (AVE)**

Variable	AVE	Information
Sugar Content Claims	0.602	Valid
Perceived Healthfulness	0.732	Valid
Brand Trust	0.663	Valid
Likelihood to Purchase	0.606	Valid

Table 5 presents the results of the Average Variance Extract (AVE) test used to measure the convergent validity of four latent constructs in this study: Sugar Content Claim, Perceived Healthfulness, Brand Trust, and Likelihood to Purchase. The results of the AVE test show that all constructs have an AVE value above 0.5, which is a threshold

used to indicate sufficient convergent validity so that it can be concluded that the indicators convergently measure the appropriate latent construct.

**Cronbach’s Alpha Test Results**

Cronbach’s alpha is used to measure reliability which describes the extent to which a measuring instrument consistently measures the same construct. Cronbach’s alpha measures the internal consistency of a construct by looking at the correlation between the indicators used to measure the construct. A variable is considered reliable if its Cronbach’s Alpha value is greater than 0.7.

**Table 6 Cronbach’s Alpha**

Variable	Cronbach’s Alpha	Information
Sugar Content Claims	0.779	Reliable
Perceived Healthfulness	0.817	Reliable
Brand Trust	0.746	Reliable
Likelihood to Purchase	0.837	Reliable

Table 6 presents the results of the Cronbach’s Alpha reliability test for the four latent variables used in this study. The variable of the sugar content claim obtained a Cronbach’s Alpha value of 0.779, indicating that the indicators used to measure this construct have good reliability where the question items in this construct are consistent with each other in measuring the sugar content claim. The Cronbach’s Alpha value for the perceived healthfulness variable of 0.817 indicates that the indicators used are consistent with each other in measuring respondents’ perception of product health.

Likewise, the Brand Trust and Likelihood to Purchase variables are considered reliable because they have Cronbach’s Alpha values of 0.746 and 0.837. Overall, the results of the Cronbach’s Alpha reliability test show that all the constructs in the measurement model have good to excellent reliability. This shows that the research instruments used have a high internal consistency where the items in each measurable construct consistently and accurately reflect the underlying construct.

**Inner Model Test Results**

The evaluation of the inner model or structural model was carried out to explain the relationship between latent variables in this study. The determination coefficient ( $R^2$ ) is used to find out how much an independent variable can explain the variance in a dependent variable. In addition, the predictive relevance ( $Q^2$ ) of the model was measured to assess how well the model predicted the observation data. Finally, the effect size criterion ( $f^2$ ) is used to measure how much influence each independent variable has on the dependent variable.

**Determination Coefficient Test Results**

The determination coefficient ( $R^2$ ) basically measures how well the built model is able to account for variance in dependent variables or bound variables.  $R^2$  shows how much change in dependent variables can be predicted or explained by independent variables included in the model. An  $R^2$  value close to 1 indicates that the model has an excellent ability to explain the variance in the dependent variable, or in other words, the independent variables in the model have a strong influence on the dependent variable.  $R^2$  can be expressed as strong if the value is greater than 0.7, medium if the value is greater than 0.5, and weak if the value is greater than 0.25 (Cepeda-Carrión, 2019).



**Table 7. Determination Coefficient**

Variable	Coefficient of Determination (R <sup>2</sup> )	Information
Perceived Healthfulness	0.551	Moderate Relationship
Brand Trust	0.744	Strong Relationships
Likelihood to Purchase	0.588	Moderate Relationship

Based on Table 7, the results of the determination coefficient (R<sup>2</sup>) test show that the research model has a moderate-strong ability to explain the variance of dependent variables. The R<sup>2</sup> value of the Perceived Healthfulness variable of 0.551 indicates that 55.1% of the variance can be explained by the independent variables in the model. This shows that other factors outside the model also play a role in influencing consumer perceptions of product health.

For Brand Trust, an R<sup>2</sup> value of 0.744 indicates that 74.4% of the variance in Brand Trust can be explained by independent variables in the model. This means that the model has a pretty good ability at explaining consumer trust in the brand. The R<sup>2</sup> value of the Likelihood to Purchase variable of 0.588 indicates that 58.8% of the variance in Likelihood to Purchase can be explained by independent variables in the model. This means that there are still other factors outside the model that affect the likelihood of consumers buying the product. Overall, the results of the determination coefficient test show that the research model has moderate and strong construction prediction ability.

**Predictive Relevance Test Results**

Another inner model test is by measuring predictive relevance (Q<sup>2</sup>). This test was carried out to show the ability of exogenous variables to be able to predict their endogenous variables. A Q<sup>2</sup> value of more than 0 can prove that the model has indicated that the model has good predictive relevance for endogenous variables and has the ability to explain empirical data and, overall, it can be said that the model formed is valid.

**Table 8. Predictive Relevance Test Results**

Variable	Predictive Relevance (Q <sup>2</sup> )	Information
Perceived Healthfulness	0.405	Valid
Brand Trust	0.356	Valid
Likelihood to Purchase	0.437	Valid

Table 8 presents the results of the predictive relevance test (Q<sup>2</sup>) for three variables: Perceived Healthfulness, Brand Trust, and Likelihood to Purchase. The three exogenous variables in this model have good predictive relevance (Q<sup>2</sup> > 0) to endogenous variables. This means that the tested model has a good ability to explain empirical data and can be considered valid.

**Effect Size Test Results**

The next inner model test was carried out by measuring the effect size (f<sup>2</sup>). This measurement was carried out to analyze the large or small influence of exogenous latent variables on endogenous latent variables. The effect size (f<sup>2</sup>) of 0.02 is considered weak; An f<sup>2</sup> of 0.15 is considered a moderate influence, and an f<sup>2</sup> of 0.35 is considered to have a strong influence.

**Table 9. Effect Size**

Construction	Effect Size (f <sup>2</sup> )	Information
Perceived Healthfulness → Sugar Content Claims	0.551	Strong Relationship
Brand Trust → Sugar Content Claims	0.744	Strong Relationship
Perceived Healthfulness → Likelihood to Purchase	0.551	Strong Relationship
Brand Trust → Likelihood to Purchase	0.744	Strong Relationship
Sugar Related Claim → Likelihood to Purchase	0.588	Strong Relationship

Table 9 presents the results of the effect measure test (f<sup>2</sup>) which is used to measure how much influence each independent variable has on the dependent variables in the research model. Sugar Content claims have a strong influence on consumer perceptions of product health (f<sup>2</sup> = 0.551), brand trust (f<sup>2</sup> = 0.744), and likelihood of purchase (f<sup>2</sup> = 0.588). This shows that sugar content claims on product labels have an important role in shaping consumer perception, building trust in brands, and encouraging purchase intent.

Consumers’ perception of product health and brand trust also had a strong influence on purchase likelihood (f<sup>2</sup> = 0.551 and 0.744) where consumers who considered the product healthy and trusted the brand were more likely to buy the product. Overall, the results of the effect size test showed that sugar claims, perceived healthfulness, and brand trust had a strong influence on likelihood to purchase.

**Hypothesis Test Results**

After confirming that the research model model can be considered fit, then proceed with hypothesis testing. Hypothesis testing will answer the initial conjecture of the research. Hypothesis testing was carried out by analyzing the bootstrapping results on the SmartPLS 3.3.3 program. The basis for decision-making is carried out by assessing the relationship between the variables in the model by paying attention to the value of the path coefficient, namely from the original sample value, T-statistics, and p-Value.

Path coefficient is a value that shows how much influence one variable has on other variables in the research model. This coefficient reflects the strength of the relationship between two variables, be it a direct or indirect relationship (through mediating variables).

**Table 10. Direct and Indirect Hypothesis Tests**

Construction	Original Sample	Standard Deviation	T Statistics	P Values
KKG → PH	0.767	0.042	18.262	0.000
KKG → BT	0.742	0.043	17.256	0.000
PH → LP	0.251	0.109	2.303	0.022
BT → LP	0.297	0.089	3.337	0.001
KKG → LP	0.391	0.107	3.654	0.000
KKG → PH → LP	0.193	0.085	2.271	0.024
KKG → BT → LP	0.220	0.070	3.143	0.002

Table 10 presents the results of the path coefficient test which can provide an overview of the direction of the relationship, namely positive or negative and how much the dependent variable changes when the independent variable increases by one unit. Path coefficient can show the direct and indirect influence between variables in the research model. Table 10 shows that:

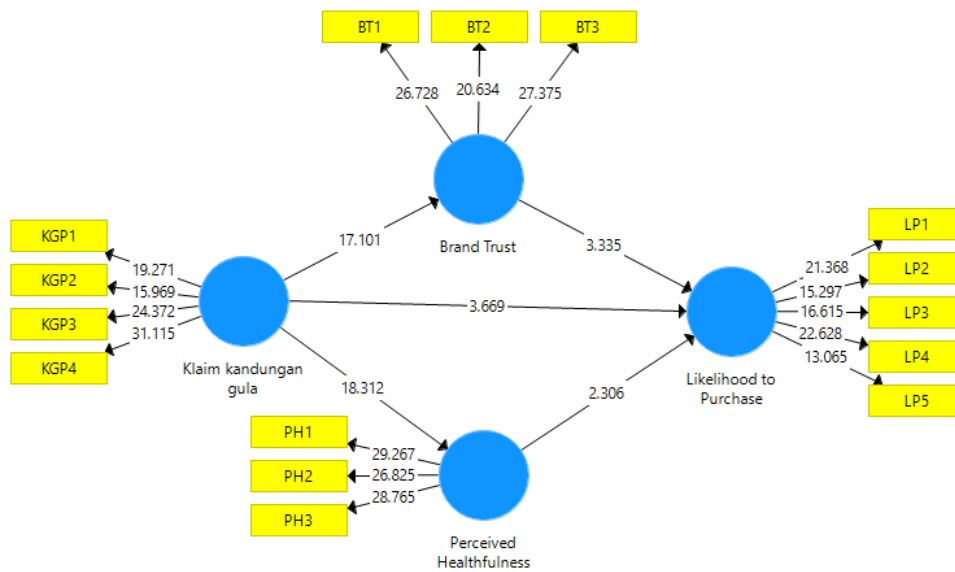
- Sugar Content Claims → Perceived Healthfulness (0.767): A path coefficient of 0.767 indicates a positive relationship between sugar content claims and health perceptions.

If the claim of sugar content in a product increase by one unit, then the health perception of the product will increase by 76.7%. This influence is positive, which means that the more a product claims to have a low or healthy sugar content, the higher the consumer perception of the health of the product.

- Sugar Content Claims → Brand Trust (0.742): A path coefficient of 0.742 indicates a positive relationship between sugar content claims and brand trust. If the sugar content claim increases by one unit, then brand trust will increase by 74.2%. This influence is positive, which means that the more a product claims to have a low or healthy sugar content, the higher the consumer trust in the brand.
- Perceived Healthfulness → Likelihood to Purchase (0.251): A path coefficient of 0.251 indicates a positive relationship between health perception and purchase potential. If the perception of a product's health increases by one unit, then the likelihood of purchasing the product will increase by 25.1%. This influence is positive, which means that the healthier a product is perceived by consumers, the higher the likelihood that they will buy the product.
- Brand Trust → Likelihood to Purchase (0.297): A path coefficient of 0.297 indicates a positive relationship between brand trust and likelihood of purchase. If brand trust increases by one unit, then the likelihood of purchasing a product will increase by 29.7%. This influence is positive, which means that the higher the consumer trust in a brand, the higher the likelihood that they will buy products from that brand.
- Sugar Content Claim → Likelihood to Purchase (0.391): A path coefficient of 0.391 indicates a positive relationship between sugar content claims and purchase potential. If the sugar content claim increases by one unit, then the likelihood of purchasing the product will increase by 39.1%. This effect is positive, which means that the more a product claims to have a low or healthy sugar content, the higher the likelihood that consumers will buy the product.
- Sugar Content Claims → Perceived Healthfulness → Likelihood to Purchase (0.193): Path coefficient of 0.193 indicates a positive indirect influence between sugar content claims and purchase likelihood through health perception. If the claim of sugar content increases by one unit, it can indirectly increase the likelihood of purchasing products through the perception of healthy products by 19.3%
- Sugar Content Claims → Brand Trust → Likelihood to Purchase (0.220): A path coefficient of 0.220 indicates a positive indirect influence between sugar content claims and the likelihood of purchase through brand trust. If the sugar content claim increases by one unit, it can indirectly increase the likelihood of purchasing the product through brand trust by 22.0%.

From the 7 pathway analyses carried out, it can be concluded that all of these pathways have a positive correlation or influence. Furthermore, hypothesis testing was carried out by comparing the p-Value value with a level of significance of 95% ( $\alpha = 0.05$ ). The determination of whether a hypothesis is accepted or rejected is based on the following criteria (Hair, 2024):

- If  $p\_value \leq 0.05$  and  $T\text{-statistic} \geq 1.967$ , then:  
H0 rejected, Ha accepted.
- If the  $p\_value > 0.05$  or the  $T\text{-statistic} < 1.967$ , then:  
H0 accepted, Ha rejected.



**Figure 3. Model Bootstrapping**

Figure 3 shows the structural model test that describes the relationship between the variables that make up the hypothesis.

Based on the results of direct and indirect hypothesis tests in Table 10 and Figure 3, it can be concluded as follows:

- H1: Claims related to sugar content have a positive and significant effect on perceived healthfulness.  
The results of the hypothesis test showed that the influence of sugar content claims on perceived healthfulness had a p-value of 0.000 ( $< 0.05$ ) and a T-statistic of 18.312 ( $> 1.967$ ) showing a significant positive influence. Thus, H1 is accepted.
- H2: Claims related to sugar content have a positive and significant effect on brand trust.  
The results of the hypothesis test show that the influence of sugar content claims on brand trust has a p-value of 0.000 ( $< 0.05$ ) and a T-statistic of 17.101 ( $> 1.967$ ) showing a significant positive influence. Thus, H2 is accepted.
- H3: Perceived healthfulness have a positive and significant effect on likelihood to purchase.  
The results of hypothesis testing showed that the influence of perceived healthfulness on likelihood to purchase had a p-value of 0.022 ( $< 0.05$ ) and T-statistic of 2.306 ( $> 1.967$ ) showed a significant positive influence. Thus, H3 is accepted.
- H4: Brand trust have a positive and significant effect on likelihood to purchase.  
The results of hypothesis testing show that the influence of brand trust on likelihood to purchase has a p-value of 0.001 ( $< 0.05$ ) and T-statistic of 3.335 ( $> 1.967$ ) showing a significant positive influence. Thus, H4 is accepted.
- H5: Claims related to sugar content have a positive and significant effect on likelihood to purchase.  
The results of hypothesis testing showed that the influence of sugar content claims on likelihood to purchase had a p-value of 0.000 ( $< 0.05$ ) and a T-statistic of 3.669 ( $> 1.967$ ) showing a significant positive influence. Thus, H5 is accepted.

H6: Claims related to sugar content have a positive and significant effect on likelihood to purchase mediated by perceived healthfulness.

The results of hypothesis testing showed that the influence of sugar content claims on likelihood to purchase through perceived healthfulness had a p-value of 0.024 ( $< 0.05$ ) and T-statistic of 2.260 ( $> 1.967$ ) showed a significant positive influence. Thus, H6 is accepted.

H7: Claims related to sugar content have a positive and significant effect on Likelihood to Purchase mediated by Brand Trust.

The results of hypothesis testing showed that the influence of sugar content claims on likelihood to purchase through brand trust had a p-value of 0.002 ( $< 0.05$ ) and a T-statistic of 3.161 ( $> 1.967$ ) showing a significant positive influence. Thus, H7 is accepted.

Seven hypotheses in this study were accepted because the p-value was less than 0.05 and the T-statistic value was greater than 1.967, which means that there is enough evidence to state that there is a significant influence between the variables tested, either directly or indirectly.

Direct influence is the relationship between two variables without an intermediate variable. In this study, there are several significant direct influences, namely:

- Perceived Healthfulness  $\rightarrow$  Sugar Content Claims (0.767)
- Brand Trust  $\rightarrow$  Sugar Content Claims (0.742)
- Brand Trust  $\rightarrow$  Likelihood to Purchase (0.744)
- Perceived Healthfulness  $\rightarrow$  Likelihood to Purchase (0.251)

Indirect influence is a relationship between two variables mediated by one or more other variables. In this study, there are 2 significant indirect influences:

- Sugar Related Claim  $\rightarrow$  Perceived Healthfulness  $\rightarrow$  Likelihood to Purchase  
( $0.767 \times 0.251$ ) = 0.193
- Sugar Related Claim  $\rightarrow$  Brand Trust  $\rightarrow$  Likelihood to Purchase  
( $0.742 \times 0.297$ ) = 0.220

As for the direct influence and indirect influence, the total influence can also be seen. Total influence is a combination of direct and indirect influences. The total influence in this research model is as follows:

Total Effect of Likelihood to Purchase  $\rightarrow$  Sugar Content Claims:

0.391 (Direct influence) + 0.193 (Indirect influence through Perceived Healthfulness mediation) + 0.220 (Indirect influence through Brand Trust mediation) = 0.804

The strongest path in this model is the direct influence of sugar content claims on Likelihood to Purchase (0.391). Its total influence of 0.804 shows that sugar claims have a very strong impact on purchasing decisions, both directly and through the mediation of Perceived Healthfulness and Brand Trust. Although not as strong as the direct influence, the variables Perceived Healthfulness and Brand Trust play an important mediating role in this model. Sugar content claims not only affect the perception of health (Perceived Healthfulness) and consumer trust in the brand (Brand Trust) directly, but also, which in turn affects the Likelihood to Purchase indirectly.

## Discussion

### Effect of Claims related to Sugar Content on Perceived Healthfulness

The results of this study firmly accept hypothesis 1, which states that claims related to sugar content have a positive and significant influence on *perceived healthfulness*. The acceptance of this hypothesis is in line with the theoretical foundation and various empirical studies that have been carried out before. From a theoretical perspective,

product claims serve as signals or cues that influence consumer perceptions. In this case, claims related to low or healthy sugar content give a positive signal regarding the attributes of the product, thus forming the perception that the product is healthier and beneficial to health.

These results are also supported by previous studies that show that nutritional claims, including sugar-related claims, can significantly affect consumer perceptions of product health. For example, research by (Nobrega et al., 2020) shows that claims on products have a positive effect on consumer perceptions regarding the health aspects of the product. The descriptive statistical results in this study also reinforce these findings. Respondents showed a positive perception of sugar claims, with the majority agreeing that products with “low sugar” or “sugar-free” claims are healthy products.

The relatively young and educated group tended to be more health-conscious and pay more attention to nutritional information on product packaging. Therefore, they are more likely to be influenced by claims related to sugar content in shaping their perception of the health of the product. The convergence between the theoretical foundation, empirical evidence from previous research, descriptive statistical results, and respondent characteristics provides strong support for hypothesis 1. Claims related to sugar content do play an important role in shaping consumer perceptions of the health of a product.

#### **The Effect of Content-related Claims on *Brand Trust*.**

The results of this study strongly support hypothesis 2, which states that claims related to sugar content have a positive and significant influence on *brand trust*. This means that the more positive the claims submitted regarding the sugar content in the product, the higher the level of consumer trust in the brand. These findings are consistent with the signaling theory that explains that product claims function as signals that convey information to consumers (Kirmani & Rao, 2000). Claims of low or healthy sugar content provide a positive signal about the brand’s commitment to product quality and health, thereby increasing consumer confidence.

The results of this study are also in line with previous empirical studies. For example, (Goodman et al., 2020) found that claims of natural sweeteners can increase consumer trust in brands. In addition, (Wu et al., 2021) research emphasizes the importance of food attribute claims, including sugar-related claims, in building consumer confidence. The descriptive statistics in this study showed that the majority of respondents agreed that they believed claims related to the sugar content listed on the packaging. This shows that consumers tend to consider these claims as credible and reliable information.

The relatively young and educated group tends to be more critical and selective in choosing products. They are more likely to seek information about sugar content and pay attention to claims associated with it. Therefore, positive sugar content claims can be an important factor in building their trust in a brand. Overall, the acceptance of hypothesis 2 is supported by a strong theoretical foundation, empirical evidence from previous research, as well as the characteristics of the respondents. Claims related to positive sugar content can increase consumer confidence in the brand.

#### **Effect of Perceived Healthfulness on Likelihood to Purchase.**

The results of this study firmly accept hypothesis 3, which states that perceived healthfulness has a positive and significant effect on likelihood to purchase. These results are in line with expectations and supported by theoretical foundations and empirical evidence from various previous studies. A positive health perception of a product will increase the overall consumer evaluation of the product. This is in line with the expectancy-value theory, which states that an individual’s attitude towards an object (in

this case, a beverage product) is influenced by their beliefs about the object's attributes (e.g., healthy or unhealthy) and their evaluation of those attributes.

The results of this study are in accordance with various empirical studies that have been carried out previously. These studies consistently show that health perception is an important factor influencing consumers' purchase intention and purchasing behavior, especially in the context of food and beverage products. For example, the study De (De Temmerman et al., 2021) found that health perception mediates the relationship between nutrition labels and purchase intent.

The descriptive statistics in this study also support these findings. The majority of respondents agreed that products with claims related to low or healthy sugar content are good products for them. This shows that respondents have a positive perception of the health of the product. The acceptance of hypothesis 3 is supported by a strong theoretical foundation, empirical evidence from previous research, descriptive statistical results, and respondent characteristics. A positive health perception of a product, which in this study is influenced by claims related to sugar content, can increase the likelihood of consumers purchasing the product.

#### **The Effect of Brand Trust on Likelihood to Purchase**

The results of the study accepted hypothesis 4, which stated that brand trust had a positive and significant effect on the likelihood to purchase. This result was in accordance with expectations and supported by theoretical foundations and empirical evidence found in previous studies. Brand trust is one of the key factors in building a strong relationship between consumers and brands. When consumers have high trust in a brand, they tend to have a more positive attitude towards the products offered by the brand. This is in line with the theory of reasoned action which states that an individual's attitude towards a behavior (in this case, purchasing behavior) is influenced by their beliefs about the consequences of that behavior and their evaluation of those consequences.

These findings are in line with previous studies that show that brand trust has a significant positive influence on consumers' purchase intentions and buying behavior. For example, (Al-Ekam, 2016) research found that brand trust mediates the influence of communication, price, and product quality on consumer purchasing behavior. The majority of respondents stated that they always choose food or beverage products based on brands that they believe in in terms of sugar safety. This shows that brand trust is an important factor that consumers consider in making purchasing decisions.

#### **The Effect of Claims related to Sugar Content on Likelihood to Purchase**

The results of this study accepted hypothesis 5, which stated that claims related to sugar content had a positive and significant effect on likelihood to purchase. These results indicate that claims submitted by producers related to sugar content, such as "low sugar" or "sugar-free" claims, have a considerable impact in encouraging consumer buying interest. These findings are in line with several previous studies that show that claims related to sugar content, especially those that focus on health aspects, can increase consumer buying interest. (Neubig et al., 2024) found that claims of reduced sugar increase purchase intent, especially in health-conscious consumers. In addition, the research of (Oostenbach et al., 2019) also shows that nutritional claims can influence food purchase intentions.

The data obtained from this study shows that consumers have a positive perception of sugar content claims. The majority of respondents stated that they pay attention to claims related to sugar content before buying, consider the claims easy to understand, and trust the claims listed on the packaging. The relatively young and

educated group tends to be more health-conscious and have better access to information. They are more likely to consider the sugar content in a product and be affected by the claims associated with it. In addition, the increasing trend of healthy lifestyles among the public also encourages a preference for products with low or healthy sugar claims.

Claims related to positive sugar content can directly affect consumer buying interest, showing that this claim is an effective marketing tool, especially in the context of increasing public awareness of the importance of a healthy lifestyle.

### **Effect of Sugar Content Related Claims on Likelihood to Purchase mediated by Perceived Healthfulness**

The results of this study accepted hypothesis 6, which stated that claims related to sugar content had a positive and significant effect on the likelihood to purchase through the mediation of perceived healthfulness. Claims related to sugar content such as low sugar or no sugar not only directly affect consumers' buying interest, but also indirectly through their perception of the health of the product. A cognitive theory in consumer decision-making that states that consumers actively process information to form perceptions and beliefs about a product. Claims related to positive sugar content will strengthen consumer perception that the product is healthy. This positive health perception will then improve the overall evaluation of the product and ultimately encourage interest in buying.

Several previous studies have shown that health perception is an important factor that influences consumers' purchase intention and purchasing behavior. (De Temmerman et al., 2021) found that the perception of health acts as a mediator between nutrition labeling and consumer purchase intent. The results of the pathway analysis in this study also provide strong empirical evidence. The path coefficient of 0.193 with a p-value of 0.024 ( $<0.05$ ) shows that there is a significant indirect influence of sugar content claims on the likelihood to purchase through perceived healthfulness.

Overall, the acceptance of hypothesis 6 confirms that health perception plays an important role in explaining how claims related to sugar content can affect consumers' buying interest. Health-related claims, such as "low sugar" or "sugar-free", not only have a direct impact on buying interest, but also indirectly shape consumers' perception of the health of the product, which ultimately drives the purchase decision. This has important implications for marketing strategies, where manufacturers need to pay attention to claims related to sugar content on product packaging and ensure that these claims are accurate and relevant to consumer health perceptions. In addition, manufacturers also need to strengthen the overall health attributes of their products, so that they can strengthen consumer perception and increase buying interest.

### **The Effect of Sugar Content Claims on Likelihood to Purchase mediated by Brand Trust**

The data from this study accepted hypothesis 7, which stated that claims related to sugar content had a positive and significant effect on the likelihood to purchase through the mediation of brand trust. This means that claims regarding low or healthy sugar content not only directly affect consumers' buying interest, but also indirectly through their trust in the brand of the product. The source credibility theory of the model emphasizes that the credibility of the source of information, in this case the brand, plays an important role in influencing consumer attitudes and behaviors. Claims related to positive sugar content can increase brand credibility in the eyes of consumers, especially if the claims are considered honest, transparent, and trustworthy.



High trust in the brand will create a positive perception of the products offered, including perceptions about their quality, safety, and health benefits. Research by (Teng et al., 2021) found that consumers' trust in nutrition labels can increase their purchase intention towards low-sugar drinks. Similar results were also found in the study (Chien et al., 2018), where mothers' beliefs about "no added sugar" claims in baby cereals influenced their purchase intentions. The path coefficient of 0.220 with a p-value of 0.002 ( $<0.05$ ) shows that there is a significant indirect influence of sugar content claims on the likelihood to purchase through brand trust mediation.

Overall, the acceptance of hypothesis 7 confirms that brand trust is an important mechanism in explaining how claims related to sugar content can affect consumer buying interest. Claims related to sugar content, such as "low sugar" or "sugar-free", not only have a direct impact on buying interest, but also indirectly reinforce consumer trust in the brand, which ultimately drives the purchase decision. These findings have important implications for marketing strategies to focus on accurate and transparent sugar content claims and consistently build and maintain brand trust through various means, such as maintaining product quality, providing good customer service, and engaging in socially responsible activities. Strong brand trust will strengthen the positive impact of sugar content claims on consumer buying interest, thereby increasing sales and customer loyalty.

## Conclusion

The results of the study show that claims related to sugar content have a strong positive influence on perceived healthfulness and brand trust. This means that the more a product claims to have a low or healthy sugar content, the more consumers' perception of the health of the product and their trust in the brand will increase. This shows that claims related to sugar content are an important factor that affects consumer perception of products and brands.

Perceived healthfulness and brand trust have also been proven to have a positive and significant effect on likelihood to purchase. The healthier the product is perceived and the higher the consumer's trust in the brand, the more likely they are to buy the product. This shows that health perception and brand trust are important factors that influence consumers' purchasing decisions. Claims related to sugar content also have a positive and significant direct influence on likelihood to purchase. This means that healthier sugar claims can increase consumer buying interest directly, without mediating health perceptions or brand trust.

In addition to direct influence, claims related to sugar content also have a positive and significant effect on the likelihood to purchase through the mediation of perceived healthfulness and brand trust. This indicates that healthier claims improve health perceptions and brand trust, which in turn increases buying interest. This shows that health perception and brand trust are important mechanisms that explain how claims related to sugar content can influence consumers' purchasing decisions. Both perceived healthfulness and brand trust proved to be significant mediators, showing that claims related to sugar content not only have a direct impact on purchase intent, but also indirectly influence through consumers' perception of product health and their trust in the brand.

This study also revealed that the direct influence between sugar content claims does have the strongest relationship, but the total influence of claims related to sugar content on the likelihood to purchase is greater than the direct influence. This emphasizes the

importance of considering the effects of mediation in understanding how product claims affect consumer behavior. The indirect influence through perceived healthfulness and brand trust contributes significantly to the overall impact of sugar-related claims on purchase intent.

Overall, these findings underscore the importance of the role of mediation in understanding the complexity of the relationship between product claims and consumer behavior. Claims related to sugar content not only have a direct impact, but also trigger cognitive and affective processes that ultimately influence purchase decisions.

## References

- Al-Ekam, J. M. E. (2016). The mediating effect of brand trust on the influence of communication, price, and product quality on consumer purchase behaviour in a less-developed country. *Malaysian Management Journal*, 20, 87–97.
- Baidya, D. R. (2020). *An Assessment of Consumer Purchasing Intention Towards Environmentally Friendly Packaging For Ready-to-drink Tea and Coffee From The Study of Consumers Visiting Terminal 21 Mall, Asok, Bangkok*.
- Bauer, J. M., & Reisch, L. A. (2019). Behavioural insights and (un) healthy dietary choices: A review of current evidence. *Journal of Consumer Policy*, 42, 3–45.
- Cepeda-Carrion, G., Cegarra-Navarro, J.-G., & Cillo, V. (2019). Tips to use partial least squares structural equation modelling (PLS-SEM) in knowledge management. *Journal of Knowledge Management*, 23(1), 67–89.
- Chien, T.-Y., Chien, Y.-W., Chang, J.-S., & Chen, Y. C. (2018). Influence of mothers' nutrition knowledge and attitudes on their purchase intention for infant cereal with no added sugar claim. *Nutrients*, 10(4), 435.
- Collins, N., & Lalor, F. (2024). Consumer behaviour towards milk and dairy yoghurt products carrying nutrition and health claims: a qualitative study. *Nutrition & Food Science*, 54(1), 56–70.
- Dam, T. C. (2020). Influence of brand trust, perceived value on brand preference and purchase intention. *The Journal of Asian Finance, Economics and Business*, 7(10), 939–947.
- De Temmerman, J., Heeremans, E., Slabbinck, H., & Vermeir, I. (2021). The impact of the Nutri-Score nutrition label on perceived healthiness and purchase intentions. *Appetite*, 157, 104995.
- Goodman, S., Vanderlee, L., Jones, A., White, C., & Hammond, D. (2020). Perceived healthiness of sweeteners among young adults in Canada. *Canadian Journal of Dietetic Practice and Research*, 82(2), 90–94.
- Huaman-Ramirez, R., & Merunka, D. (2019). Brand experience effects on brand attachment: the role of brand trust, age, and income. *European Business Review*, 31(5), 610–645.
- Ikonen, I., Sotgiu, F., Aydinli, A., & Verlegh, P. W. J. (2020). Consumer effects of front-of-package nutrition labeling: An interdisciplinary meta-analysis. *Journal of the academy of marketing science*, 48, 360–383.
- Keller, K. O., & Guyt, J. Y. (2023). A War on sugar? Effects of reduced sugar content and package size in the soda category. *Journal of Marketing*, 87(5), 698–718.
- Kirmani, A., & Rao, A. R. (2000). No pain, no gain: A critical review of the literature on signaling unobservable product quality. *Journal of marketing*, 64(2), 66–79.
- Musso, F., Colamatteo, A., Bravi, L., Pagnanelli, M. A., Murmura, F., & Sansone, M. (2022). Analysis of factors affecting the purchase of private label products by different age consumers. *British Food Journal*, 124(13), 619–636.
- Neubig, C. M., Staudigel, M., & Roosen, J. (2024). Can health trump taste? Implicit and explicit attitudes toward sugar-reduction claims and their differentiated impact on purchase intention for cereals. *Agribusiness*.
- Ngo, H. M., Liu, R., Moritaka, M., & Fukuda, S. (2020). Effects of industry-level factors, brand credibility and brand reputation on brand trust in safe food: evidence from the safe vegetable sector in Vietnam. *British Food Journal*, 122(9), 2993–3007.
- Nobrega, L., Ares, G., & Deliza, R. (2020). Are nutritional warnings more efficient than claims in shaping consumers' healthfulness perception? *Food Quality and*

*Preference*, 79, 103749.

- Oostenbach, L. H., Slits, E., Robinson, E., & Sacks, G. (2019). Systematic review of the impact of nutrition claims related to fat, sugar and energy content on food choices and energy intake. *BMC Public Health*, 19, 1–11.
- Paunisaari, A. (2019). *The role of nutrition and health claims in the purchasing of functional beverages: Effects on purchasing intent among finnish and American consumers*.
- Purwanto, A. (2021). Partial least squares structural equation modeling (PLS-SEM) analysis for social and management research: a literature review. *Journal of Industrial Engineering & Management Research*.
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair Jr, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of family business strategy*, 5(1), 105–115.
- Schmidt, J., & Bijmolt, T. H. A. (2020). Accurately measuring willingness to pay for consumer goods: a meta-analysis of the hypothetical bias. *Journal of the Academy of Marketing Science*, 48, 499–518.
- Teng, H.-J., Lo, C.-F., & Ni, J.-J. (2021). Synergy effect of nutritional labelling on purchase intention of sugar-sweetened beverages. *British Food Journal*, 123(12), 4402–4420.
- Wahidin, M., Achadi, A., Besral, B., Kosen, S., Nadjib, M., Nurwahyuni, A., Ronoatmodjo, S., Rahajeng, E., Pane, M., & Kusuma, D. (2024). Projection of diabetes morbidity and mortality till 2045 in Indonesia based on risk factors and NCD prevention and control programs. *Scientific reports*, 14(1), 5424.
- Wu, W., Zhang, A., van Klinken, R. D., Schrobback, P., & Muller, J. M. (2021). Consumer trust in food and the food system: a critical review. *Foods*, 10(10), 2490.