Knowledge on the Plate: The Influence of Nutrition Literacy and Dietary Habits on Food Choices among Senior High School Students

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INTRODUCTION

Rationale

Globally, food choices and preferences are changing in ways that are detrimental to mental and physical health (Clark et al., 2019). Senior high school students in Asia suffer from obesity and habitually consume unhealthy foods, which are influenced by family factors such as parental education, parenting style, and socioeconomic status (Shing, 2020). Similar to this, Palestine is facing a serious health issue as a result of open food markets and the adoption of Western lifestyles, which have resulted in concerning rates of metabolic syndrome (33%) and obesity (65.3%) (Duran et al., 2021).

In the Philippines, students have low levels of nutrition literacy, especially regarding topics such as food choices, water consumption, air quality, rest, physical activity, nutrition, and temperance (Dungog et al., 2021). According to a survey by Assan (2020), 80.0% of students regularly eat breakfast, lunch, and dinner, and eat meat and fish, but 62.1% eat fast food with eggs infrequently, and 56.8% occasionally eat fruits, vegetables, legumes, and snacks. Moreover, Agdeppa et al. (2020) study noted that many Filipino schoolchildren and adolescents, especially in rural and low-income areas, suffer from inadequate nutrient intake.

According to Santos (2022), predicting health outcomes and identifying potential health risks associated with poor dietary intake can improve overall health. In addition, Ong et al. (2020) underscore its value for understanding health disparities and informing policy decisions to promote health equity. Similarly, Reyes et al., (2021) study focuses on the importance of evaluating healthcare interventions and refining healthcare programs. Therefore, leveraging one's dietary habits can enhance student well-being and promote healthy lifestyles, informing policy decisions and targeted interventions (Garcia, 2025).

In local, particularly in Davao City, adolescents face high prevalence of junk foods consumption and sugary drinks, irregular meals and unbalanced diets due to lack knowledge of healthy living (Mizia, 2021). Another study in Mabini, Davao De Oro, found that fishermen’s children in the Philippines are prone to suffer an unhealthy diet due to inadequate dietary intakes, particularly during the summer season. Furthermore, the researchers identified challenges in promoting nutrition knowledge among senior high school students, highlighting the complexities of engaging students in healthy eating habits and maintaining their interest in nutrition education (Estaña et al., 2024).

However, despite numerous studies examining dietary habits and their health impacts across various populations, such as international students and broader demographic groups, there is limited research specifically addressing the influence of nutrition literacy and dietary habits on the food choices of senior high school students. Most existing studies focus on adults or specific populations, without deeply exploring adolescents' food choices or how their understanding of nutrition translates into actual eating behaviors.

Research Objectives

This research examined the influence of nutrition literacy and dietary habits on food choices among senior high school students. This study specifically sought answers to the following objectives:

1. To examine the level of nutrition literacy among senior high school students in terms of:

1.1 knowledge and understanding; and

1.2 skills.

2. To describe the level of dietary habits among senior high school students in terms of:

1.1 food frequency consumption,

1.2 nutrition beliefs; and

1.3 lifestyle.

3. To find out the level of food choices among senior high school students in terms of:

1.1 food familiarity;

1.2 mood; and

1.3 convenience.

4. To investigate the significant relationship between nutrition literacy and food choices among senior high school students.

5. To determine the significant relationship between dietary habits and food choices among senior high school students.

6. To figure out which of the domains in nutrition literacy would influence food choices among senior high school students.

7. To figure out which of the domains in dietary habits would influence food choices among senior high school students.

Research Hypotheses

The following hypotheses were tested at the 0.05 level of significance.

1. There was no significant relationship between nutrition literacy and food choices among senior high school students.

2. There was no significant relationship between dietary habits and food choices among senior high school students.

3. There was no domain in nutrition literacy that would significantly influence the food choices of senior high school students.

4. There was no domain in dietary habits that would significantly influence the food choices of senior high school students.

REVIEW OF RELATED LITERATURE

This section of the study reviewed articles and findings on nutrition literacy, dietary habits, and food choices. Various variables and indicators used in this study were also presented.

Nutrition Literacy

Nutrition Literacy plays a crucial role in shaping overall wellness, as evidenced by the De Jesus (2023) study, which suggests that possessing accurate and adequate nutrition literacy enables individuals to differentiate between nutritious and unhealthy foods. Similarly, nutrition literacy is one of several factors needed to establish proper eating habits and is especially important for adolescents (Rodas, 2023). In addition, according to Khan (2022), nutrition literacy involves making intentional choices to consume the right amounts of nutrients at the right times to protect and improve one's health and quality of life. Moreover, knowledge on nutrition is essential for developing healthy eating habits (Javeluna, 2023), good health factors (Fabian, 2023), and optimal physical performance (Rushton, 2023), and optimal physical performance (Rushton, 2020).

Additionally, a study by Laquimin et al. (2023) found that accurate nutrition literacy empowers individuals to make smart food choices. In addition, by grasping the fundamentals of nutrition, people can cultivate habits that foster wellness and minimize the risk of chronic health issues (Lawrence, 2024). Moreover, a study by Criselda et al. (2023) found that people with a strong grasp of nutrition tend to adopt healthier eating patterns. Furthermore, knowing nutrition enables individuals, especially senior high school students, to cultivate healthier eating habits and support initiatives that promote nutritious food (Dizon et al., 2019).

Knowledge and Understanding. A healthy diet is crucial for physical and mental well-being. Poor knowledge and understanding of food choices can lead to chronic diseases such as diabetes, heart disease, and obesity, underscoring the need for nutrition education (Alshahrani et al., 2024). Understanding the factors influencing food literacy can help educators develop targeted interventions to improve students' knowledge and decision-making skills (Guiné et al., 2023).

In today's complex world, people are often confused about what to eat for optimal health, and the overwhelming amount of information can lead to unhealthy choices. (Silva et al., 2023). Similarly, research suggests that education level can impact dietary choices in adolescents, but surprisingly, nutrition knowledge doesn't always translate to healthy habits, this disconnect occurs because individuals may not know how to apply their knowledge in practical ways (Onyenweaku et al., 2023).

Moreover, the way we produce and consume food has significant environmental and health implications, emphasizing the need for informed food choices (Sahadeo et al., 2025). However, research shows that few students in this age group meet dietary guidelines, often consuming unhealthy foods and failing to meet essential nutrient requirements (Lambert et al., 2019).

Food and nutrition literacy are essential concepts that help individuals make informed decisions about their diet. Having knowledge and understanding of food and nutrition enables individuals to make choices that promote their health and contribute to a sustainable food system (Silva, 2023). Despite its significance, food literacy is often limited in low-income contexts, where access to reliable information is scarce (Araque-Padilla & Montero-Simo, 2025).

Skills. Acquiring skills to make informed food choices is crucial for students' long-term health outcomes, enabling them to adopt habits that promote well-being. However, many students lack essential food literacy skills, hindering their ability to plan, select, and prepare nutritious meals (Bereznay et al., 2019). In addition, planning meals, purchasing, and preparing food require a range of essential skills for a healthy, balanced diet. Lastly, individuals with adequate cooking and food preparation skills tend to consume higher quality diets and have better weight control (Celik et al., 2023).

Moreover, developing the skills to make informed food choices is crucial for students, as their eating habits are influenced by factors such as health, convenience, and sensory appeal. Students' busy lifestyles and demanding

academic schedules often lead to inconsistent eating patterns, making it essential for them to develop the skills to select healthy foods (Falconet et al., 2025). Additionally, school food services play a critical role in providing students with balanced meals that support their physical and cognitive growth (Lee, 2019).

Dietary Habits

Consistent with Guevremont's (2019) findings, effective dietary habits can positively influence senior high school students' overall well-being. Successful interventions can lead to lasting behavioral changes, fostering healthier eating habits among individuals (Depboylu, 2023). In addition, dietary habits can significantly affect overall well-being, suggesting that making informed food choices is crucial for senior high school students' overall wellness (Kos, 2020).

Moreover, the study by Montizuma et al. (2020) highlights that adolescents' dietary habits are critical to their health and well-being, as this life stage is characterized by increased nutritional needs driven by rapid growth and development. However, in Almoraie's (2024) narrative review, dietary habits remain influenced by various factors, including nutritional knowledge. It underscored the crucial role of nutritional knowledge in shaping dietary habits, particularly among senior high school students (Utter et al., 2018).

Food Frequency Consumption. Using advanced statistical techniques, scientists can now analyze complex meal patterns, considering multiple variables and combinations to understand better how whole meals impact health (O'Hara and Gibney, 2021). Another study by Horn and Laupsa-Borge (2022) investigated individual variations in food frequency consumption among people with obesity, using cluster analysis to derive meal and dietary patterns.

According to Alkhulaifi (2022), food frequency among senior high school students is evolving from a focus on individual nutrients to a more holistic approach that examines overall meal patterns. On the other hand, according to Fonseca et al. (2021), the campus food environment influences the dietary patterns of senior high school students.

Irregular food frequency, such as meal skipping and dieting, is significantly associated with eating disorders among senior high school students (Aykut, 2022). Similarly, Morshed et al.'s (2022) study reveals that deviant food frequency, characterized by skipping meals and consuming unhealthy foods, is strongly linked to poor overall wellness among senior high school students.

Nutrition Beliefs. The nutrition beliefs and habits of senior high school students have become a pressing concern due to excessive calorie intake and inadequate consumption of essential nutrient (Cohen et al.,). In addition, the study by Mirzaei et al. (2021) found that students who ate a healthier diet, as measured by the Healthy Eating Index, tended to improve their health.

Holding healthy nutrition beliefs ensures that SHS students consume essential nutrients, vitamins, and minerals necessary for optimal physical and mental well-being (Smith, 2019). On the other hand, a diet high in processed foods, sugar, and unhealthy fats can lead to chronic diseases, such as diabetes, heart disease, and obesity, which negatively impact self-reported health status (A study on Zambales, 2024).

According to Trijsburg et al. (2019), a healthy dietary pattern, as reflected in students' nutrition beliefs, should demonstrate variety across key food groups. Additionally, the study by Dalwood et al. (2020), considering all dimensions of diet quality, including nutrient adequacy, food diversity, and moderation, in assessing the dietary habits of SHS students is crucial. In addition, the study by Cobiac & Scarborough (2020) found that adhering to nutritionally recommended practices can significantly improve overall health, potentially increasing life expectancy and promoting students' health to set them up for a lifetime of optimal health.

Lifestyle. According to the study by Hill et al. (2019), the lifestyle of senior high school students is shaped by their daily habits, behaviors, and choices. On the other hand, engaging in regular physical activity and exercise is crucial for maintaining good health and well-being throughout one's life. In fact, it is so important that it can be considered the reason for one's existence (Hills, 2018).

In addition, a study by Pascua (2022) found that the lifestyle of senior high school students is characterized by moderate self-regulated learning habits and low exposure to media. Additionally, the lifestyle of senior high school students is shaped by multiple factors, including knowledge of nutrition, as evident in the study by Fernandez et al. (2024), which examined its impact on the overall well-being of senior high school students.

Moreover, adopting healthy lifestyles is crucial for managing illnesses, but many people, including senior high school students, struggle to make changes. Students in this age group face various barriers, such as busy schedules and peer influences, that prevent them from adopting healthier habits (Apidechkul et al., 2022). Additionally, a healthy lifestyle simply means doing things that make you happy and feel good, and you get to decide what your healthy lifestyle looks like (Risher, 2025).

Furthermore, a study published in the Journal of Pediatrics by Marques et al. (2020) found that senior high school students who engaged in regular physical activity and had adequate sleep tended to have healthier lifestyles, including better eating habits, reduced screen time, and improved overall well-being. Additionally, a healthy lifestyle is achieved by following a daily routine, including constantly tempering his body on the basis of active action, eating healthy foods (Yokutkhon, 2022).

Food Choices

Understanding why people make certain food choices is crucial for creating a healthier and more sustainable food system (Chen & Antonelli, 2020). Another study by Wongprawmas et al. (2021) found that environmental concerns and health are the top factors influencing food decisions among young people.

Similarly, according to Fernqvist et al. (2024), price, social influences, personal preferences, culture, and environment all shape food choices. In contrast, unhealthy food choices, high in sugar, sodium, and saturated fats, pose a significant risk for chronic diseases, including diabetes, hypertension, and cardiovascular disease (Levy et al., 2021).

Food Familiarity. Familiarity with foods, based on factors like availability and preparation, impacts not only what people eat but also why and where they choose to eat (Frez-Muñoz & Fogliano, 2024). Similar to this, a study by Stanley et al. (2022) emphasized that food familiarity, which encompasses knowledge about food and nutrition, improves informed decision making that connects individual dietary choices to sustainability and well-being, demonstrating the complex role that familiarity plays in promoting healthier and more mindful food consumption.

According to Ganesh et al. (2019), people tend to ignore nutritional warnings, such as high salt or sugar content, in favor of well-known brands because they believe these brands to be of higher quality and offer better taste sensation (Spinelli & Monteleone, 2021). In contrast, a student who feels more confident in their ability to cook more often improves their familiarity with food preparation and favors healthier, home-cooked meals (Ganesh et al., 2019).

Additionally, according to Amore et al. (2019), societal and emotional elements that influence eating choices over time are strongly ingrained in food familiarity. Moreover, Gligorić et al. (2021) study discovered that eating partners' practices affect personal food preferences, with relationships on health-conscious people encouraging healthy eating habits.

According to research conducted during the COVID-19 pandemic by Khan et al. (2025), dietary choices are also influenced by the interaction of food familiarity with shifting surroundings and outside variables. Consumers prioritized convenience, health, and natural content in their food choices, making familiarity more significant during uncertain times. Furthermore, social meals have an effect on nutrient intake and food preference, suggesting that familiar social circumstances can support eating habits even in times of emergency (Maugeri et al., 2022).

Mood. An individual's emotional state can influence their food preferences, with certain moods triggering cravings for specific types of food. Conversely, the food choices made can also impact an individual's mood, creating a cycle where emotions drive food decisions and food consumption affects emotional well-being

(Spinelli & Monteleone, 2021). In contrast, emotional eating is traditionally defined as the tendency to engage in eating behaviors as a way to manage, reduce, or avoid negative feelings such as depression, anxiety, and stress (St. Pe et al., 2025).

Food decisions refer to the choices regarding what, when, and how much to eat, which ultimately determine an individual's energy and nutrient intake. Food patterns are described by the quantity, proportion, variety, combinations, and frequency with which each food is generally consumed (Berhanu et al., 2023). According to Fallo et al. (2024), mood influencing food choices is a reciprocal relationship, where emotions drive food decisions and food consumption affects emotional well-being.

Indeed, everyone seeks comfort during challenging times. When individuals are emotionally unsettled, they often choose activities like eating, playing video games, or watching movies to feel better. There is a significant relationship between emotions and food (Nasrin et al., 2020). Food motives related to health, sensory appeal, convenience, and natural content have been identified among students. Eating behaviors such as uncontrolled eating, restrained eating, emotional eating, social eating, and proactive eating are prevalent in this group (Falconet et al.,2025).

Students frequently develop poor food choices and eating habits due to various factors related to university life. Consequently, this can affect their overall diet and lead to changes in their nutritional status (Javier, 2023). Therefore, the successful implementation of health policies that acknowledge the psychological and social factors influencing food choices and the effect of food intake on mood is essential (Leeds et al., 2020).

Convenience. According to a survey by the International Food Information Council (2021), with 74% of consumers aiming to eat healthier, senior high school students prioritize nutrition knowledge when making food purchasing decisions, preferring convenient and healthy options in school cafeterias or nearby food establishments. In addition, according to Good Food Institute (2022), as plant based diets gain popularity, with 42% of consumers reducing meat consumption (GFI, 2022), students need convenient access to nutritious and eco-friendly food choices.

Convenience refers to the ease with which individuals can access and obtain food, encompassing factors such as physical accessibility, time spent buying and preparing food, and affordability (Drewnowski, 2020). However, Excessive consumption of convenience foods is often linked to obesity and other health issues, sparking concerns among consumers (Boysen, 2019).

According to a survey by the National Retail Federation (2020), convenience plays a significant role in shaping food choices, particularly among individuals with busy lifestyles. With growing demand for convenient, healthy options, consumers are prioritizing nutrition knowledge when making food purchases. In contrast, a recent study by Dunford et al. (2023) revealed that online meal planning and grocery shopping platforms can significantly enhance convenience and promote healthier eating habits. The researchers investigated the impact of these digital tools on dietary behavior and food purchasing decisions among a diverse group of participants.

According to Micha et al. (2024), convenient access to reliable nutrition information is essential, particularly for individuals with limited time or resources. On the other hand, a study by Gordon et al. (2020) found that convenient packaging and labeling significantly influence consumer perceptions of healthy foods, enabling informed decisions about diet.

Correlation Between Measures

The studies cited above underscore a significant positive correlation between nutrition literacy and dietary habits, both of which influence students' food choices (Figueroa et al., 2025). It is to empower individuals to make informed food choices, adapt to evolving nutrition information, and cultivate healthy dietary habits (Catapang, 2022). Healthy dietary habits play a crucial role in supporting students' ability to make informed food choices, boosting their overall well-being and capacity to engage positively with learning environments (Qi et al., 2023). In addition, integrating nutrition-focused initiatives into campus organizations can further boost students' ability to plan, select, and prepare nutritious food, fostering better dietary habits (Mankar et al., 2025).

Additionally, Lee et al. (2022) found that nutrition literacy plays a vital role in achieving health goals, affirming the central role of informed food choices in overall well-being. Students' nutrition literacy shapes not only their eating habits but also their capacity to make healthy decisions, impacting overall health outcomes. Ultimately, nutrition educators' roles shape not only their own knowledge but also food choices and dietary habits, thereby influencing overall health outcomes (Taylor et al., 2019).

Furthermore, students with strong nutrition literacy and dietary habit adaptability tend to make healthier food choices, demonstrating resilience in the face of challenges such as unhealthy food options. A positive outlook on nutrition can lead to better decision-making and overall well-being, while negative perceptions may lead to unhealthy eating patterns (Murakami et al., 2023). Those with high nutrition literacy and flexible eating habits are more likely to navigate food challenges effectively, making informed choices that support their health goals (Koca & Arkan, 2023).

Moreover, students' interest in nutrition, interactive learning about food choices, and motivation to make healthy decisions contribute to better engagement with healthy eating habits (CTroncos, 2023). Positive interactions with nutrition educators foster a sense of connection, making students more likely to value and apply nutrition knowledge, predict healthier food choices, and improve overall well-being (Mostafazadeh, 2024).

The preceding presentations and discussions of various literature significantly helped shed light on the significance of nutrition literacy and Dietary habits in shaping students' food choices. The cited literature also assisted the researchers in recognizing that there is a substantial correlation between nutrition literacy and dietary habits, contributing to the maintenance of food choices among students of Lorenzo S. Sarmiento Sr. National High School.

Theoretical Framework

This study was grounded in the Reliability and Validity Theory by Sapp & Jensen (1991), which underscores that nutrition literacy and dietary habits are significantly correlated with students' food choices. In the context of nutrition literacy, instructors must possess a deep understanding of nutrition principles and effective teaching strategies to promote a healthier lifestyle (Spronk et al., 2019). At the same time, by streamlining nutrition education, targeted programs can effectively enhance students' nutrition knowledge, thereby fostering healthier habits and improved health outcomes (Vaitkeviciutel & Harris, 2018). Therefore, students' ability to adapt nutrition knowledge effectively is crucial to influencing their dietary habits and food choices, which can be impacted by their nutrition knowledge and competence in healthy decision-making (Medina et al., 2020).

Also, the researchers Plener & Melo (1996) found that people, especially students, tend to be cautious when trying new and unfamiliar foods. While this wariness served as a protective mechanism for our ancestors, it can also limit dietary variety and lead to missed opportunities for nutrient-rich options. However, by acknowledging and addressing food neophobia, students can develop a more informed approach to food selection, prioritizing nutritional literacy and culinary exploration over knowledge, understanding, and skills (Białek-Dratwa et al., 2022). By doing so, food neophobia can lead to a limited diet, food choices, and nutritional deficiencies, where students can cultivate healthier eating habits, reduce anxiety around new foods (Gomes et al., 2020).

To further strengthen the study, Ajzen's (1991) Theory of Planned Behavior suggests that students' dietary habits are influenced by their intentions to eat healthily, which are shaped by their attitudes, subjective norms, and perceived behavioral control. Students who intentionally plan their habits, especially their food intake, eating behavior, and meal patterns, can develop positive dietary habits (Cooner, 2020). Planning meals enables students to make informed choices about nutrient composition, moderation of unhealthy ingredients, and consumption of essential foods, forming proper dietary habits (Li et al., 2023).

According to the Food Motives Theory by Rankin et al. (2018), individuals' food choices are driven by motives such as weight control, health, and ethical concerns. However, factors like familiarity and convenience also play a significant role. People tend to prefer familiar foods, often associated with tradition, and may be hesitant to adopt personalized nutrition if it deviates from their usual diet. Additionally, convenience is a key determinant of food choice, and individuals who prioritize convenience may view healthy food options as inconvenient, leading to less favorable attitudes towards PN (Bunting et al., 2018). When choosing food, individuals are often influenced by factors such as familiarity, mood, and convenience, which can impact their ability to make healthy

choices. Despite the importance of healthy eating, many people, especially those from lower-income families, struggle to adopt balanced diets due to limited access to nutritious food options. The widespread availability of diverse foods in more developed societies can sometimes lead to overconsumption and unhealthy eating habits (Guiné et al., 2023).

Lastly, a Social Cognitive Theory by Bandura (1997) explains how personal experiences, observations of others, and environmental factors shape individual health behaviors, including food choices. This theory is relevant to the study of nutrition literacy and dietary habits among students, as it highlights the importance of environmental and social factors in influencing food choices. Furthermore, students with higher levels of food nutrition literacy tend to make more informed decisions about their diet, considering factors such as nutritional value, accessibility, and cultural significance. However, having knowledge about nutrition alone is not enough to guarantee healthy food choices among students, as other factors like convenience and marketing also play a role (Lai et al., 2021)**.**

Conceptual Framework

Presented in Figure 1 was the conceptual framework of the study. The independent variables of this study were nutrition literacy and dietary habits. Firstly, nutrition literacy had the following indicators: *knowledge and understanding***,** which refer to the ability to make informed decisions about food choices, taking into account factors such as nutrition, safety, sustainability, and cultural significance; and *skills***,** which refer to the practical abilities and competencies required to select, prepare, and consume food in a way that promotes health, well-being, and sustainability (Liu et al., 2020).

Secondly, dietary habits was assess the following indicators: *food frequency consumption*, signifying consistent and frequent intake of nutritious food groups, indicating healthy eating habits; *nutrition beliefs*, suggested that students held strong, positive beliefs about nutrition, demonstrating a high level of understanding and confidence in making informed dietary choices that meet their nutritional needs; and *lifestyle*, which refer to student's reflecting a strong commitment to healthy habits, demonstrating a knowledge of competence in balancing dietary intake and managing food (Catapang, 2022).

Furthermore, the dependent variable was food choices with the following indicators: *food familiarity***,** which referred to the comfort and recognition of individual have with certain foods, often shaped by their cultural background, upbringing, and personal experiences; *mood* which examined how positive or negative emotions influence student's food choices; and *convenience* which gauged how easily and quickly students can access and consume food, influencing their food choices (Steptoe, 1995).

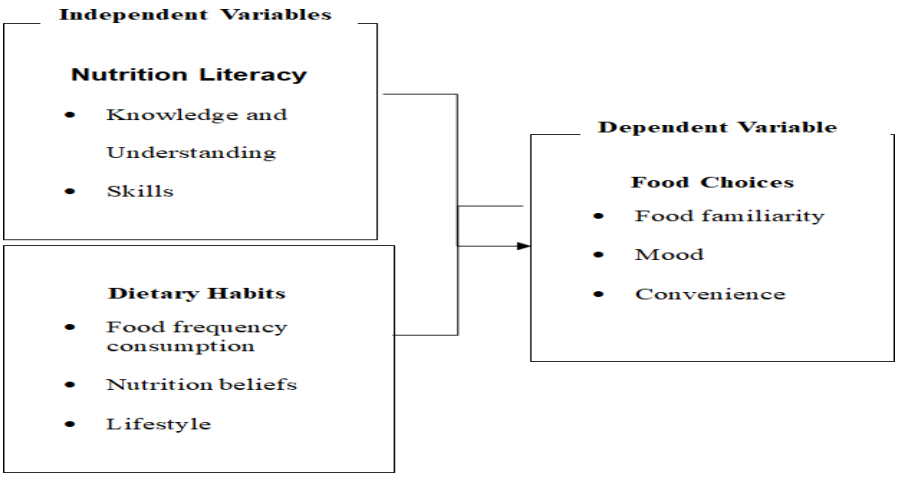

Figure 1. The Conceptual Framework of the Study

Significance of the Study

This study would be valuable to various stakeholders, including the Department of Education**,** school administrators**,** educators, parents, and future researchers. The findings of this study would provide insights for the Department of Education to advance nutrition education and health literacy among students, informing

curriculum development and teaching strategies. School administrators could use the results to design programs and workshops that promote healthy eating habits and enhance students' overall well-being. Additionally, the study's insights could inform educators on effective ways to integrate nutrition education into their teaching practices, making learning more engaging and relevant to students' lives. This research would contribute to the development of evidence-based policies and interventions that support the health and well-being of senior high school students.

Moreover, school educators could benefit from this research by identifying the impact of their nutrition knowledge and dietary habits on the food choices of students, allowing them to refine their teaching approaches and better support students' well-being. Parents might also benefit from understanding the importance of nutrition education in schools, enabling them to reinforce healthy habits at home and contribute to their children's improved health and academic performance. The results of this research would directly benefit students, particularly senior high school students, by providing insights into the relationship between nutrition knowledge, dietary habits, and food choices. This knowledge would empower students to make informed choices about their diet and lifestyle, potentially leading to improved academic performance and overall well-being. Finally, the findings would serve as a valuable resource for future researchers, offering a foundation for further investigation into the complex relationships between nutrition knowledge, dietary habits, and food choices among adolescents.

Definition of Terms

In order for the reader to have a better understanding of the terminologies used in the study, the following terms were defined conceptually and operationally.

Nutrition Literacy. This refers to an individual having knowledge about nutrition, enabling them to cultivate healthier eating habits and support initiatives that promote nutritious food (Dizon et al., 2019). Operationally, this encompasses students' ability to apply nutrition concepts to real-life situations, make informed food choices, and demonstrate thinking skills related to nutrition.

Dietary Habits. This refers to the regular patterns of food consumption, including food choices, meal frequency, and portion sizes (Pollan, 2018). As used in the study, it refers to the typical food consumption patterns, including food choices, eating frequency, and portion sizes of students.

Food Choices. This refers to the type of foods consumed by individuals (Catapang, 2020). In this study, it refers to students' personal food choices that they consume in their daily living.

METHOD

Discussed in this chapter were the research steps and procedures that were employed in this study. This chapter presented the research design, research locale, sample, research instrument, data collection, and statistical tools.

Research Design

This study utilized a quantitative, non-experimental design, employing descriptive correlational methods to explore the potential relationship between two specified variables. The goal was to describe the existing situation and investigate the underlying causes of a particular phenomenon. By using correlational research, the study aimed to identify relationships between variables without manipulating or controlling any factors, providing insight into the nature and strength of these relationships. A correlation reflects the strength and direction of the relationship between two or more variables (Bhandari, 2021). Correlation research involves collecting data in order to determine whether a relationship exists between two or more quantifiable variables (Gay et al., 2006).

This survey collected numerical data to investigate a specific phenomenon. A structured questionnaire was designed to gather data from target respondents, who will answer a series of questions. The study aimed to quantify the impact of two key factors - nutrition literacy and dietary habits on the food choices of senior high school students.

Research Locale

The findings of this study were specific to the context of senior high school students. The general applicability of the findings was limited by the scope and the sample. Accordingly, even though there could be common features, the findings might not have general applicability to other systems. Presented in Figure 2 was the map of the Philippines consisting of 17 regions in which the municipality of Mawab, province of Davao de Oro, was located in Region XI. Furthermore, presented in the same figure was the vicinity map of the respondents in the municipality of Mawab, Davao de Oro.

Mawab is a landlocked municipality in the Philippine coastal province of Davao de Oro. Mawab is 103 kilometers from Davao City, the regional center of Davao Region (Region XI), and 21.1 kilometers from Davao de Oro's Provincial Capitol. The municipality has a land area of 136.10 square kilometers (52.55 square miles), which constitutes 2.98% of Davao de Oro's total area. Its population, as determined by the 2020 Census, was 39,631. The location of the respondents was in Mawab, Davao de Oro. Furthermore, the location of the respondents and the conduct of the study were at Lorenzo S. Sarmiento Sr. National High School.

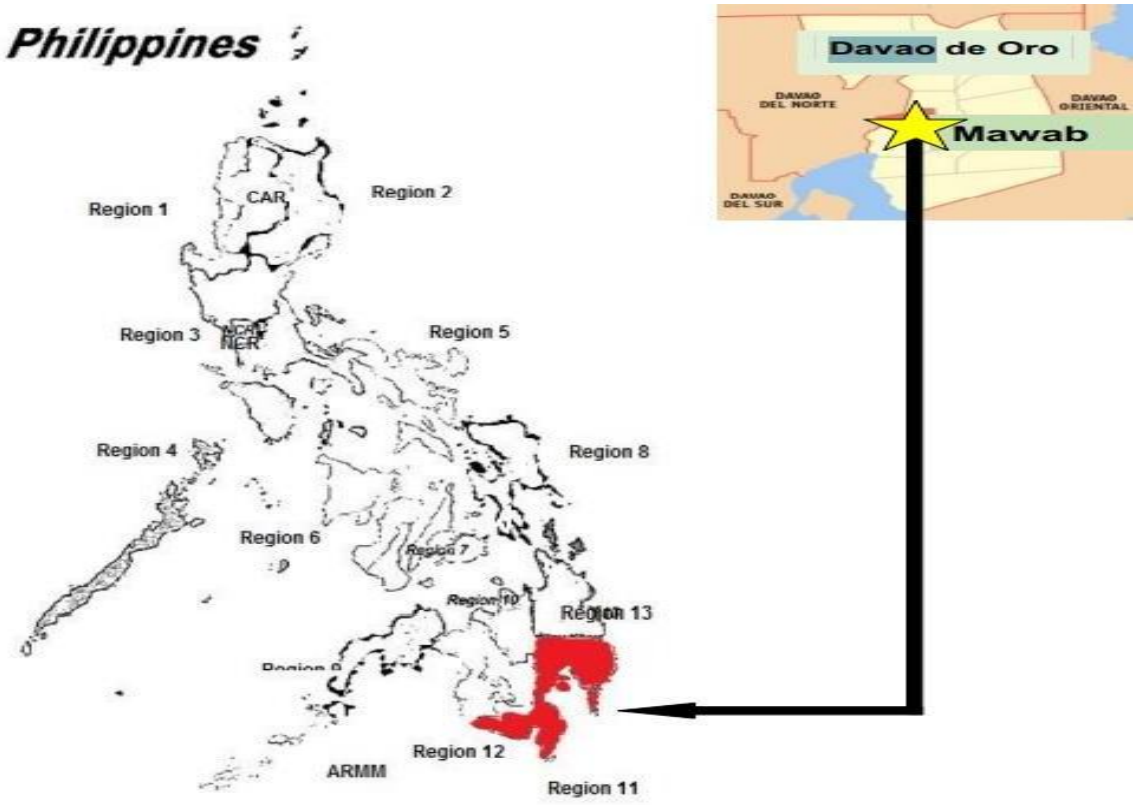

Figure 2. Map of the Philippines Highlighting Mawab, Davao de Oro

Population and Sample

Simple random sampling was employed in selecting the respondents for this study. The subjects included 183 Caregiving students from Lorenzo S. Sarmiento Sr. National High School, all of whom must be part of the study at their respective institutions in order to participate. These individuals were considered ideal respondents because they are the focus of our study, however, other strands are part of the exclusion criteria.

According to Kline (2005), a sample size of 100–200 respondents was considered medium. In the case of Senior High School students, out of a population of 183 individuals, only caregiving students of the respondents were selected using purposive sampling. The chosen number of caregiving students, 183, was deemed statistically significant for representing the broader population of caregiving students at LSSSNHS. The sample size was computed using the Raosoft sample size calculator. Shown in Table 1 were the respondents of the study, which were the caregiving students of Lorenzo S. Sarmiento Sr. National High School located at Mawab, Davao de Oro, Philippines, for the school year 2025-2026.

Table 1. Presents the study's population and sample size

Sections	Population	Respondents
A	55	49
B	55	49
C	41	39
D	51	46
TOTAL	204	183

Table 1. Population and Sample Size of Respondents

The distribution of the respondents detailed in Table 1, is as follows: 46 students from the caregiving program in section Aphrodite at Lorenzo S. Sarmiento Sr. High School; 39 caregiving students from section Apollo at the same school; 49 caregiving students from section Jade at Lorenzo S. Sarmiento Sr. High School; and 49 caregiving students from section Amethyst at Lorenzo S. Sarmiento Sr. National High School. In total, our study includes 183 caregiving students.

Research Instrument

The instrument of the study was ensured the reliability and validity analysis, particularly Cronbach's alpha coefficients, for all adapted questionnaire. The instrument that was used in the study was adapted from the standardized survey of Pablo (2021) for the first independent variable questionnaire or the nutrition literacy, which was based on adapted questionnaires developed by (Liu et al., 2020); the second independent variable questionnaire was used to determine the senior high school student's dietary habits, which was based on the research by (Catapang, 2022); and lastly, the food choices questionnaire by (Steptoe & Pollard, 1995) or the dependent variable, but the questionnaire was modified to suit the context of the study.

The first set of the questionnaire dealt with nutrition literacy, which was composed of two (2) indicators: knowledge and understanding, and skills. The contents of the instrument were presented to the group of experts for validation and rating. In evaluating the level of nutrition literacy, the following five (5) orderable gradations with their respective range of means and descriptions were considered:

Range of Means	Descriptive Equivalent	Interpretation
4.20 – 5.00	Very High	This means that the nutrition literacy among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was very much positive.
3.40 – 4.19	High	This means that the nutrition literacy among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was very much positive.
2.60–3.39	Moderate	This means that the nutrition literacy among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was moderately positive.
1.80–2.59	Low	This means that the nutrition literacy among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was less positive.
1.00–1.79	Very Low	This means that the nutrition literacy among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was not positive.

The second set of the instrument dealt with dietary habits. It was composed of three (3) indicators, such as food frequency consumption, nutrition beliefs, and lifestyle. For the dietary habits, the following five (5) orderable gradations with their respective range of means and descriptions were considered:

Range of Means	Descriptive Equivalent	Interpretation
4.20 – 5.00	Very High	This means that the dietary habits among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was very much positive.
3.40 – 4.19	High	This means that the dietary habits among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was very much positive.
2.60–3.39	Moderate	This means that the dietary habits among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was moderately positive.
1.80–2.59	Low	This means that the dietary habits among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was less positive.
1.00–1.79	Very Low	This means that the dietary habits of senior high school caregiving students at Lorenzo S. Sarmiento Sr. National High School were not positive.

The third set of the instrument was composed of food choices, which included three (3) indicators: food familiarity, mood, and convenience. For the student's food choices, the following five orderable gradations with their respective range of means and descriptions were considered:

Range of Means	Descriptive Equivalent	Interpretation
4.20 – 5.00	Very High	This means that the food choices among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was very much positive.
3.40 – 4.19	High	This means that the food choices among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was very much positive.
2.60–3.39	Moderate	This means that the food choices among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was moderately positive.
1.80–2.59	Low	This means that the food choices among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was less positive.
1.00–1.79	Very Low	This means that the food choices among senior high school caregiving students in Lorenzo S. Sarmiento Sr. National High School was not positive.

Remarkably, the research instrument used in this study was evaluated by experts, with an overall rating of 4.86.

Data Collection

The following salient steps were adhered to as part of the procedure for data gathering: The researchers sought validation of the research questionnaires, and once validated, they requested an endorsement from their research teacher, Noli Julosan, PhD, to conduct the study. Next, a letter to conduct the study was secured from Lorenzo S. Sarmiento Sr. National High School's Assistant School Principal II, Ma'am Roberta A. Javier. It was forwarded to school educators who participated in the data collection.

Next, informed consent was given and collected in a face-to-face procedure. Upon providing the forms, the researchers explained the study's details to the respondents, specifically its purpose and the nature of their participation. All queries regarding their participation in the study and the collection and use of the data were fully addressed. Upon the respondents' voluntary acceptance to participate in the study, the form was collected and retained for data-gathering purposes. Moreover, no additional personal information was collected from the respondents beyond what was necessary for the study. All data was kept confidential by the researchers and utilized only during the conduct of the study. After which, the forms were stored to avoid unnecessary utilization of information.

Then, the questionnaires were distributed to the study respondents, with a focal person facilitating distribution beyond our institution. During data collection, the instructions were clearly explained to each of them, and the researchers ensured that their responses remained confidential by not including their names in any part of the study or in the form they submitted. Each of them was given ample time to answer all the questionnaires. Afterward, the researchers retrieved the survey questionnaires and checked whether the respondents completed all items. Lastly, the researchers collected all the survey questionnaires and prepared them for statistical treatment. This was done by the researchers and validated by the statistician from Lorenzo S. Sarmiento Sr. National High School for processing. The researchers interpreted the data. Based on the data, conclusions were drawn and recommendations formulated**.**

Statistical Tool

The statistical tools that were used for data analysis and interpretation are the following:

Mean. This statistical tool was used to determine the level of nutrition literacy and dietary habits on food choices among senior high school students.

Pearson (r). This statistical tool was used to determine the significance of the relationship between nutrition literacy and dietary habits on food choices among senior high school students.

Multiple Regression Analysis. This statistical tool was used to determine the influence of nutrition literacy and dietary habits on food choices among senior high school students.

Ethical Consideration

This quantitative study raised several ethical concerns that impacted its methodology. Key issues included ensuring the right to conduct the study, maintaining participant confidentiality, and ensuring participant anonymity. To address these concerns, researchers carefully reviewed the study protocol and adhered to standardized criteria, closely monitoring ethical standards throughout the research process, including:

Voluntary Participations. The caregiving students were allowed to participate without fear of repercussions, penalties, or loss of benefits. They have been informed of the study's purpose and advantages. The participants' rights to contribute to all knowledge were carefully observed and subsequently agreed upon.

Privacy and Confidentiality. The researchers kept the respondents' personal information secure and kept it as secret as possible in the private study.

Informed Consent Process. Technical terminology was not included in the research surveys, which could have hampered the respondents' comprehension. It would provide them with a clearer picture of the benefits they can expect from the school principal's actions.

Recruitment. The distribution of respondents revealed how they would be selected. The data collection measures, the questionnaire organization, and the types of respondents included in this study were detailed.

Risks. There were no high-risk conditions in the study that participants could face regarding physical, psychological, or socioeconomic issues.

Benefits. The results of this study would benefit school administrators, educational institutions, and teachers by providing programs on nutrition education, dietary habits, and food choices.

Fabrication. The study contained no hint of deliberate, untruthful statements about what had been done, without presenting the data or offering anything precise.

Falsification. There was no evidence in this study of deliberate falsification of the work to conform to a theoretical model of expectation, nor of exaggerated assertions or overstatements.

Conflict of Interest (COI). The study contained no hints of a conflict of interest, such as the disclosure of the COI, which was a set of circumstances in which a secondary interest, such as monetary or academic retributions or awards, tended to bias the professional judgment on the primary interest, such as the safety of the participants or the validity of the inquiry.

Deceit. There was no trace of deceptive content in the study that could cause harm to the respondents.

Permission from the Organization/Location. The research was conducted with formality and adhered to the ethical standards set by the concerned organization. Thus, the researchers sent a formal consent letter to the concerned respondents and to those involved in Davao de Oro who were included in this research. The research was conducted only after the authorities' approval.

Authorship. The researchers were Grade 12 TVL-Caregiving students at Lorenzo S. Sarmiento Sr. National High School. As a result, the research underwent a series of reviews. The study also followed the ethical consideration protocols set forth by the School Ethics Review Committee. The data obtained in this research were analyzed to assess the questionnaire's consistency.

RESULTS

This part of the paper presented the data and analysis of the questionnaire responses, based on the research objectives outlined in the first chapter. Tables were arranged under the following subheadings: Level of Nutrition Literacy, Level of Dietary Habits, Level of Food Choices, Significant Relationship between Nutrition Literacy and Food Choices, Significant Relationship between Dietary Habits and Food Choices, Multiple Regression Analysis on the Influence of the domain of Nutrition Literacy on Students' Food Choices, and Multiple Regression Analysis on the Influence of the domain of Dietary Habits on Students' Food Choices among Senior High School Students' with their corresponding indicators.

Level of Students' Nutrition Literacy

Table 2 shows students' Nutrition Literacy levels in terms of knowledge and understanding, and skills. The overall mean is 4.00, described as high, with a standard deviation of 0.73. The high level is due to respondents' high ratings across all indicators. This indicates that respondents' responses to the level of nutrition literacy were positive, about knowledge and understanding, and skills.

The cited overall mean score was the result of the following computed mean scores, from highest to lowest: 4.01 (high) for knowledge and understanding, with a standard deviation of 0.83; and 4.00 (high) for skills, with a standard deviation of 0.81.

Table 2. Level of Nutrition Literacy

Indicators	Mean	SD	Descriptive Equivalent
Knowledge and Understanding	4.01	0.83	High
Skills	4.00	0.81	High
Overall	**4.00**	**0.73**	**High**

The primary positive student nutrition literacy is *Knowledge and Understanding*, which has the highest mean among all indicators. It is typically about taking into a learning environment focused on nutrition literacy that extends beyond the classroom, creating a space where students feel safe, supported, and inspired to develop healthy eating knowledge and habits. When educators foster a supportive culture around nutrition education, they can effectively enhance students' motivation to engage with nutritional concepts. This increased motivation contributes to improved understanding, positive dietary decision-making, enriched learning experiences, and the achievement of intended nutrition literacy outcomes.

Regarding the students' Skills, respondents believe they are competent in applying food-related knowledge at school. They show not only an understanding of food concepts but also the ability to apply this knowledge through effective teaching practices. Their ability to evaluate food options allows them to choose meals that support their health and well-being. These skills reflect how students use their knowledge in real-life situations, particularly when deciding what foods to consume. Strengthening these abilities can further improve students' capacity to make informed and responsible food choices that contribute to better dietary habits and overall health.

Level of Dietary Habits

Shown in Table 3 are the mean scores for the indicators of students' dietary habits, with an overall mean of 4.06 and a standard deviation of 0.70, indicating a high level. The high level is due to respondents' high ratings across all indicators. This indicates that the respondent's responses regarding dietary habits were positive across food frequency consumption, nutrition beliefs, and lifestyle.

The cited overall mean score was the result obtained from the following computed mean scores from highest to lowest: 4.07 or high for lifestyle, with a standard deviation of 0.85; 4.07 or high for nutrition beliefs, with a standard deviation of 0.78; and 4.02 or high for food frequency consumption, with a standard deviation of 0.89.

Table 3. Level of Dietary Habits

Indicators	Mean	SD	Descriptive Equivalent
Lifestyle	4.07	0.85	High
Nutrition Beliefs	4.07	0.78	High
Food frequency consumption	4.02	0.89	High
Overall	**4.06**	**0.84**	**High**

In terms of *lifestyle*, the indicator with the highest mean shows how strongly students believe their eating habits affect various aspects of their lives. It looks at how healthy and unhealthy food choices influence students' daily activities and how important these habits are to them. A high mean may also show that students are managing their lifestyle well. This suggests that students understand how their eating habits affect their personal lives, school performance, and social well-being, and that they can make healthier food choices even when faced with challenges.

Regarding with *nutrition beliefs*, the respondents showed a positive response, as evidenced by the high mean score. Students show good awareness when choosing food and make careful decisions about what they eat. This high score suggests that students understand basic nutrition and can choose food wisely in different situations. Their ability to handle food-related challenges demonstrates resilience and a positive attitude toward maintaining healthy eating habits, even amid diverse influences and limitations.

Finally, *food frequency consumption*, which has the lowest mean, reflects how long the effects of students' food choices last. Although the mean is lower, students show some awareness of managing their eating habits, even during challenging situations. However, the lower score suggests concerns about the consistency of their food choices over time. In conclusion, while students understand that eating habits can change, they need proper guidance and support to maintain healthy, consistent food choices and build long term healthy eating habits.

Level of Food Choices

Table 4 presents the mean scores of students' food choices in terms of food familiarity, mood, and convenience. The overall mean is 4.05, with an equivalent description of high, and a standard deviation of 0.86. This implies that respondents' responses to the level of students' food choices were positive regarding food familiarity, mood, and convenience.

The cited overall mean score was the result obtained from the following computed mean scores from highest to lowest: 4.06 or high for food familiarity, with a standard deviation of 0.87; 4.05 or high for convenience, with a standard deviation of 0.91; and 4.04 or high for mood, with a standard deviation of 0.81.

Table 4. Level of Food Choices

Indicators	**Mean**	**SD**	**Descriptive Equivalent**
Food Familiarity	4.06	0.87	High
Convenience	4.05	0.91	High
Mood	4.04	0.81	High
Overall	**4.05**	**0.86**	**High**

The main positive factor in students' food choices at Lorenzo S. Sarmiento Sr. National High School is *food familiarity*, which has the highest mean. Food Familiarity refers to how well students recognize and are comfortable with different types of food. This shows that students are generally confident in choosing foods they know and are familiar with. A high level of food familiarity also suggests that students are more likely to make consistent and positive food choices, as they feel comfortable trying or selecting foods they know and enjoy.

Convenience also shows the highest mean, indicating the same positive result as the previous indicator. Convenience refers to how easy and practical it is for students to access and choose food. This means that students' food choices are often influenced by how simple or convenient it is for them to get the foods they want. When food options are easy to reach, quick to prepare, or ready to eat, students are more likely to choose them. Making convenient, accessible food available can help students make better, more consistent food choices.

Finally, *mood* has the lowest mean. Mood refers to how students' feelings influence their food choices, including whether they eat certain foods when they are happy, stressed, or tired. This suggests that students' emotions can affect the way they select and enjoy food. Understanding and supporting students' moods can help them make better food choices, encouraging them to choose foods thoughtfully rather than impulsively.

Significance Relationship Between Nutrition Literacy and Food Choices

One crucial purpose of this study is to determine the relationship between nutrition literacy and dietary habits on food choices. Pearson's r was used to determine the correlation between the two variables. The results of the computation are shown in Table 5.

Likewise, the results revealed that nutrition literacy and food choices are significantly related. This result is due to a p-value of <.001, which is lower than the 0.05 threshold. Hence, the decision is made to reject the null hypothesis, which stated that there is no significant relationship between nutrition literacy and food choices. Moreover, Pearson's r value of 0.614 indicates a moderate correlation between nutrition literacy and food choices.

Table 5. Significance Relationship Between Nutrition Literacy and Food Choices

		Nutrition Literacy	**Food choices**
Nutrition Literacy	Pearson's r p-value	----- -----	
Food choices	Pearson's r p-value	0.614 <.001	----- -----

**Significant at 0.05 significance level*

Significance Relationship Between Dietary Habits and Food Choices

Another crucial purpose of this study is to determine whether dietary habits are significantly related to food choices. Pearson's r was used to determine the correlation between the two variables. The results of the computation are shown in Table 6.

Likewise, the results revealed that dietary habits and food choices are significantly related. This result is due to a p-value of <.001, which is less than the 0.05 p-value. Hence, the decision is to reject the null hypothesis that there is no significant relationship between dietary habits and food choices.

Moreover, Pearson's r value of 0.710 indicates a moderate correlation between dietary habits and food choices.

Table 6. Significance Relationship Between Dietary Habits and Food Choices

		Dietary Habits	**Food choices**
Dietary Habits	Pearson's r p-value	----- -----	
Food choices	Pearson's r p-value	0.710 <.001	----- -----

**Significant at 0.05 significance level*

Multiple Regression Analysis on the Influence of the Domain of Nutrition

Literacy on Food Choices

The data shown in Table 7 are the regression coefficients used to test the significance of the domain of nutrition literacy on food choices among senior high school students. Using the Multiple Regression Analysis, the data revealed that nutrition literacy significantly influences food choices among senior high school students ($F(1, 44) = 44.12$, $p < .001$).

This means that the level of nutrition literacy influences students' food choices, as the probability is less than 0.05. The coefficient of determination (R^2) of 0.329 indicates that 32.9% of the variation in nutrition literacy levels influences students' food choices. The remaining 60.3% is chance variation, suggesting that other factors beyond the scope of this study may also contribute to students' food choices.

Table 7. Multiple Regression Analysis on the Influence of the Domain of Nutrition Literacy to Food Choices

Nutrition Literacy	**Coefficient**	**t-value**	**p-value**	**Decision** α=0.05
Knowledge and Understanding	0.457*	6.051	<.001	Ho is rejected
Skills	0.170*	2.258	.025	Ho is rejected
Dependent Variable: Food Choices				

p<.001 R=0.574 R2=0.392 F-value=55.44 p<.001

The indicator *knowledge and understanding* has a coefficient of 0.236*, a t-value of 6.051, and a p-value of <.001, which is less than the significance level of 0.05, indicating that knowledge and understanding significantly influence students' food choices in a singular capacity. Further, the coefficient 0.457* indicates that a one-unit increase in knowledge and understanding results in a corresponding increase of 0.457 in students' food choices.

Next, *skills* have a coefficient of 0.170*, a t-value of 2.258, and a p-value of .025, which is less than the significance level of 0.05, indicating that skills have a significant influence on students' food choices in a singular capacity. More so, the coefficient of 0.170* connotes that a one-unit increase in the level of food choices results in a corresponding rise of 0.074 in food choices.

Therefore, as shown in the table, the null hypothesis that no domain of nutrition literacy significantly influences food choices is rejected based on knowledge and understanding, and skills.

Multiple Regression Analysis on the Influence of the Domain of Dietary

Habits on Food Choices

Table 8 presents the regression analysis of the influence of dietary habits on students' food choices. The table shows a computed f-value of 74.24 and a p-value of <.001, indicating that dietary habits significantly influence students' food choices, as the p-value is less than the 0.05 significance level. The coefficient of determination (R2) of 0.554 indicates that food frequency, nutrition beliefs, and lifestyle factors explain 55.4% of students' food choices. In comparison, the remaining percentage of 44.6% is attributable to other indicators not included in the study.

Table 8. Multiple Regression Analysis on the Influence of the Domain of Dietary Habits to Food Choices

Dietary Habits	**Coefficient**	**t-value**	**p-value**	**Decision** α=0.05
Food Frequency Consumption	0.202*	3.280	.001	Ho is rejected
Nutrition Beliefs	0.233*	3.629	<.001	Ho is rejected
Lifestyle	0.448*	7.065	<.001	Ho is rejected
Dependent Variable: Food Choices				

p<.001 R=0745 R2=0.554 F-value=74.24 p<.001

Moreover, the indicator *food frequency consumption* has a coefficient of 0.202*, a t-value of 3.280, and a p-value of .001, which is less than the significance level of 0.05, indicating that food frequency consumption has a significant influence on students' food choices in a singular capacity. Furthermore, the coefficient 0.202* indicates that a one-unit increase in food frequency consumption results in a corresponding increase of 0.202 in students' food choices.

Next, the *nutrition beliefs* have a coefficient of 0.233*, a t-value of 3.629, and a p-value of <.001, which is less than the significance level of 0.05, indicating that nutrition beliefs significantly influence students' food choices in a singular capacity. Moreover, the coefficient of 0.233* indicates that a one-unit increase in nutrition beliefs results in a corresponding increase of 0.231 in students' food choices.

In addition, *lifestyle* has a coefficient of 0.448*, a t-value of 7.065, and a p-value of <.001, which is less than the 0.05 significance level, suggesting that lifestyle significantly influences students' food choices. Additionally, the coefficient of 0.448* indicates that a one-unit increase in lifestyle level results in a corresponding increase of 0.448* in students' food choices.

Therefore, as shown in the table, the null hypothesis that no domain of dietary habits significantly influences food choices is rejected for food frequency, nutrition beliefs, and lifestyle.

DISCUSSION

This chapter presents the data on nutrition literacy, dietary habits, and food choices, along with a discussion of the findings. It also includes related studies, the conclusions drawn from the results, and the researchers' recommendations based on the study.

Level of Nutrition Literacy

In the preceding chapter, the findings regarding nutrition literacy among Senior High School Students were presented. It revealed that nutrition literacy was reported as high, suggesting a significant presence of factors among students and in their food choices.

In addition, the study's results emphasize that students' food choices are heavily influenced by their nutrition literacy. When students are knowledgeable and skilled in nutrition education, they are more likely to engage with and understand the material, leading to healthier food choices and boosting students' overall wellness and wellbeing.

Students' nutrition literacy involves having the knowledge and understanding needed to make informed food choices. The concept of Mancone et al. (2024) supports this idea, suggesting that when students develop a positive relationship with nutrition, it can increase their motivation and contribute to better academic outcomes and learning experiences.

Lastly, students' skills in choosing food were found to be significant in the results. Guiné et al. (2023) emphasized that having proper food skills influences what students eat, as it involves not only knowing what is healthy but also applying that knowledge in practice. Students who are skilled in planning meals, reading food labels, and cooking are more likely to make healthier choices. Furthermore, Ares et al. (2023) noted that students' food choices are influenced by their environment, and possessing the right skills helps them select healthier options despite the presence of unhealthy foods.

Level of Dietary Habits

The previous chapter presented the level of dietary habits among senior high school students, which was found to be high. All three indicators were also rated high, indicating that this quality is strongly present among the students.

The respondents' dietary habits among senior high school students reflect positive perceptions and strong abilities in managing nutrition-related challenges, including food frequency consumption, beliefs, and lifestyle. This high level indicates a supportive environment that promotes adaptability and healthy nutritional practices.

The highest mean scores were observed in food frequency and nutrition beliefs, highlighting that students' eating habits are strongly influenced by what they eat and their perceptions of nutrition. Students who value certain foods and have a solid understanding of nutrition are more likely to make healthy choices and navigate food options effectively (Raut et al., 2024). Conversely, an excessive focus on the negative aspects of food can lead to unhealthy eating or stress around food (Hsu & Liu, 2025).

Lifestyle has the least impact on students' eating habits compared to other factors. When students take responsibility for their choices, they are more likely to make healthy decisions and correct unhealthy ones (Almoraie et al., 2024). As Avram et al. (2024) note, eating habits are influenced by factors such as age, gender, social life, lifestyle, and mental state. However, having the skills to make informed food choices is key to developing and maintaining healthy dietary habits.

Level of Food Choices

The previous chapter reported that students' food choices were rated as high, with all three indicators also scoring high. This suggests that senior high school students demonstrate strong and positive food selection behaviors.

The respondents, Senior High School students, demonstrated a much more positive outlook in our research. Students' positive responses highlight the creation of suitable food choices that not only encourage cognitive participation but also foster strong behavioral and emotional connections.

Food familiarity among students is high and positive, supporting Xu and Zeng's (2022) findings that familiarity strongly influences food choices. Students are motivated to try local foods they are unfamiliar with, though food neophobia can limit this effect. Overall, familiarity plays a key role in encouraging new food experiences.

Convenience ranked second-highest, strongly influencing students' food choices. When food is easily accessible and fits their schedule, students are more likely to select it, as supported by Wilson (2020). This is evident in habits such as grabbing quick bites between classes, choosing delivery, or opting for campus food that saves time and effort, highlighting convenience as a key factor in their decisions.

Lastly, mood had the lowest mean but still influences students' food choices. As Leeds et al. (2020) note, negative moods can lead to cravings for unhealthy foods, while positive moods often encourage healthier selections. External factors like advertisements can also sway choices. Understanding this connection is important for promoting healthier eating habits (AlAmmar et al., 2020).

Significance of the Relationship Between Nutrition Literacy and Food Choices

The study revealed a significant relationship between nutrition literacy and food choices. The p-value confirmed a positive correlation, indicating that higher nutrition literacy is associated with healthier food choices among students.

This correlation supports Smith's (2022) findings, highlighting that nutrition literacy is crucial in guiding food choices. Individuals with higher nutrition literacy are more likely to make informed dietary decisions, consume more fruits and vegetables, and adhere to recommended eating guidelines (Lee et al., 2020).

Supporting Park & Lee's (2023) study, students who understand nutrition information are better equipped to make healthy decisions. However, if students are not well-informed about nutrition, they might struggle with food labels and make poorer choices, increasing their risk of health issues (Gonzalez et al., 2021).

Similarly, enhancing nutrition literacy empowers students to make informed food choices, lowering their risk of diet-related diseases. By understanding nutrition information, they can navigate food options more effectively, fostering healthier habits and reducing the likelihood of chronic conditions (Kang & Kim, 2024). Health

education programs that strengthen nutrition literacy play a pivotal role, equipping students with the knowledge to make informed decisions and promoting overall well-being (Rodriguez et al., 2025).

Significance of the Relationship Between Dietary Habits and Food Choices

The study revealed a significant relationship between dietary habits and food choices, indicating that changes in dietary habits are linked to changes in students' food choices. This finding rejects the null hypothesis and highlights how students' food frequency, nutrition beliefs, and lifestyle influence their daily eating behaviors.

Dietary habits and food choices are closely connected, as regular eating patterns shape overall diet quality. For instance, Gonçalves et al. (2022) found that students who frequently consumed sugary or highly palatable foods had less balanced diets. Similarly, Golestanbagh et al. (2021) showed that personality traits influence food choices: neurotic or open individuals tended to select salty, fatty, or sweet foods, whereas conscientious students preferred healthier options like vegetables, nuts, and dairy.

Students' eating habits are shaped by a combination of culture, lifestyle, and socioeconomic factors, which guide their daily food choices and gradually form their dietary patterns (Gherasim et al., 2020). Similarly, Al-Hassan et al. (2025) found that household size, income, and taste preferences directly influence how often students eat and the variety in their diets, highlighting the interplay of personal and social factors in shaping dietary habits.

Food choices directly influence health outcomes. Diets high in fats, sugar, or processed foods increase the risk of cardiovascular problems, while consuming whole foods like fruits, vegetables, nuts, and fiber offers protective benefits (Chen et al., 2023). This underscores the importance of making informed food choices, as they shape dietary habits and long-term health. Additionally, social interactions also affect what we eat, gradually forming our eating patterns over time (Intiful et al., 2021).

Multiple Regression Analysis on the Influence of the Domain of Nutrition

Literacy on Food Choices

The regression analysis examining the effect of nutrition literacy on students' food choices shows that all domains; knowledge and understanding, and skills significantly influence their food choices.

A study by Jones and Adkins (2021) revealed that students with lower nutrition knowledge and understanding tended to select more unhealthy foods compared to those with higher literacy scores, highlighting how understanding nutrition empowers healthier choices. Supporting this, Mostafazadeh et al. (2023) reported that nutrition literacy accounts for 44% of students' eating behavior, emphasizing the strong link between knowledge and healthy food decisions.

A study by Koca and Arkan (2020) emphasizes that applying food-related skills enables students to make informed eating decisions. When students take charge of their nutrition learning, they are more likely to make healthier choices, with autonomy playing a key role in shaping their eating habits. However, McNamara et al. (2021) note that limited nutrition and health literacy can hinder students' ability to make healthy food choices.

The domains are equally important and interrelated. Having knowledge and personal development helps students make better food choices and translate them into healthy eating habits. Notably, the skills domain has a strong impact on food choices, highlighting that all factors work together in shaping students' dietary decisions.

Multiple Regression Analysis on the Influence of the Domain of Dietary

Habits on Food Choices

The regression analysis examining the effect of dietary habits on senior high school students' food choices shows that all three domains; food frequency consumption, nutrition beliefs, and lifestyle significantly influence their food choices. Nutrition beliefs had the strongest impact, followed by lifestyle and food frequency.

A study by Chaudhary et al. (2020) found that senior high school students often prefer unhealthy foods, such as sugary snacks and fried items, while skipping meals, contributing to broader health issues. Nutrition beliefs strongly influence these choices prioritizing convenience or taste over health leads to poorer eating habits, suggesting that reshaping beliefs could promote healthier diets. Supporting this, López-Gil et al. (2022) showed that students with better eating habits, including regular breakfast and higher fruit and vegetable intake, tend to achieve higher academic performance.

Furthermore, lifestyle plays a significant role in shaping students' food choices and long-term eating habits. Maintaining healthy routines, making nutritious choices, and promoting good nutrition help students develop positive habits that can last a lifetime (Richardson et al., 2023). However, as Edin et al. (2024) note, lifestyle factors such as convenience, taste, and social habits often outweigh nutritional knowledge, leading many students to choose fast food despite knowing healthier options.

Moreover, food frequency consumption was found to significantly influence students' food choices. While students may know which foods are healthy, factors like familiarity and convenience often have a stronger impact on their decisions. How often students think about food also shapes what they ultimately choose to eat.

CONCLUSION

The study concludes that nutrition literacy across knowledge and understanding, and skills; and dietary habits including food frequency consumption, nutrition beliefs, and lifestyle—are all high among students. Overall food choices, covering food familiarity, convenience, and mood, were also high. Contrary to the theoretical assumption of no relationship, Pearson's correlation showed that nutrition literacy and dietary habits are significantly and moderately associated with students' food choices, confirming their influential role.

RECOMMENDATIONS

After the presentation and discussion of the findings and results of the study, the researchers formulated the following recommendations to improve nutrition literacy and dietary habits and successfully foster students' food choices within the school community.

As indicated by our study on Nutrition Literacy and Dietary Habits on Food Choices among Senior High School students, the DepEd can enhance food choices among senior high school students by expanding nutrition programs, including healthy meal options and regular monitoring. Implementing comprehensive Food and Nutrition Programs can ensure safe food handling, storage, and preparation practices. Furthermore, supporting student-led initiatives can facilitate the dissemination of effective nutrition knowledge, address key areas for improvement, and promote healthier food choices among students. Providing support for these collaborative platforms will allow students to share effective knowledge about hygiene practices and food safety.

Furthermore, school administrators at Lorenzo S. Sarmiento Sr. National High School should actively promote and expand the FSP and Nutrition program within the school area. Additionally, proper food preparation, surface cleaning, chilling perishable foods below 5°C, cooking meats to 75°C, and training staff in safe handling to prevent contamination have been implemented, as the null hypothesis that nutrition literacy and dietary habits do not significantly influence students' food choices has been rejected. These practices directly boost wellness by reducing the risk of foodborne illness. Knowing food choices can improve students' well-being. Which students and teachers can gain a huge benefit from this study, enabling them to consume food without worrying about safety. By addressing nutrition literacy and dietary habits in food choices, they will be better equipped to handle unforeseen obstacles, resulting in improved overall well-being and greater effectiveness in improving students' wellness.

Students can learn about food choices, improving their intellectual grasp and emotional confidence in health routines. Students gaining knowledge about food choices can help by understanding the importance of choosing healthy foods before eating and the necessity of preparing food safely.

In addition, canteen staff can benefit by learning new ways to sell nutritious foods and by gaining knowledge on how to prepare better foods for students and teachers.

Moreover, teachers can enhance their understanding of nutrition literacy and dietary habits by guiding students in selecting healthy foods and avoiding unhealthy options. Through this process, teachers also reinforce their own knowledge and awareness of proper nutrition practices.

In this regard, these recommendations aim to create a supportive and growth-oriented environment for students, fostering continuous improvement across all variables, namely nutrition literacy and dietary habits regarding food choices among senior high school students. Through collaborative learning, reflective practices, and exposure to diverse knowledge about food choices, students can enhance their knowledge and practices to benefit their health and overall wellness.

Lastly, future researchers could explore additional factors beyond the variables, such as nutrition literacy and dietary habits, that may influence students' food choices. This study can enable future researchers a more comprehensive understanding of the complex influencing food choices among adolescents. By building upon this research, future studies can contribute to evidenced-based strategies for promoting healthy eating habits. Additionally, future researchers should include broader populations, longitudinal designs, and international-based studies to strengthen casual inference and applicability.

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