

Digital information exposure and behavioral intention toward healthy diet: An application of the theory of planned behavior

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Abstract

This study examines the healthy diet intention using the Theory of Planned Behavior framework, in which it investigates the roles of attitude, subjective norms, and perceived behavioral control in predicting individuals' intentions to adopt healthy dietary behavior, and the mediating role of attitude in the relationship between digital information exposure and healthy diet intention. This study was prompted by the increasing awareness about diet and the proliferation of information about healthy diets in digital media, but there is an increase in the number of obesity cases in Indonesia. A quantitative approach was employed using an online survey involving 213 respondents in Indonesia, and data were analyzed using Partial Least Squares Structural Equation Modeling (SEM-PLS). Structural model analysis revealed that digital information exposure significantly influences attitudes toward a healthy diet. Furthermore, attitude, subjective norms, and perceived behavioral control significantly predict healthy diet intention, with attitude emerging as the strongest predictor. These results highlight the important role of digital media in shaping health-related attitudes and behavioral intentions. The study contributes to the development of TPB research by integrating digital information exposure into the model and provides practical implications for digital health communication and nutrition promotion strategies.

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INTRODUCTION

Diet is one of the most important components of healthy living and it is playing a fundamental role in determining the well-being of individual and population. Individuals who have tendency to consume an unhealthy diet have a higher risk to suffer for diseases, particularly non-communicable disease (NCDs), which may lead to long-term disability. Existing research shows that awareness of the importance of healthy diet have increased overtime, as evidenced by the expanding body of academic research on the topic, ranging from awareness and attitude to nutrition among young generation (Sahadeo et al., 2025, Hsu & Liu, 2025), eating habit on older generation (Daniele et al., 2024), awareness of diet-related disease (Żarnowski et al., 2022) to adjustment of diet after Covid-19 (Onyenweaku et al., 2023). Although these studies are far from exhaustive, they demonstrate

growing scholarly and public attention toward healthy diets from various perspectives. However, the awareness and focus on healthy eating is still unequal among the different population groups and does not necessarily lead to good eating behaviour due to cultural, socioeconomic and information hurdles.

Research also shows that Indonesians are more aware about what they consume and their diets. According to a poll of Indonesians in 38 provinces performed by Kurious-Katadata Insight Center (KIC), 69.6% of respondents claimed to have been on a diet (databoks.katadata.co.id, 2023b). Most of the responders (75.7%) were on a diet for health maintenance followed by weight control (63.1%). Other reasons for dieting, such as improving physical shape and avoiding stress, accounted for 49.1% and 24.5%, respectively (databoks.katadata.co.id, 2023a). Another interesting insight from the same research shows that there are various types of dieting committed by the respondents. The majority of respondents on a diet by reducing the frequency or portion size of meals (59.9%). Furthermore, 53.2% of respondents on a diet by reducing carbohydrate or sugar intake, and 45% of respondents do it by avoiding fatty foods. The remaining 2.6% of respondents revealed different diets, such as fasting, intermittent fasting, starchy diets, or eating solely fruits and vegetables (databoks.katadata.co.id, 2023a). The findings indicate that people in Indonesia are quite aware of the need to be healthy by paying attention to lifestyle and seeking appropriate food practices.

However, the increased attention and heightened understanding of healthier eating does not necessarily mean better public health results. Indonesia's increasing obesity rates illustrate the difference between awareness and actual behaviour. The number of obese persons in Indonesia has increased significantly in the last decade, according to research from the FAO, IFAD, WHO and WFP (2025). In 2002, there were only about 10 million people classified as obese. By 2022 the figure more than doubled to 21.6 million adults. This trend is consistent with the World Obesity Federation's finding that approximately 13% of adults in Indonesia are obese (2025). Indonesia has a lower prevalence of obesity than several ASEAN countries as Brunei (35%), Malaysia (24%), Thailand (17%) and Singapore (15%), but the continued increase signifies a severe public health concern (World Obesity Federation, 2025). Another survey stated that 57% of people who have tried weight-loss programs have experienced various challenges in maintaining their diet (Jakpat, 2023). These findings suggest that while awareness of healthy diets might be growing, the actual behavior of adopting good eating behaviour is still a considerable challenge for many individuals.

This situation raises the question of what are some factors that can drive the intention and behavior of adopting a healthy diet in an endeavor to maintain health. In the Indonesian context, many individuals still struggle to maintain a consistent diet over time, even though they have demonstrated a commitment to reducing portion sizes, limiting sugar and carbohydrate intake, and avoiding fatty foods. Therefore, this study seeks to answer the broader question of why increased awareness and exposure to healthy diet information has not been accompanied by proportional improvements in health outcomes. Aside for information exposure, this study is also curious to understand other factors, such as attitudes, societal values, and individual control over dieting that can lead to the emergence of intention to adopt healthy diets.

The knowledge and understanding about healthy diet can be a factor that led to attitude and healthy behavior. Several studies' result have shown that information seeking and information exposure are significantly influencing the formation of healthy attitudes and behaviors in society (Gilbert et al., 2021; P. L. Liu et al., 2023; Nagler, 2014; Paul & Headley-Johnson, 2025; Peña-y-lillo, 2024; Pottage et al., 2026; Westerwick et al., 2017). With the advancement of digital information technology, individuals have easy access to a wide variety of health information through online media, social media, and interpersonal sources. This ease of access can potentially encourage changes in healthy attitudes and behaviors, but at the same time, it can also lead to confusion if the

information received is contradictory or overwhelming. Unintentional exposure to health information and information overload can also influence individuals' focus on a healthy lifestyle.

Exposure to health information from social media can be an effective tool in influencing individuals' healthy lifestyle habits, such as increasing physical activity, healthy eating habits, and mental health awareness (Paul & Headley-Johnson, 2025). This is possible because information on social media is not only formal details that contains facts and data, but it can also involve sharing activities that generate more communicative information. However, social media can also be a source of inaccurate health information, ultimately hindering positive behavioral change. The effectiveness of information on social media in influencing individuals may be determined by the type of platform, message format, and user engagement with health content. Indonesia with increasing digital media adoption and usage also show similar trend. A research (Ayaskara Nisita Synergy, 2024) finds that the majority of Indonesian acquired their health information through social media (98.08%), followed by public service announcements (52.93%), and various online sources on the internet (50.34%). And in the same report, the majority of the public seek health information related to a healthy lifestyle (87.03%), followed by content related to balanced nutrition (72.27%), and related to disease prevention and control programs and environmental health (64.29%) (Ayaskara Nisita Synergy, 2024). From this research we can see that social media is increasingly playing a significant role in providing health information that could possibly lead to healthy behaviors.

Easier access to online health information, including information about diet and healthy eating patterns, is a positive aspect, allowing users to increase their knowledge and become more informed. However, this ease of access can also be problematic if the health information that widely circulated and accessed by users is inaccurate and misinformation that can lead to misunderstandings and lead to unhealthy behaviors. Several studies have examined how users navigate digital health information as a way to reduce misinformation and information overload. Venkatesan et al. (2014), for example, found that the quality of health information in online discussion forum, particularly regarding chronic diseases, is influenced by several factors, such as the clarity of user questions in the forum, the quality of information gathered in discussions, and the knowledge and insights of participants in online discussions. According to this study, improving the quality of these factors can reduce the spread of misinformation in online communities. On the other hand, research by Mitsutake et al. (2024) found that individuals with higher eHealth literacy, even though they actively use various online information sources, tend to be more cautious when reading digital health information. This contrasts with users with lower digital health literacy, who experience greater difficulty to discern information and to identify misinformation even with lower online media usage. Furthermore, it has been found that reliance on search engines and online information can lead to information overload that contributes to information fatigue. This fatigue can lead to increased misunderstandings and ultimately fuel the spread of health misinformation (Luo et al., 2025). Social media interactions and social overload can also increase health-related anxiety and fatigue, potentially leading to the spread of misinformation (Wu & Pei, 2022). Thus, this literature suggests that users acquire and manage digital health information through source evaluation and digital literacy skills. However, information overload and misinformation can pose challenges to effective information seeking. Ultimately, individual competency and systemic interventions are crucial.

Studies have provided further insights into the ways digital media use influences individual behavioral intentions that may predict actual behavior. Research from Liu et al. (2023) found that exposure to food and nutrition information in the media increases attention to healthy eating. Exposure to information, as Curşeu et al. (2021) have found, can predict or shape attitudes related to COVID-19, particularly toward protective behaviors. Similarly, research by Amin et al. (2023) reveals that exposure to health information through digital media can influence attitudes toward

COVID-19 prevention, especially regarding mask use. These studies demonstrate that exposure to health-related information through media can shape and influence individual attitudes. Furthermore, Yang & Wu (2021) have found the relationship between Chinese citizens' exposure to health information on social media and their health-protective behavior in response to haze pollution, particularly the use of anti-haze masks, with attitudes serving as a mediating factor. In addition, research by Lee (2011), in the context of environmental health communication, found that exposure to information positively influences attitudes, which subsequently leads to intentions to engage in environmentally related behaviors. The ability of exposure to health information to shape attitudes is influenced by aspects of the credibility of the information source, the accumulation of information obtained, trust in the information source (Venkatesan et al., 2014), and even excessive exposure to information can produce misperception on a health issue (Luo et al., 2025), as well as generating anxiety and exhaustion (Wu & Pei, 2022). Collectively, these findings suggest that exposure to health-related information in digital media plays an important role in shaping attitudes and predicting intentions toward health-related behaviors. Therefore, it can be hypothesized:

H1: Exposure to healthy diet information through digital media positively influences individuals' attitudes toward healthy eating, which in turn increases their intention to adopt healthy dietary behavior.

To examine other factors that lead to behavioral intention to do healthy diet, this research use the Theory of Planned Behavior (TPB) from Icek Ajzen (1991, 2020). TPB is one of the most widely used theories for explaining intentional human behavior, including health-related behaviors such as healthy dieting. According to TPB, an individual's behavior is primarily determined by behavioral intention, which reflects the person's motivation and willingness to perform a particular action. Behavioral intention is influenced by three main factors: attitude toward the behavior, subjective norms (or social norms), and perceived behavioral control (PBC) (Ajzen, 1991, 2020).

In TPB, attitude refers to an individual's positive or negative evaluation of a particular behavior, which subsequently shapes consistent patterns of action. It reflects the extent to which a person believes that performing the behavior will lead to desirable or undesirable outcomes (Ajzen, 1991, 2020). Attitudes are formed through beliefs about the consequences of a behavior and the value attached to those consequences. For example, if someone believes that eating healthy food improves well-being and prevents disease, they are more likely to develop a favorable attitude toward healthy eating. In the context of healthy eating, TPB suggests that individuals are more likely to adopt and maintain healthy dietary behaviors when they have positive attitudes toward healthy food. Subjective norms describe perceived social pressure to perform or avoid a behavior. This concept concerns how individuals think significant other (people or groups) view a particular behavior (Ajzen, 1991, 2020). When individuals perceive that important other expect or encourage them to engage in a behavior, they are more likely to form intentions to perform that behavior. Perceived behavioral control refers to an individual's perception of how easy or difficult it is to perform a behavior. It reflects the degree of control people believe they have over carried out an action, based on factors such as skills, resources, opportunities, or obstacles (Ajzen, 1991, 2020). In TPB, perceived behavioral control can influence both behavioral intention and actual behavior directly.

Research applying the TPB consistently demonstrates that attitudes, subjective norms, and perceived behavioral control (PBC) are important predictors of healthy diet intentions. Early evidence from Nejad et al. (2004) showed that attitudes were the strongest predictor of dieting intention, with the TPB model explaining 77% of the variance in dieting intention and 46% of subsequent dieting behavior. Similarly, Close et al (2018) studying office workers in the Southeastern United States, found that attitude, subjective norm, and PBC were all positively associated with intention to

consume a healthy diet, although PBC emerged as the strongest predictor. Research involving children and adolescents has also supported the usefulness of TPB, in which attitudes, parental and peer norms, motivation to comply, and PBC explained 35% of the variance in healthy eating intention among French children, with PBC again identified as the most influential factor (Bazillier et al., 2011). These findings indicate that individuals are more likely to intend to adopt healthy dietary behaviors when they hold favorable attitudes, perceive social encouragement, and believe they possess sufficient control over healthy eating practices.

More recent studies have extended the TPB framework by incorporating contextual and motivational factors to better explain healthy eating intentions. Liu et al. (2021) found that subjective norms and PBC significantly predicted healthy eating intentions among adults in Beijing, explaining 76.6% of the variance in intention. Bélanger et al. (2023) similarly observed that subjective norms and PBC were significant determinants of healthy diet intention among women with a history of gestational diabetes, particularly when family support, time availability, and access to healthy food information were considered. Furthermore, evidence from Abusalih et al. (2025) showed that PBC was the only direct predictor translating intention into actual fruit and vegetable consumption among Saudi women, emphasizing the importance of self-confidence and perceived ability in sustaining healthy eating behavior. Collectively, these studies confirm that TPB is a robust theoretical framework for predicting healthy diet intentions, while also highlighting the particularly strong role of perceived behavioral control in influencing both intention and actual dietary behavior. Based on the findings of previous studies and the Theory of Planned Behavior, the following hypotheses can be formulated:

H2: Attitudes towards a healthy diet, subjective norms, and perceived behavioral control have an influence on the intention to do a healthy diet in adults.

H3: Attitude mediates the relationship between information exposure and intention to act.

METHODS

This research study used a cross-sectional design and was conducted with the target adult individuals (≥ 18 years old), both males and female, in Indonesia. The sample was determined using a non-probability sampling technique with a purposive sampling approach based on predetermined criteria, which are individuals who were currently on a diet and had been exposed to a healthy diet information in digital media. The sample size was 200 respondents, referring to Roscoe and Hair's recommendation of a sample size larger than 30 and ideally above 100 for significant results (Hair, Hult, Ringle, & Sarstedt, 2021). The data collected through a self-administered survey online survey by utilizing Google Forms link. The questionnaire was distributed through various digital platforms to respondents who met the research criteria. All responses to this study were voluntary, with participants responding to the distribution of survey question links, either through communal or individual requests. Respondents completed the survey after reading information about the study and its objectives and then providing a statement of consent, as stated at the beginning of the survey questions.

In terms of measurement, exposure to information in digital media was measured by adapting items from Gil de Zúñiga et al. (2012) and Yang & Wu (2021), which consist of questions such as: "individuals often read posts about healthy diets in digital media," "individuals often watch posts about healthy diets in digital media," and "sources of healthy diet information from digital media help me understand healthy diets." Respondents could choose from a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Furthermore, attitude and subjective norms variables were measured by adapting items from Gardner & Hausenblas (2005). Attitude was measured by using items such as: "doing a healthy diet

is beneficial for the individual," "doing a healthy diet is a wise action for the individual," and "doing a healthy diet is a good action for the individual." Subjective norms were measured by using items such as: "people who have important roles for the individual think that the individual should do a healthy diet," "people who have important roles for the individual think that the individual should do a healthy diet," and "people who have important roles for the individual support the individual to do a healthy diet." Respondents could choose from a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Additionally, behavioral control and intention to follow a healthy diet were measured by adapting items from Conner et al. (2002). The items used to measure behavioral control were, "according to the individual, following a healthy diet in the future is easy to do," "the individual believes that if the individual follows a healthy diet, the individual can consistently do it," "whether or not to follow a healthy diet in the future is an individual decision," "the individual has complete self-control follow a healthy diet," "the individual is confident that the individual can follow a healthy diet," and "the individual believes that the individual can follow a healthy diet if the individual wants to." Finally, the items used to measure the intention to follow a healthy diet were, "the individual intends to follow a healthy diet in the future," "the individual will try to follow a healthy diet in the future," "the individual wants to follow a healthy diet in the future," "the individual hopes to follow a healthy diet in the future," and "there is a high probability that the individual will follow a healthy diet in the future." The answers that respondents could choose were a 7-point Likert scale ranging from a score of 1 (strongly disagree) to a score of 7 (strongly agree).

Data analysis was conducted using the Partial Least Square Structural Equation Modeling (PLS-SEM) method with SmartPLS to test the relationship between variables and research hypotheses (Hair et al., 2019). PLS-SEM was used because this study primarily aimed to predict behavioral intentions and identify the main determinants of intention to adopt a healthy diet. Furthermore, the proposed model integrates the construct of digital information exposure with the Theory of Planned Behavior, thus representing a relatively complex and exploratory research model. PLS-SEM is well-suited for prediction-oriented research, theory development, and handling complex models (Hair et al., 2019). Model evaluation included an outer model to test construct validity and reliability (reliability indicators, internal consistency, convergent validity, and discriminant validity), as well as an inner model to assess the strength of the relationship between variables through collinearity tests, path coefficients, R-square values, and f-square (Hair, Hult, Ringle, Sarstedt, et al., 2021).

RESULTS AND DISCUSSION

Data obtain from the survey of the 213 respondents involved in the study presents demographic characteristics as shown in Table 1. Based on the place of origin, the respondents were overwhelmingly dominated by participants from Java, accounting for 88.25% of the total sample. Respondents from Sumatera represented 9.40%, while participants from Kalimantan and Sulawesi each accounted for only 0.47%. Meanwhile, respondents from Bali and Nusa Tenggara contributed 1.41% of the sample. These findings indicate that the sample distribution is highly concentrated in Java, suggesting that the study results may primarily reflect the perspectives and behavioral tendencies of individuals living in the most urbanized and populous region of Indonesia.

In terms of age distribution, the respondents were predominantly young adults aged 18–32 years, representing 87.80% of the sample. Participants aged 33–47 years accounted for only 7.04%, while respondents aged 48–63 years represented 5.16%. This distribution demonstrates that the study largely reflects the perceptions and behaviors of younger generations, who are generally more exposed to digital media, social media platforms, and online health information. The dominance of younger respondents may also indicate a greater familiarity with digital communication technologies,

which could influence variables related to information exposure, attitudes, and behavioral intentions examined in the study.

Regarding weight status, the response to the question of weight status from the respondents were further categorized by using the Decree of the Minister of Health of the Republic of Indonesia Number HK.01.07/MENKES/509/2025 concerning National Guidelines for Clinical Services for the Management of Adult Obesity. The largest proportion of respondents fell within the normal weight category (35.20%). However, a considerable proportion of participants were classified as overweight or obese. Combined together, the categories of overweight and obese indicate that more than 60% of respondents experienced weight conditions above the normal range. In contrast, only 4.20% of respondents were categorized as underweight. These findings suggest that issues related to overweight and obesity are highly prevalent among the respondents, highlighting the relevance of studying healthy diet intentions and health-related behaviors within this population.

Table 1. Respondent Characteristics

Demography	Frequency (N=213)
Place of Origin	(%)
Sumatera	9.40
Java	88.25
Kalimantan	0.47
Sulawesi	0.47
Bali and Nusa Tenggara	1.41
Age	(%)
18 – 32	87.80
33 – 47	7.04
48 – 63	5.16
Wight status	(%)
Underweight	4.20
Normal weight	35.20
Overweight	17.40
Obesity I	15.50
Obesity II	27.70

Source: Authors own work

Table 2. Discriminant Validity (Heterotrait-Monotrait)

Construct	1	2	3	4	5
1) PBC					
2) Intention	.624				
3) Subjective Norms	.211	.317			
4) Attitude	.567	.687	.254		
5) Information Exposure	.447	.480	.242	.480	

Source: Authors own work

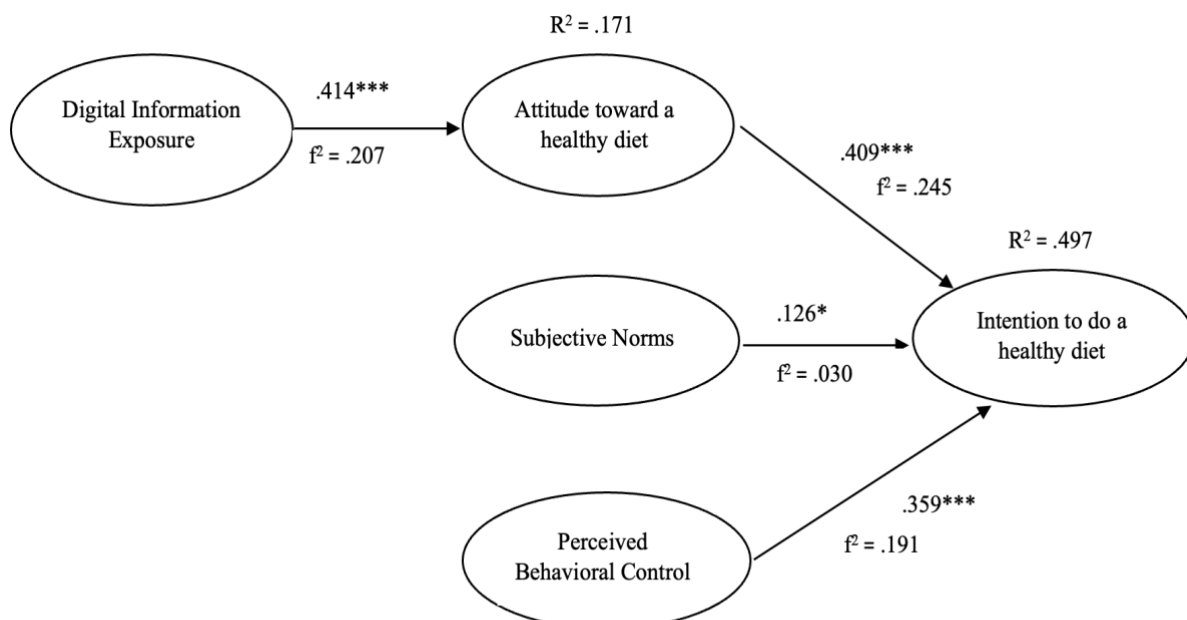
In regards to convergent validity and reliability assessment, the result shows most indicator values exceed 0.70, suggesting that the indicators strongly represent their respective constructs (Table 3). The PBC construct shows somewhat more varied loadings, ranging from .633 to .872. Although PBC1 (.633) and PBC4 (.658) are slightly below the ideal threshold of 0.70, they remain acceptable because the AVE and composite reliability values for the construct still meet recommended standards. The AVE values further confirm convergent validity for all constructs since all AVE values exceed the minimum threshold of 0.50. The values indicates that each construct explains more than 50% of the variance of its indicators. The reliability statistics also demonstrate strong internal consistency across the constructs. Cronbach's Alpha values range from .791 to .920,

while Composite Reliability values range from .862 to .940. These results indicate that the measurement items consistently measure the same latent construct. Overall, the findings confirm that the measurement model is both valid and reliable, meaning that the constructs and indicators used in the study are appropriate for further structural model analysis and hypothesis testing.

Table 3. Convergent Validity and Reliability

Construct	Item	Outer Loading	AVE	α	CR
Information Exposure	IE1	.789	.696	.791	.873
	IE2	.879			
	IE3	.833			
Attitude	ATT1	.754	.678	.842	.894
	ATT2	.830			
	ATT3	.842			
	ATT4	.863			
Subjective Norms	SN1	.902	.792	.868	.919
	SN2	.925			
	SN3	.840			
PBC	PBC1	.633	.559	.809	.940
	PBC2	.717			
	PBC4	.658			
	PBC5	.872			
	PBC6	.828			
Intention to do healthy diet	INT1	.885	.758	.920	.862
	INT2	.919			
	INT3	.840			
	INT4	.841			
	INT5	.865			

Source: Authors own work



Note: * $p < .05$, ** $p < .01$, *** $p < .001$; $f^2 \geq .02$ (small), $f^2 \geq .15$ (medium), $f^2 \geq .35$ (large).

Figure 1. Structural equation model with path coefficients and its significance

Source: Authors own work

Table 4. Indirect Effects

Path Coefficient	β	Decision
Digital Information Exposure (IE) \rightarrow Attitude (ATT) \rightarrow Intention to healthy diet (INT)	0.169***	Supported

Source: Authors own work

To evaluate the structural model and answer the hypotheses in this study, bootstrapping was applied. The result, as demonstrated in Figure 1, indicate that all hypothesized relationships are positive and statistically significant. Digital information exposure significantly affects attitudes toward a healthy diet with a path coefficient of ($\beta = .414, p < .001$). This finding suggests that greater exposure to health-related information through digital media contributes to more favorable attitudes toward healthy eating. Therefore, **H1 was supported**. The R^2 value for the attitude construct is .171, meaning that digital information exposure explains 17.1% of the variance in attitudes toward a healthy diet. Although moderate, this result demonstrates that information exposure plays an important role in shaping individuals' evaluations and perceptions regarding healthy dietary behavior.

The model further demonstrates that attitude, subjective norms, and perceived behavioral control significantly predict intention to adopt a healthy diet. Among these predictors, attitude has the strongest influence on intention ($\beta = .409, p < .001$), followed by perceived behavioral control ($\beta = .359, p < .001$). Both variables exhibit medium effect sizes, indicating substantial contributions to the prediction of healthy diet intention. In contrast, subjective norms show a weaker but still significant influence on intention ($\beta = .126^*; p < .05$). These findings suggest that individuals are more likely to intend to adopt healthy eating behaviors when they hold positive evaluations toward healthy diets and believe they possess sufficient ability, resources, and control to practice such behaviors. Therefore, **H2 was supported**. The explanatory power of the model is reflected in the R^2 value for intention to do a healthy diet, which reaches .497. This indicates that approximately 49.7% of the variance in healthy diet intention is jointly explained by attitude, subjective norms, and perceived behavioral control. According to SEM-PLS interpretation standards, this represents a moderate to substantial explanatory capability, suggesting that the model effectively predicts behavioral intention.

This study also examines whether Attitude toward a healthy diet (ATT) mediates the relationship between Digital Information Exposure (IE) and Intention to adopt a healthy diet (INT). Table 4 shows that attitude significantly functions as a mediating variable in the relationship between digital information exposure and healthy diet intention ($\beta = 0.169, p < .001$). The result suggests that exposure to digital health information contributes to the development of more positive attitudes toward healthy eating, which subsequently increases individuals' intentions to engage in healthy dietary behavior. **Therefore, H3 was supported**. In the context of the Theory of Planned Behavior, this finding is theoretically important because attitude serves as a cognitive and evaluative mechanism through which external information influences behavioral intention. In other words, individuals who are frequently exposed to nutrition, diet, and health-related information through digital media are more likely to perceive healthy eating as beneficial, valuable, and desirable, thereby strengthening their motivation and intention to practice healthy dietary behaviors.

The findings of this study indicate that the Theory of Planned Behavior remains a strong theoretical framework in predicting and explaining individual intentional behavior, particularly in this study to explain healthy diet intentions in the context of digital information exposure. The results of the measurement model demonstrated satisfactory validity and reliability. The structural model analysis revealed that digital information exposure significantly influenced attitudes toward a healthy

diet. These findings suggest that exposure to health-related information through digital media contributes to more positive evaluations of healthy eating behavior. As previously explained, credible and trustworthy information, and the accumulation of information obtained over a long period of time, can contribute to attitude formation. This is also seen in the issue of attitude formation towards a healthy diet, as revealed in this study. These results are consistent with previous research showing that digital media exposure can shape health-related attitudes and behavioral intentions. Studies by P. L. Liu et al., (2023) and Curşeu et al. (2021) found that exposure to health and nutrition information increases individuals' awareness and influences attitudes toward health-protective behavior. Similarly, Yang & Wu (2021) demonstrated that exposure to health information through social media significantly affected health-protective behavior through the mediating role of attitudes. Therefore, the present study reinforces the argument that digital communication platforms play an important role in influencing individuals' cognitive evaluations regarding healthy dietary behavior.

These findings also indicate that attitude is the strongest predictor of healthy diet intentions. Individuals with more positive attitudes toward healthy eating are more likely to engage in healthy eating behaviors. This suggests that attitudes reflect an individual's positive or negative evaluation of a behavior, and these attitudes stem from beliefs about the expected outcomes of the behavior. When individuals perceive substantial benefits from adopting a healthy diet and the desired consequences of a healthier physique and a more ideal body weight, they are more likely to develop positive attitudes that strengthen their behavioral intentions to engage in healthy eating. These findings align with numerous TPB-based studies that emphasize the central role of attitudes in predicting behavioral intentions. Nejad et al. (2004) found that attitude was the strongest predictor of dieting intention, while Close et al. (2018) similarly reported that positive attitudes significantly increased intention to consume a healthy diet among office workers. The medium effect size of attitude in the present study further indicates that positive evaluations of healthy eating substantially contribute to intention formation. These findings suggest that individuals are more likely to commit to healthy dietary behavior when they perceive healthy eating as beneficial, useful, enjoyable, and important for their well-being.

Perceived behavioral control was also found to significantly influence healthy diet intention. This result suggests that individuals who believe they possess sufficient ability, resources, and opportunities to maintain healthy eating habits are more likely to develop stronger behavioral intentions. This finding supports previous studies emphasizing the importance of perceived control in dietary behavior. Research by D. Liu et al. (2021), (Bélanger et al. (2023), and Abusalih et al. (2025) consistently found that perceived behavioral control is among the strongest predictors of healthy eating intentions and behaviors. In the present study, the effect size of perceived behavioral control was categorized as medium, highlighting its substantive role in predicting intention. The result implies that healthy dietary behavior is not only determined by favorable attitudes but also by individuals' confidence in their ability to implement healthy eating practices despite various obstacles such as time limitations, food accessibility, or financial constraints.

Meanwhile, subjective norms exert a positive but relatively weaker influence on healthy diet intentions. These findings suggest that social pressure, encouragement, or approval from family members, friends, and significant others contribute to an individual's healthy eating intentions, although their practical effects are smaller compared to attitudes and perceived behavioral control. These subjective norms represent perceived social pressure from significant others to perform a specific action. However, many contemporary behaviors, such as engaging in and implementing a healthy diet in daily life, are largely voluntary and performed privately. Consequently, individuals tend to rely more on personal evaluations and perceived benefits than on external social expectations. Furthermore, normative influences are likely indirect, as they may shape attitudes

toward a behavior first, rather than directly influencing intentions. This suggests that personal beliefs and evaluations are more influential determinants of intention formation in the context of voluntary behavior than external environmental influences. The result is consistent with previous TPB studies showing that subjective norms often play a secondary role in predicting dietary intention. For instance, Liu et al. (2021) and Bazillier et al. (2011) found that subjective norms significantly predicted healthy eating intentions, although the effect was weaker than perceived behavioral control. The relatively small effect observed in this study may reflect the increasing individualization of dietary decision-making among younger adults, particularly those heavily exposed to digital media and online health information.

An important contribution of this study lies in the identification of the mediating role of attitude in the relationship between digital information exposure and healthy diet intention. The indirect effect analysis confirmed that digital information exposure significantly affects healthy diet intention through attitude. This finding provides theoretical support for the cognitive mechanism proposed within TPB, where external information influences behavioral intention through evaluative processes. In other words, exposure to digital health information does not directly translate into behavioral intention unless individuals internalize and evaluate the information positively. This mediation finding extends previous TPB research by integrating digital information exposure as an antecedent variable influencing attitude formation.

The study also offers several practical implications. First, public health campaigns and digital nutrition communication programs should prioritize strategies that strengthen positive attitudes toward healthy eating. Merely providing information may be insufficient unless the content is capable of shaping favorable evaluations regarding healthy dietary behavior. Second, interventions should enhance individuals' perceived behavioral control by improving access to healthy food, providing practical dietary guidance, and increasing self-efficacy regarding healthy meal preparation. Third, digital platforms and social media can serve as strategic channels for disseminating persuasive health information, especially among younger populations who dominate the respondent profile in this study. Overall, the findings highlight the importance of integrating digital communication strategies with psychological determinants of behavior in promoting healthy dietary intentions and public health outcomes.

CONCLUSION

This study showed that exposure to information in digital media plays a significant role in shaping individuals' attitudes toward a healthy diet, which in turn contributes to the formation of intentions to engage in such behavior. The results presented that information exposure significantly influences attitudes, and that attitudes, subjective norms, and perceived behavioral control collectively significantly influence intentions to engage in a healthy diet. Furthermore, attitudes are also shown to mediate the relationship between information exposure and intentions, thus reinforcing the role of attitudes as a crucial mechanism in the formation of behavioral intentions. These findings align with the Theory of Planned Behavior (TPB), which states that intention is the primary predictor of behavior and is influenced by attitudes, subjective norms, and behavioral control. This study also extends the TPB by adding exposure to digital media as an additional predictor, proven relevant in the context of health communications.

Overall, this study confirms that even though people have been exposed to extensive health information and are aware of a healthy lifestyle, the formation of intentions to consistently follow a healthy diet is still influenced by psychological and social factors. Therefore, the delivery of health information through digital media should not only focus on the quantity of information but also on the quality delivery, which can shape individuals' positive attitudes toward a healthy diet. This also

includes the influence of significant others and the ability to control oneself in following a healthy diet, which can encourage consistent adoption.

Author Contribution

Conceptualization, S.D.A. and S.R.M.; methodology, S.D.A.; software, S.D.A.; validation, S.R.M.; formal analysis, S.D.A.; investigation, S.D.A.; data curation, S.D.A. and S.R.M.; writing—original draft preparation, S.D.A. and S.R.M.; writing—review and editing, S.D.A. and S.R.M.; visualization, S.D.A.; supervision, S.R.M.; project administration, S.D.A.; funding acquisition, and S.R.M. All authors have read and agreed to the published version of the manuscript.

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Conflict of Interests

The authors declare no conflict of interest.

Data Availability Statement

The data is available by request to the corresponding author upon reasonable request.

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