“Determinants affecting consumers’ functional food purchase intention in the Southern region of Thailand”

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DETERMINANTS AFFECTING CONSUMERS' FUNCTIONAL FOOD PURCHASE INTENTION IN THE SOUTHERN REGION OF THAILAND

Abstract

Functional food plays an essential role in enhancing strong health and preventing the risk of diverse infectious diseases. This study examines the determinants influencing consumers' functional food purchase intention in the Southern region of Thailand. The Theory of Reasoned Action (TRA) is employed as a research model. The survey is conducted using a quantitative method, while 420 consumers' responses are obtained employing questionnaire at convenience and department stores from February to March 2025. The target sample comprised consumers in three provinces with large economies, including Phuket, Songkhla, and Surat Thani, who knew about functional food and were interested in purchasing it. Structural Equation Modeling (SEM) is used to analyze the research hypotheses. The results indicate that product innovation adoption ($\beta = 0.528$, $p < 0.001$) and influencers ($\beta = 0.518$, $p < 0.001$) have a significant positive influence on purchase intention. On the other hand, brand trust ($\beta = -0.094$, $p = 0.316$) and health consciousness ($\beta = -0.046$, $p = 0.456$) demonstrate insignificant negative impacts on purchase intention. Influencers ($\beta = 0.505$, $p < 0.001$) and health consciousness ($\beta = 0.392$, $p < 0.001$) have a significant positive effect on product innovation adoption. Moreover, influencers ($\beta = 0.266$, $p < 0.001$) and health consciousness ($\beta = 0.207$, $p < 0.001$) positively influence purchase intention indirectly through significant product innovation adoption. The findings will be beneficial and provide managerial implications for manufactures, marketers and state agencies to conduct relevant strategies, which can increase consumers' functional food purchase intention efficiently.

Keywords purchase intention, product innovation adoption, influencers, functional food, Thailand

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INTRODUCTION

The global population is currently approximately 8 billion and continues to grow. The United Nations Department of Economic and Social Affairs (2022) predicted a 10% increase to around 8.5 billion by 2030. This trend increases food demand, resulting in the overuse of natural resources. These consequences have driven global warming, impacting the environment, food systems, and livelihoods, leading to biological hazards from pathogens like viruses, notably COVID-19 (Aksoy et al., 2021; Jeyakumar Nathan et al., 2021). Consequently, this issue has affected well-being and caused a health crisis in Thailand. As a result, the health-conscious trend has gained in popularity among Thai consumers, who prioritize improving their health and quality of life. This has led to changes in consumption behavior with a focus on healthy food to build immunity and prevent diseases, particularly functional food (Kasikorn Research Center, 2022). Understanding the ways and reasons why consumers, who strongly intend to purchase functional

food is critical. Hence, studying consumer behavior is also crucial, leading to improve functional food to meet consumers' needs effectively (Bagchi, 2019; Pienwisetkaew et al., 2022).

The TRA is applied in this study. However, this theory may still have the research gap due to it may still be insufficient for predicting behavioral intention, particularly consumers' purchase intention (Gundala et al., 2022). In order to better comprehend the research gap, this study also seeks to fill it.

The Southern region of Thailand has experienced economic growth continuously. Meanwhile, it is considered an important economic zone for driving and developing the country. In 2023, the Southern region had a Gross Regional Product (GRP) per capita of US$4,468.41, with a growth rate of 2.20% compared to 2022. (Office of the National Economic and Social Development Council, 2025). Since, functional food has been a standard quality product and a quite high price, resulting in consumers in this region have purchasing power towards functional food properly. Therefore, it is crucial to combine other factors into the TRA to clearly understand consumers' intention to purchase functional food, leading to enhance predictive power towards purchase behavior and promote significant sustainable consumption.

1. LITERATURE REVIEW

Functional food plays an important role in improving physical and mental well-being and reducing the risk of diseases. Based on the review of literature, functional food is a food product enhanced with functional ingredients and improved through research and advanced bioprocessing to offer better quality and added benefits for consumers (Vlaicu et al., 2023). It is fortified with bioactive compounds, such as vitamins, minerals, antioxidants, probiotics, prebiotics, dietary fibre, fatty acids, and phytochemicals (Baker et al., 2022). According to the Krungsri Research Center (2022), the global market for functional food was anticipated to reach approximately US$180.80 billion in 2021, and US$206.70 billion by 2026, with a projected annual growth rate of 2.70%. Meanwhile, the market value of functional food in Thailand amounted to around US$3.68 billion in 2019 and is expected to grow at a rate of 7.50% in 2024. Nevertheless, the market value of functional food was generated by no less than US$7.66 billion in 2022 (Thansettakij, 2023). Besides, food consumption trends among Thai people have grown due to food innovation and increased interest in functional food. This expansion is essential for consumers, who wish to prioritize their health and immunity for a sustainable quality of life. Consequently, manufacturers have increased investment in research and development for new functional food products with added health benefits for consumers (Pienwisetkaew et al., 2022). The success of new functional food relies on the acceptance of consumers. Understanding their responses is crucial for manufacturers in the agri-food sector to respond efficiently to consumers' needs, leading to success and growth.

The TRA model has been employed extensively in research to understand the diversity of human behavior in various contexts. It was proposed by Fishbein and Ajzen (1975). Besides, Sheppard et al. (1988) reported that the TRA model could predict individuals' behavior successfully in most cases, provided that such behavior is volitional and unforced. Furthermore, the theory purports that behavioral intention drives actual behavior. Interestingly, the advantage of TRA is that it can help researchers integrate effective variables to better understand behavioral intention (Hu et al., 2024). Even though the TRA theory has been in existence for some time, many consumer survey studies have still utilized it as a foundation for further research (Liu & Tsaur, 2020). The researchers have used the TRA model to predict consumers' healthy food purchase intention, including functional food, proving its effectiveness.

Purchase intention is a powerful approach, employed to predict and influence consumer behavior in the future. It is the main focus of marketing scholars (Lim & An, 2021; Kim & Lee, 2023). Purchase intention refers to consumers' interest in certain products, which leads to their willingness to purchase them (Sudarsono et al., 2024), especially functional food. Previous research has shown that purchase intention is used to study

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consumer behavior regarding functional food, revealing significant insights into their actual purchasing behavior (Nguyen & Phan, 2022; Wu et al., 2022; Añaña & Barbosa, 2023; Nguyen & Pham, 2023). Therefore, purchase intention is utilized in this research to evaluate the capability of consumers to purchase functional food.

Innovation refers to the development of new ideas. It can relate to products, processes, marketing, or organizational innovation (Schumpeter, 1934). One of the crucial innovation components driving businesses is product innovation, which refers to a new product developed under a modern production and processing system to meet changing consumers' needs, as it also influences consumers to purchase a new product (Tarmidi et al., 2021; Chang-Muñoz et al., 2023). Manufacturers realize the importance of sustainable product innovation and communicating its benefits to consumers as part of promoting sustainable consumption, while consumers are the receivers of new products and can decide on their consumption and adoption (Wang & Su, 2022). Thus, product innovation plays a significant role for manufacturers in achieving commercial success, and consumers will also receive the benefits. However, consumer adoption of product innovation is crucial for market success, particularly in the context of functional food, as it significantly influences consumers' purchase intention (Pienwisetkaew et al., 2022). According to the study by Jeyakumar Nathan et al. (2021), food innovation adoption by consumers directly influences organic food purchase intention. Meanwhile, Wang et al. (2024) note that consumers' innovation adoption characteristics directly affect the purchase intention of innovative alternative proteins. Hence, product innovation adoption can play a key role in increasing consumers' purchase intention towards functional food. Consequently, product innovation adoption is also an important determinant in promoting consumers' functional food purchase intention.

Brand trust is based on the context of interactions and exchanges between consumers and the brand. It is quietly generated over time as consumers collect experience and knowledge of the brand (Chavadi et al., 2023; Ling et al., 2023). Hence, as mentioned above, brand trust encourages the creation of long-term, positive relationships between consumers and the brand. Brand trust represents the confidence and reliability consumers have towards the capability of the brand to meet their expectations and act responsibly, as well as fulfil the promises it has made to consumers (Bezbaruah et al., 2022; Teangsompong & Sawangproh, 2024). Recently, consumers have increasingly trusted natural and functional food brands due to their high quality and safety standards (Nguyen, 2020; Bezbaruah et al., 2022). However, brand trust is crucial to ensuring consumer purchases. Accordingly, Teangsompong and Sawangproh (2024) demonstrate that online brand trust positively influences consumers' online purchase intention towards plant-based foods. A recent study by García-Salirrosas et al. (2024) mentions that brand trust in healthy food brand products directly and positively affects consumers' purchase intention. Therefore, brand trust can be particularly influential in increasing and encouraging purchase intention towards functional food.

In the context of marketing, influencers have obtained enhancing attention in researches. They are individuals with specific knowledge and expertise in a particular area of interest, enabling them to effectively convey information and opinions on that subject (Siriphanmanee, 2022). They also influence consumers' behavior, especially purchasing decisions. According to Hoonsopon and Puriwat (2016), influencers can be classified into two categories: private and public groups. A private group comprises people, who are close to consumers, such as peers and family members, while a public group consists of celebrities, public figures, and individuals with large numbers of followers on social media. Generally, influencers are connected to social factors that can impact the decision of those persons, so messages through the media can also influence individual decision-making (Ajzen & Kruglanski, 2019). However, social factors play an important role in the concept of purchasing and consumption, resulting in the consumption and purchase of healthy food receiving a positive response from consumers, including functional food (Nystrand & Olsen, 2020; Aksoy et al., 2021). Accordingly, Jeyakumar Nathan et al. (2021) show a positive relationship between the social factor and consumers' food innovation adoption towards organic food. Whereas, Binthawihok (2021) reports that influencers have a positive ef-

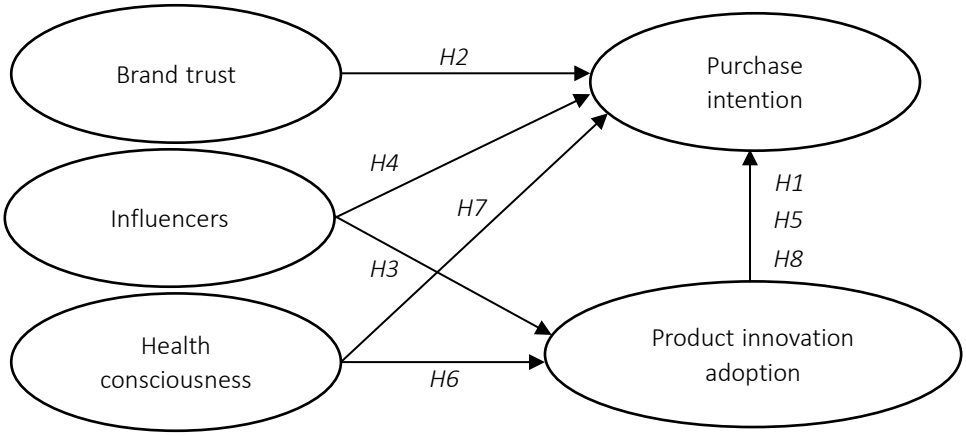

Figure 1. Conceptual framework

fect on consumers' purchase intention towards natural functional drinks, while the findings of Añaña and Barbosa (2023) indicate that digital influencers significantly influence consumers' purchase intention towards a healthy food product. Moreover, Jeyakumar Nathan et al. (2021) illustrate that the impact of social factors on consumers' purchase intention of organic food is mediated by food innovation adoption. Consequently, influencers can also drive and increase consumers' product innovation adoption and purchase intention towards functional food.

Health-conscious consumers often prioritize healthcare to achieve good health, such as exercising regularly, getting enough rest, and consuming healthy food. Indeed, health consciousness describes the level at which persons attend to their health or are inclined to take care of their health, while living and performing daily activities simultaneously, particularly the purchase of food products driven by health and product safety reasons (Pu et al., 2021; Arcese et al., 2024). Recently, consumers have become more conscious of the role played by functional food in their nutrition, creating a trend that is gaining interest (Zarif Sagheb et al., 2020; Nguyen & Pham, 2023). However, health consciousness is a fundamental driving force encouraging consumers to purchase healthy food to improve their health, including functional food. According to Jeyakumar Nathan et al. (2021), health consciousness directly affects the adoption by consumers of organic food innovation. Meanwhile, prior studies by Nguyen and Phan (2022) and Nguyen and Pham (2023) illustrate that health consciousness significantly influences consumers' purchase intention towards functional food. Furthermore, Jeyakumar Nathan et al. (2021) propose that food innovation adoption plays a mediating role in the influence of health consciousness on consumers' purchase intention towards organic food. Based on a review of the literature, health consciousness can significantly influence product innovation adoption and consumers' purchase intention towards functional food.

This study aims to investigate the factors influencing the functional food purchase intention of consumers in the Southern region of Thailand through such determinants as product innovation adoption, brand trust, influencers, and health consciousness. The conceptual model of this study is presented in Figure 1. Based on the literature review, the following hypotheses are proposed:

H1: Product innovation adoption positively and directly influences consumers' functional food purchase intention.

H2: Brand trust positively and directly influences consumers' functional food purchase intention.

H3: Influencers positively and directly influence product innovation adoption.

H4: Influencers positively and directly influence consumers' functional food purchase intention.

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H5: Influencers positively and indirectly influence consumers' functional food purchase intention through product innovation adoption.

H6: Health consciousness positively and directly influences product innovation adoption.

H7: Health consciousness positively and directly influences consumers' functional food purchase intention.

H8: Health consciousness positively and indirectly influences consumers' functional food purchase intention through product innovation adoption.

2. METHODOLOGY

This study employs a quantitative approach as the essential research methodology. A survey was conducted via questionnaire using non-probability sampling due to an unknown population size. Consumers selected for the sample consisted of those who knew about functional food and were interested in purchasing it. However, this study concentrates on general consumers for the following reasons. The majority of consumers are concerned regarding health. Meanwhile, they have sufficient knowledge and experience about functional food (Binthawihok, 2021). Thus, they also are interested to consume functional food increasingly in order to gain good health and become relevant participants to answer questions for the research concerning functional food purchase intention. According to Tabachnick and Fidell (2013) recommend that a sample size of 300 or more is required for SEM analysis. The sample size for this study was computed by considering the number of indicator variables. This study included 32 indicator variables and used a ratio concept between the sample and the number of indicator variables, indicating that the sample size should not be less than 10 cases per one indicator variable (Bentler & Chou, 1987). Hence, a sample size of 320 consumers was obtained. Nevertheless, in the event that the distributed questionnaire contains incomplete responses, the sample size would be enhanced proportionally to 420 respondents living in three provinces with large economies in the Southern region, Thailand, namely Phuket, Songkhla, and Surat Thani. The survey was conducted at convenience and department stores from February to March 2025, and the purposive sampling technique was applied to select respondents. This method uses a specific standard to obtain respondents corresponding to the studied phenomenon (Damayanti et al., 2024) and can include specific details due to the characteristic knowledge or observance of the predefined principle. However, this study was reviewed and approved by the Ethics Committee on Human Research of Thaksin University, with number COA No.TSU 2024_288.

The questionnaire items were rated using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). This scale requires respondents to identify the degree to which they strongly disagree or agree with a series of statements on a specific point. The proposed measurement variables consisted of five constructs. The consideration of each construct in this research was adopted and modified based on previous studies. Firstly, purchase intention was measured through six items as proposed by Shen and Chen (2020) and Nguyen et al. (2021). Secondly, product innovation adoption included six observables modified from Jeyakumar Nathan et al. (2021). Thirdly, brand trust was measured by six different items and extracted from previous studies as Binthawihok (2021). Fourthly, the influencers section comprised seven items adopted from Binthawihok (2021). Finally, the validated seven items were used to measure health consciousness taken from Jeyakumar Nathan et al. (2021). For reliability, 30 consumers, who knew and were interested in purchasing functional food and were not included in the study sample, examined the questionnaire. The Statistical Package for Social Science (SPSS) software was used to test the questionnaire and determine its reliability. Cronbach's alpha coefficient was adopted to test the reliability of the measurement items. The Cronbach's alpha, valued at 0.945, was found to be at an acceptable level. When analyzed separately, the findings displayed that product innovation adoption, brand trust, influencers, health consciousness, and purchase intention revealed Cronbach's alpha coefficients valued at 0.826, 0.775, 0.882, 0.917, and 0.886, respectively, demonstrating an acceptable level. SPSS was used to analyze the sample demographic statistics. Jamovi software was employed

to test the hypotheses, with confirmatory factor analysis (CFA) used to confirm measurement reliability and validity, and SEM for hypothesis testing of the proposed structural model.

3. RESULTS

Table 1 presents the descriptive statistics of the sample characteristics. The majority of respondents were female (269 persons, 64.0%), aged 18-25 years (173 persons, 41.2%), single (266 persons, 63.3%), students (144 persons, 34.3%), held a Bachelor's degree (306 persons, 72.9%), and had a monthly income of less than or equal to 15,000 THB (180 persons, 42.9%). Most of the participants knew and were interested in purchasing dairy products (275 persons, 22.4%).

Table 1. Sample characteristics

Items	Classification	Frequency	Percentage
Gender	Male	151	36.0
	Female	269	64.0
Age	18-25 years (Gen Z)	173	41.2
	26-41 years (Gen Y)	137	32.6
	42-57 years (Gen X)	82	19.5
	58-76 years (Gen B)	28	6.7
Marital status	Single	266	63.3
	Married	139	33.1
	Divorced/widowed/ separated	15	3.6
Occupation	Student	144	34.3
	Private employee	82	19.5
	Civil servant	98	23.3
	Business	85	20.3
	Others: housewife, retired	11	2.6
Education	Below Bachelor's degree	80	19.0
	Bachelor's degree	306	72.9
	Above Bachelor's degree	34	8.1
Income (THB)	Less than or equal to 15,000	180	42.9
	15,001-30,000	161	38.3
	30,001-45,000	61	14.5
	More than 45,001	18	4.3
Types of functional foods that you know about and are interested in purchasing	Dairy products	275	22.4
	Chocolate products	183	14.9
	Bread/crackers/ bakery products	227	18.4
	Grain cereal products	189	15.4
	Soft drinks	117	9.5
	Egg products	144	11.7
	Functional meat products	95	7.7

The measurement model was assessed by conducting CFA to test the reliability and validity of all constructs. As presented in Table 2, the results revealed that the factor loading ranged from 0.636 to 0.849 and therefore beyond 0.500, indicating a high level of reliability. Thus, all constructs were internally consistent and reliable. Meanwhile, the range of Composite Reliability (CR) was between 0.877 to 0.925, and therefore greater than 0.700, indicating a strong convergent validity. In addition, all constructs had the Average Variance Extracted (AVE) greater than 0.500, ranging from 0.501 to 0.681, demonstrating an acceptable convergent validity. All values revealed in the results indicated acceptable reliability and validity for the measurement model. However, all indicators showed significant values at $p < 0.001$, consecutively.

Table 2. Measurement model

Constructs	Items	Factor loadings	CR	AVE
Product innovation adoption (PIA)	PIA1	0.737	0.885	0.559
	PIA2	0.787		
	PIA3	0.755		
	PIA4	0.764		
	PIA5	0.745		
	PIA6	0.729		
Brand trust (BT)	BT1	0.734	0.882	0.561
	BT2	0.788		
	BT3	0.738		
	BT4	0.683		
	BT5	0.767		
	BT6	0.784		
Influencers (I)	I1	0.739	0.894	0.553
	I2	0.697		
	I3	0.686		
	I4	0.788		
	I5	0.797		
	I6	0.701		
	I7	0.781		
Health consciousness (HC)	HC1	0.636	0.877	0.501
	HC2	0.753		
	HC3	0.734		
	HC4	0.683		
	HC5	0.728		
	HC6	0.736		
	HC7	0.709		
Purchase intention (PI)	PI1	0.827	0.925	0.681
	PI2	0.849		
	PI3	0.843		
	PI4	0.842		
	PI5	0.819		
	PI6	0.757		

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Heterotrait-monotrait (HTMT) ratio of correlations was also employed to test the discriminant validity of each construct before the SEM analysis. The HTMT was used to gain more credible results. According to Table 3, all HTMT values of latent variables in this study were less than 0.900, demonstrating satisfactory discriminant validity.

Table 3. The HTMT ratio of correlations

Constructs	BT	I	HC	PI	PIA
BT	–	–	–	–	–
I	0.897	–	–	–	–
HC	0.710	0.700	–	–	–
PI	0.724	0.812	0.616	–	–
PIA	0.758	0.774	0.717	0.819	–

The acceptance values for considering the measurement model fit require that the obtained fit indices meet the following criteria: the chi-square ratio value to degrees of freedom () should be less than 3.000, the Comparative Fit Index (CFI) should be greater than 0.900, and the Tucker-Lewis Index (TLI) should exceed 0.900. For alternative indices, the root mean square error of approximation (RMSEA) should be below 0.080, and the standardized root mean square residual (SRMR) should be less than 0.080. The CFA findings demonstrated that the fit indices met the desired levels (= 1,105 ($p < 0.001$); df = 454; = 2.44; CFI = 0.926; TLI = 0.919; RMSEA = 0.054; SRMR = 0.046). Thus, the measurement model was found to be a good and reliable fit with the data.

SEM was used to evaluate the hypothesized conceptual model of this study, including *H1* to *H8* (Figure 2). The goodness-of-fit indices for the proposed conceptual model displayed an acceptable model fit (= 958 ($p < 0.001$); df = 450; = 2.13; CFI = 0.942; TLI = 0.936; RMSEA = 0.052; SRMR = 0.045). Additionally, all the foregoing indices were greater than the recommended goodness-of-fit values. Table 4 reveals the hypotheses results for the structural model. The main findings revealed that six out of eight hypotheses were supported. According to *H1*, the positive evaluation of coefficients between product innovation adoption and purchase intention had a significant and direct positive impact (= 0.528, $p < 0.001$). Therefore, *H1* was supported. Brand trust highlighted an insignificant and direct negative impact on purchase intention (= –0.094, $p = 0.316$), indicating *H2* was not supported. The influencers effect demonstrated a substantial and direct positive influence on product innovation adoption (= 0.505, $p < 0.001$), hence supporting *H3*. The positive relationship between influencers and purchase intention displayed a significant and direct positive influence (= 0.518, $p < 0.001$). Consequently, *H4* was supported. For *H5*, stating that product innovation adoption plays a significant mediating role in the impact of influencers on purchase intention, was supported (= 0.266, $p < 0.001$). Testing the impact of health consciousness towards product innovation adoption illustrated a significant and direct positive effect (= 0.392, $p < 0.001$), demonstrating *H6* was supported. Health consciousness described an insignificant and direct negative influence on purchase intention (= –0.046, $p = 0.453$). Thus, *H7* was not supported. Finally, the influence of health consciousness on purchase intention was significantly mediated by product innovation adoption (= 0.207, $p < 0.001$), indicating *H8* was supported.

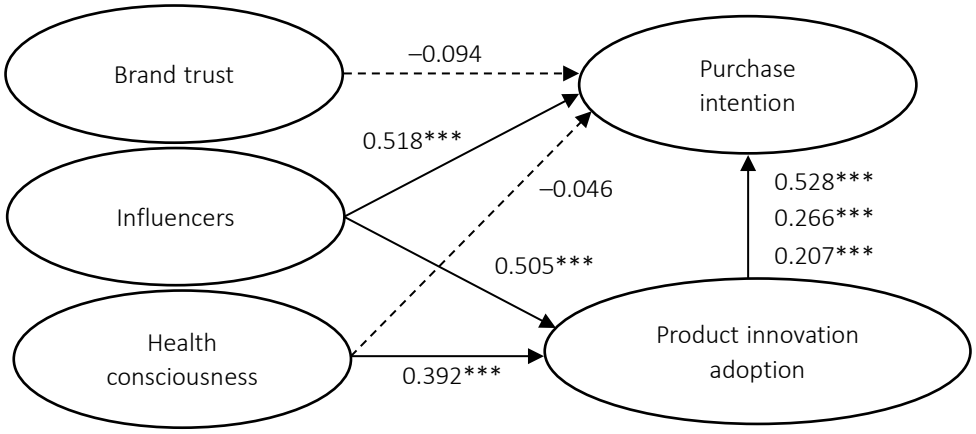

Figure 2. Results of the conceptual model

Table 4. Hypotheses results for the structural model

Hypothesis	Path correlation	Path coefficients	*p*-value	Results
H1	PIA → PI	0.528***	< 0.001	Supported
H2	BT → PI	–0.094	0.316	Not supported
H3	I → PIA	0.505***	< 0.001	Supported
H4	I → PI	0.518***	< 0.001	Supported
H5	I → PIA → PI	0.266***	< 0.001	Supported
H6	HC → PIA	0.392***	< 0.001	Supported
H7	HC → PI	–0.046	0.456	Not supported
H8	HC → PIA → PI	0.207***	< 0.001	Supported

Note: *** $p < 0.001$.

4. DISCUSSION

Firstly, the finding supports *H1* that product innovation adoption has a significant positive influence on consumers' functional food purchase intention, which is similar with the results of Jeyakumar Nathan et al. (2021) and Wang et al. (2024). From this finding, it can be interpreted that consumers give priority and adopt product innovation increasingly, notably functional food, which ultimately leads to the creation of a stronger purchase intention, as functional food, is a new product that can improve good health and well-being for collective consumers.

Secondly, the hypothesis *H2* was not supported that brand trust was revealed to have an insignificant negative effect on purchase intention towards functional food, which does not align with the previous research of Teangsompong and Sawangproh (2024) and García-Salirrosas et al. (2024) but reinforces the results of Binthawihok (2021). A possible explanation for this finding is that consumers considered brand trust to be an unimportant consideration when purchasing functional food; however, they prioritize and would like to purchase based on other factors, such as health benefits and nutritional information.

Thirdly, the result of this study indicates that influencers have significant positive influences on product innovation adoption and purchase intention towards functional food, indicating *H3* and *H4* was supported. This result adds to previous studies conducted by Jeyakumar Nathan et al. (2021), Binthawihok (2021) and Añaña and Barbosa (2023). It can be explained that consumers focus on influencers consecutively, leading to higher product innovation adoption and purchase intention, particularly towards functional food, so that influencers will encourage consumers to prioritize their new product recommendation and its benefits. When consumers recognize the information provided, it gives them confidence, which they apply to their decision-making.

Fourthly, the study outcomes validate *H5*, which proposed that influencers were found to positively and indirectly influence consumers' functional food purchase intention by driving significant product innovation adoption among consumers towards functional food. This result is consistent with that of Jeyakumar Nathan et al. (2021). It can be described that consumers realize importance product innovation adoption, which plays a significant role in mediating between influencers and consumers' purchase intention. Ultimately, they will have enhanced purchase intention, especially functional food.

Fifthly, the finding of this study show that health consciousness was revealed to have a significant positive influence on product innovation adoption, supporting *H6*. This result is consistent with previous research confirmed by Jeyakumar Nathan et al. (2021). It illustrates that consumers considered health consciousness extremely in order to attain the goal of good health, leading to product innovation adoption, especially functional food.

Sixthly, the hypothesis *H7* was not supported, which found that health consciousness had an insignificant negative effect on purchase intention towards functional food. This finding is not aligned with the results of Nguyen and Phan (2022) and Nguyen and Pham (2023) but conform to the studies of Zayed et al. (2022), Permatasari et al. (2024) and Jakubowska et al. (2024). From this

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finding, it can be interpreted that consumers did not believe health consciousness to be the main driving force behind the purchase of functional food, but they prioritized and needed to purchase it for other reasons, such as product innovation, reasonable price, good taste, and convenience in purchasing.

Lastly, *H8* proposed that health consciousness was revealed to have an indirect positive influence on consumers' functional food purchase intention through significant product innovation adoption, supporting *H8*. This result is consistent with the research of Jeyakumar Nathan et al. (2021). It can be demonstrated that health consciousness can result in product innovation adoption for consumers towards functional food, leading to higher purchase intention. Hence, the crucial role of health consciousness on purchase intention may be mediated by product innovation adoption.

CONCLUSION

This study aims to examine the determinants affecting consumers' functional food purchase intention in the Southern region of Thailand. The empirical findings revealed that product innovation adoption and influencers had a significant positive effect on consumers' functional food purchase intention. The significant positive impact of influencers and health consciousness on product innovation adoption, while the influence of them on consumers' functional food purchase intention is significantly mediated by product innovation adoption.

Besides, this study provides managerial implications for stakeholders in three parts. Firstly, manufacturers should give precedence to the research and development of functional food innovation to respond to consumers' needs. Secondly, marketers should establish communication channels for consumers and utilize online advertisements by influencers to create positive perceptions towards functional food innovation. Lastly, state agencies should encourage consumers to give priority to health consciousness and organize training to provide knowledge of functional food innovation.

However, this research has some limitations, which can be epitomized into three areas. To begin with, this research estimated consumers' purchase intention towards functional food using various samples. Hence, future studies should consider specific samples to provide more detailed results. Secondly, this study examined consumers' purchase behavior by integrating diverse variables, comprising product innovation adoption, brand trust, influencers, and health consciousness. Consequently, future research should adapt other factors into the research to obtain divergent findings and benefits. Lastly, this was a quantitative study. Therefore, future studies could conduct a mixed methods study, while a qualitative study should include in-depth interviews to acquire different and more dependable information.

AUTHOR CONTRIBUTIONS

Conceptualization: Bamrungphong Phongphanich, Chetsada Noknoi, Orachan Sirichote.
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REFERENCES

1. Ajzen, I., & Kruglanski, A. W. (2019). Reasoned action in the service of goal pursuit. *Psychological Review, 126*(5), 774-786. https://doi.org/10.1037/rev0000155
2. Aksoy, N. C., Kabadayi, E. T., & Alan, A. K. (2021). An unintended consequence of Covid-19: Healthy nutrition. *Appetite, 166,* 105430. https://doi.org/10.1016/j.appet.2021.105430
3. Añaña, E., & Barbosa, B. (2023). Digital influencers promoting healthy food: The role of source credibility and consumer attitudes and involvement on purchase intention. *Sustainability, 15*(20), 15002. https://doi.org/10.3390/su152015002
4. Arcese, G., Elmo, G. C., Fortuna, F., Pasca, M. G., & Risso, M. (2024). The role of traditional aspects, health consciousness and environmental concerns in Italian agri-food consumption during Covid-19. *British Food Journal, 126*(1), 237-254. https://doi.org/10.1108/BFJ-10-2022-0841
5. Bagchi, D. (2019). *Nutraceutical and functional food regulations in the United States and around the world* (3rd ed.). Academic Press, Massachusetts.
6. Baker, M. T., Lu, P., Parrella, J. A., & Leggette, H. R. (2022). Consumer acceptance toward functional foods: A scoping review. *International Journal of Environmental Research and Public Health, 19*(3), 1217. https://doi.org/10.3390/ijerph19031217
7. Bentler, P. M., & Chou, C. P. (1987). Practical issues in structural modeling. *Sociological Methods & Research, 16*(1), 78-117. https://doi.org/10.1177/0049124187016001004
8. Bezbaruah, S., Dhir, A., Talwar, S., Tan, T. M., & Kaur, P. (2022). Believing and acting on fake news related to natural food: The influential role of brand trust and system trust. *British Food Journal, 124*(9), 2937-2962. https://doi.org/10.1108/BFJ-02-2021-0190
9. Binthawihok, P. (2021). *Factors influencing the customers intention to purchase a natural functional drink in Bangkok* [Master thesis, Mahidol University]. Retrieved from https://archive.cm.mahidol.ac.th/bitstream/123456789/3980/1/TP%20MM.004%202021.pdf
10. Chang-Muñoz, E. A., Guarín-García, A. F., Charris-Sevilla, Y., Gallego-Nicholls, J. F., Santos-Rojo, C., & Ortigosa-Blanch, A. (2023). Innovation activities and their impact on product innovation results: Evidence from a sectorial study. *Sustainability, 15*(8), 6459. https://doi.org/10.3390/su15086459
11. Chavadi, C. A., Sirothiya, M., Menon, S. R., & MR, V. (2023). Modelling the effects of social media–based brand communities on brand trust, brand equity and consumer response. *Vikalpa: The Journal for Decision Makers, 48*(2), 114-141. https://doi.org/10.1177/02560909231172010
12. Damayanti, C. P., Ninggar, D., & Sugiarto, C. (2024). The effect of influencer advertising on the intention to buy Wardah cosmetics in Indonesia. *Innovative Marketing, 20*(1), 88-100. http://dx.doi.org/10.21511/im.20(1).2024.08
13. Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention: An introduction to theory and research* (1st ed.). Addison Wesley, Boston.
14. García-Salirrosas, E. E., Escobar-Farfán, M., Veas-González, I., Esponda-Perez, J. A., Gallardo-Canales, R., Ruiz-Andia, R., ... & Zabalaga-Davila, R. F. (2024). Purchase intention of healthy foods: The determinant role of brand image in the market of a developing country. *Foods, 13*(20), 3242. https://doi.org/10.3390/foods13203242
15. Gundala, R. R., Nawaz, N., Harindranath, R. M., Boobalan, K., & Gajenderan, V. K. (2022). Does gender moderate the purchase intention of organic foods? Theory of reasoned action. *Heliyon, 8*(9), e10478. https://doi.org/10.1016/j.heliyon.2022.e10478
16. Hoonsopon, D., & Puriwat, W. (2016). The effect of reference groups on purchase intention: Evidence in distinct types of shoppers and product involvement. *Australasian Marketing Journal, 24*(2), 157-164. https://doi.org/10.1016/j.ausmj.2016.05.001
17. Hu, T. L., Chao, C. M., & Lin, G. H. (2024). The role of social media marketing in green product repurchase intention. *Sustainability, 16*(14), 5916. https://doi.org/10.3390/su16145916
18. Jakubowska, D., Dąbrowska, A. Z., Pachołek, B., & Sady, S. (2024). Behavioral intention to purchase sustainable food: Generation Z's perspective. *Sustainability, 16*(17), 7284. https://doi.org/10.3390/su16177284
19. Jeyakumar Nathan, R., Soekmawati, Victor, V., Popp, J., Fekete-Farkas, M., & Oláh, J. (2021). Food innovation adoption and organic food consumerism – A cross national study between Malaysia and Hungary. *Foods, 10*(2), 363. https://doi.org/10.3390/foods10020363
20. Kasikorn Research Center (2022). *Health-conscious trend from Covid-19, creating opportunities for SMEs*. Retrieved from https://www.kasikornbank.com/SiteCollectionDocuments/business/sme/knowledge/article/KSMEAnalysis/Healthtrend_SME/Healthtrend_SME.pdf
21. Kim, N., & Lee, K. (2023). Environmental consciousness, purchase intention, and actual purchase behavior of eco-friendly products: The moderating impact of situational context. *International Journal of Environmental Research and Public Health, 20*(7), 5312. https://doi.org/10.3390/ijerph20075312
22. Krungsri Research Center (2022). *Future food industry*. Retrieved from https://www.krungsri.com/th/research/research-intelligence/future-food-2022
23. Lim, H. R., & An, S. (2021). Intention to purchase wellbeing

http://dx.doi.org/10.21511/im.21(4).2025.15

food among Korean consumers: An application of the Theory of Planned Behavior. *Food Quality and Preference, 88,* 104101. https://doi.org/10.1016/j.foodqual.2020.104101

24. Ling, S., Zheng, C., & Cho, D. (2023). How brand knowledge affects purchase intentions in fresh food e-commerce platforms: The serial mediation effect of perceived value and brand trust. *Behavioral Sciences, 13*(8), 672. https://doi.org/10.3390/bs13080672

25. Liu, H. T., & Tsaur, R. C. (2020). The theory of reasoned action applied to green smartphones: Moderating effect of government subsidies. *Sustainability, 12*(15), 5979. https://doi.org/10.3390/su12155979

26. Nguyen, H. V., Nguyen, N., Nguyen, B. K., & Greenland, S. (2021). Sustainable food consumption: Investigating organic meat purchase intention by Vietnamese consumers. *Sustainability, 13*(2), 953. https://doi.org/10.3390/su13020953

27. Nguyen, N. T. (2020). Attitudes and repurchase intention of consumers towards functional foods in Ho Chi Minh city, Vietnam. *International Journal of Analysis and Applications, 18*(2), 212-242. https://doi.org/10.28924/2291-8639-18-2020-212

28. Nguyen, T. T., & Pham, T. T. V. (2023). Determinants of purchase intentions: Foreign imported functional foods in Asian emerging country. *Food Research, 7*(3), 55-62. https://doi.org/10.26656/fr.2017.7(3).849

29. Nguyen, T. T., & Phan, H. T. T. (2022). Impact of COVID-19 anxiety on functional foods consuming intention: Role of electronic word of mouth. *Heliyon, 8*(11), e11344. https://doi.org/10.1016/j.heliyon.2022.e11344

30. Nystrand, B. T., & Olsen, S. O. (2020). Consumers' attitudes and intentions toward consuming functional foods in Norway. *Food Quality and Preference, 80,* 103827. https://doi.org/10.1016/j.foodqual.2019.103827

31. Office of the National Economic and Social Development Council (2025). *Gross regional and provincial product 2023.* Retrieved from https://www.nesdc.go.th/wordpress/wp-content/uploads/2025/05/article_20250508160158.pdf

32. Permatasari, N., Rohman, F., & Vaya Hapsari, R. D. (2024). The influence of health consciousness, food safety concern, subjective norm, perceived behavioral control on organic rice purchase intention mediated by attitude: A study on millennial generation in East Java. *International Research Journal of Economics and Management Studies, 3*(7), 184-194. https://doi.org/10.56472/25835238/IRJEMS-V3I7P120

33. Pienwisetkaew, T., Wongthahan, P., Naruetharadhol, P., Wongsaichia, S., Vonganunsuntree, C., Padthar, S., ... & Ketkaew, C. (2022). Consumers' intention to purchase functional non-dairy milk and gender-based market segmentation. *Sustainability, 14*(19), 11957. https://doi.org/10.3390/su141911957

34. Pu, B., Du, F., Zhang, L., & Qiu, Y. (2021). Subjective knowledge and health consciousness influences on health tourism intention after the COVID-19 pandemic: A prospective study. *Journal of Psychology in Africa, 31*(2), 131-139. https://doi.org/10.1080/14330237.2021.1903181

35. Schumpeter, J. A. (1934). *The theory of economic development* (1st ed.). Harvard University Press, Cambridge.

36. Shen, Y. C., & Chen, H. S. (2020). Exploring consumers' purchase intention of an innovation of the agri-food industry: A case of artificial meat. *Foods, 9*(6), 745. http://doi.org/10.3390/foods9060745

37. Sheppard, B. H., Hartwick, J., & Warshaw, P. R. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research, 15*(3), 325-343. http://www.jstor.org/stable/2489467

38. Siriphanmanee, W. (2022). *Factors affecting loyalty in influencer tracking for food product reviews of customers in each generation*. [Master thesis, Mahidol University]. Retrieved from https://archive.cm.mahidol.ac.th/bitstream/123456789/4956/1/TP%20MM.071%202565.pdf

39. Sudarsono, H., Ikawati, R., Azizah, S. N., Sujono, R. I., & Fitriyani, Y. (2024). Muslim Generation Z's purchase intention of halal cosmetic products in Indonesia. *Innovative Marketing, 20*(4), 13-24. http://dx.doi.org/10.21511/im.20(4).2024.02

40. Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Pearson International Publishing, Boston.

41. Tarmidi, D., Mardhatillah, S., Masripah, F., Febriyanto, D., & Pribadi, T. A. (2021). The influence of product innovation and price on customer satisfaction in halodoc health application services during Covid-19 (Survey of halodoc app users in Bandung in 2021). *Turkish Journal of Computer and Mathematics Education (TURCOMAT), 12*(11), 1084-1091. https://doi.org/10.17762/turcomat.v12i11.6000

42. Teangsompong, T., & Sawangproh, W. (2024). Understanding online purchase intention of plant-based foods: Exploring causal factors and moderating role of self-efficacy within the SOR theory. *Heliyon, 10*(10), e30785. https://doi.org/10.1016/j.heliyon.2024.e30785

43. Thansettakij. (2023). *Future food, a rising star among the top 10 booming s-curve industries*. Retrieved from https://www.thansettakij.com/business/economy/568548

44. United Nations Department of Economic and Social Affairs. (2022). *World population prospects 2022: Summary of results*. Retrieved from https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022_summary_of_results.pdf

45. Vlaicu, P. A., Untea, A. E., Varzaru, I., Saracila, M., & Oancea, A. G.

(2023). Designing nutrition for health – Incorporating dietary by-products into poultry feeds to create functional foods with insights into health benefits, risks, compounds, food component functionality and safety regulations. *Foods, 12*(21), 4001. https://doi.org/10.3390/foods12214001

46. Wang, O., Perez-Cueto, F. J., Scarpa, R., & Scrimgeour, F. (2024). The influence of innovation-adoption characteristics on consumers' trust and purchase intentions of innovative alternative proteins: A comparison between plant-based food, cultured food, and insect-based food. *Food Quality and Preference, 113,* 105072. https://doi.org/10.1016/j.foodqual.2023.105072

47. Wang, S., & Su, D. (2022). Sustainable product innovation and consumer communication. *Sustainability, 14*(14), 8395. https://doi.org/10.3390/su14148395

48. Wu, I. H., Liang, C., & Ip, C. Y. (2022). Involvement theory with market segmentation: Effect of false functional food advertising on purchase intention. *Foods, 11*(7), 978. https://doi.org/10.3390/foods11070978

49. Zarif Sagheb, M., Ghasemi, B., & Nourbakhsh, S. K. (2020). Factors affecting purchase intention of foreign food products: An empirical study in the Iranian context. *British Food Journal, 122*(5), 1485-1504. https://doi.org/10.1108/BFJ-05-2019-0318

50. Zayed, M. F., Gaber, H. R., & El Essawi, N. (2022). Examining the factors that affect consumers' purchase intention of organic food products in a developing country. *Sustainability, 14*(10), 5868. https://doi.org/10.3390/su14105868

http://dx.doi.org/10.21511/im.21(4).2025.15

APPENDIX A

Table A1. Questionnaire items

Constructs	Items	Sources
Product innovation adoption	PIA1: Functional food products are innovations for me. PIA2: The production and processing of functional food products influence me to make a decision about what I choose to consume. PIA3: Advanced biotechnology has produced functional food products with improved quality. PIA4: Functional food products are innovative products that will be accepted by consumers. PIA5: I support the use of technology and innovation in the production of functional food products. PIA6: Technologically superiority in producing functional food products will enhance food yields to ensure they will be sufficient for consumers' needs.	Jeyakumar Nathan et al. (2021)
Brand trust	BT1: I am confident that the brand of functional food products I am interested in purchasing from will consistently maintain the quality and standards of its products. BT2: I am interested in purchasing functional food products from a well-known brand, although I never purchase or consume them. BT3: The brand of functional food products that I am interested in purchasing is a brand about, which I am confident as its image reflects honesty and sincerity. BT4: When I consider purchasing functional food products, I prioritize the brand before the price. BT5: I am confident that functional food products from a well-known brand will meet the expected high quality. BT6: I believe that the brand of functional food products that I am interested in purchasing will deliver the value proposition as a promise to consumers.	Binthawihok (2021)
Influencers	I1: My friends play a role in recommending functional food products for me to consume. I2: My family members influence me in my decision to consume functional food products. I3: I think that media stimulation will help me realize the benefits of consuming functional food products for health. I4: Celebrities influence me by recommending that I consume functional food products. I5: Food product reviewers create an attraction for me, encouraging my interest in consuming functional food products. I6: Health experts can provide reliable information and influence my decision to consume functional food products. I7: Social media influencers influence my decision to consume functional food products.	Binthawihok (2021)
Health consciousness	HC1: Health consciousness makes me think that it is crucial that I choose to consume healthy food. HC2: I am very conscious and attentive about taking care of my health. HC3: I am conscious and attentive about my health changes. HC4: I give precedence to having a strong body. HC5: Health concerns influence my decision to consume functional food products. HC6: The nutritional value of functional food products affects my decision about what I choose to consume. HC7: I prioritize consuming functional food products in order to sustain good health.	Jeyakumar Nathan et al. (2021)
Purchase intention	PI1: I intend to purchase functional food products. PI2: I think and consider purchasing functional food products, as they are the best choice for me. PI3: The probability that I will purchase functional food products is very high. PI4: I intend to purchase more functional food products than other products. PI5: I intend to purchase functional food products even though they are more expensive. PI6: I intend to consume new functional food products.	Shen and Chen (2020), Nguyen et al. (2021)