

**Level of Knowledge on Vegetarianism Across Generation: A Comparative Study**

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Abstract - Vegetarianism, a dietary pattern that excludes meat, poultry, and seafood, has gained significant attention in recent years due to its potential health benefits and environmental concerns (Anderson J. et.al., 2021). However, the level of knowledge about vegetarianism across generations is not well understood. 145 customers of a selected Vegetarian Restaurant accomplished the quiz-type instrument adapted from “Knowledge of Vegetarian and Non-vegetarian Peruvian Dietitians about Vegetarianism at Different Stages of Life” by Saintila, J. et.al. (2021). This mixed method study revealed that their level of knowledge on vegan diet is “Approaching Proficiency” (47.6%). 88.28% comprehends that “Vegan diet includes foods like vegetables and fruits and nothing that comes from an animal.” 71.72% have misconception that “The supplemental nutrient that should not be missing for a vegetarian/vegan child is Vitamin B1” due to the common belief that this vitamin is primarily derived from animal products, overlooking plant-based sources like legumes and whole grains. No significant differences ( $p > .05$ ) were found after comparing the scores of the respondents based on their demographic profile. In addition, the focused-group interviews provided deeper insights and perspectives on vegetarianism, exploring their experiences, as well as the challenges in adopting this lifestyle, and views on society’s role in promoting vegetarianism. This paper contributes to enhance understanding and knowledge about vegetarianism and having a healthy lifestyle. Educational workshops, Social Media Campaigns, School Curriculum Integration, Partnerships with Food Brands, and Community Health Support Groups were recommended by the researchers to help intensify information dissemination about vegetarian and vegan diet.

Keywords - Vegetarianism, Vegetarian, Vegan, Non-vegan, Foods, Vegan diet, Plant-based meals

**Introduction**

More people have adopted plant foods for various reasons such as health, sustainability of the environment, and animal welfare over the last years. The purpose of this study is to examine the level of knowledge of vegetarianism across all generations. Previous studies have indicated that young people are more inclined to consider ethics and environmental factors in deciding what foods they eat, leading them to adopt vegetarianism. Vegetarianism has gained significant popularity. Vegetarians and non-vegetarians have varying dietary preferences based on factors such as age, gender, education, work experience, and other factors. Generation X, born 1965-1980, grew up influenced by convenience, fast food, and processed foods, prioritizing health and healthier eating habits. Millennials, born 1981-1996, prefer organic, locally produced meals, flexitarian, and plant-based diets, relying on food delivery services. Generation Z, born 1997-2012, is health-conscious, preferring whole, organic, and locally sourced foods, adopting plant-based diets and focusing on sustainability. Gender plays a role in these preferences, with females being more likely to follow plant-based diets due to sociocultural influences and health issues. Education can increase awareness of ethical, environmental, and health-related issues related to food choices, with higher levels of education potentially leading to a higher likelihood of adopting a vegan diet. Job experience, particularly in health, environmental sustainability, or animal welfare, may also influence a person’s decision to adopt a vegan diet. A comparative study can help bridge the generational gap by analyzing beliefs, attitudes, and reasons for adopting a vegetarian lifestyle. The food industry should innovate and promote healthy eating policies, while ongoing assessment and community involvement are crucial. The study compares vegetarian lifestyles across generations, examining their benefits and effects on lifespan. It also examines vegetarianism in modern and ancient eras, providing a starting point for understanding its impact. Researchers study the reasons people choose vegetarianism, their perceptions, and the impact on physical health. They focus on the science behind cooking, highlighting the importance of balance between vegetables, meat, and condiments. The study also distinguishes between vegetarianism and the shift from meat consumption to vegetables, emphasizing the positive effects of vegetables on the body. The goal is to provide reliable information and reduce barriers to adopting a vegetarian diet.

**Materials and Method**

Research Design:

This study digs into the sophisticated approach of non-experimental descriptive research from a comparative standpoint, shining light on its importance in understanding variations in vegetarian knowledge among age groups. It underlines the critical relevance of this approach in examining variables without direct manipulation, with a particular focus on generational differences in vegetarianism awareness. Furthermore, this publication distinguishes between experimental and nonexperimental research in psychology, emphasizing the importance of both approaches.

The study emphasizes the need of using simple random selection to generate unbiased and generalizable results. An illustrated case study demonstrates how this methodology contrasts the depth of understanding regarding vegetarian behaviors across students from public and private schools, demonstrating its practical relevance in real-world circumstances.

#### Research Locale:

This research will take place at Vege Select, a well-known vegetarian Chinese restaurant located at 739 Ongpin St., Binondo, Manila. This venue has been carefully chosen as the optimum environment for the researchers' comprehensive survey questionnaire. The major goal is to assess and analyze individuals' knowledge levels about vegetarianism, particularly among those who follow vegetarian diets. Vege Select provides an ideal setting for data collecting, allowing researchers to gain unique insights and vital information about vegetarian practices. To ensure meticulous data collection, a meticulous protocol has been developed to maintain consistency and precision in the results. The researchers' meticulous planning and preparation aim to yield precise, reliable, and insightful findings.

#### Sampling Design:

This study applies Probability Sampling via Simple Random Sampling, a technique aimed to ensure that individuals within a population have an equal chance of selection. Fleetwood (n.d.) from Question Pro emphasizes its utility in generating exact data, which Trochim (n.d.) supports by emphasizing its fairness in varied population selection. The study focuses on people who patronize vegetarian food restaurants in Binondo, Manila, in order to assess their awareness and education about vegetarianism. Using survey questions developed by the researchers, this methodology allows for a thorough analysis of respondents' thoughts without manipulation. The simple random selection technique ensures a representative sample from the target community, increasing the study's reliability and generalizability and reducing bias in evaluating the depth of vegetarian knowledge across generations.

#### Instrumentation:

The researchers undertook a modification of the survey questionnaire utilized in the study titled "Knowledge of Vegetarian and Non-vegetarian Peruvian Dietitians about Vegetarianism at Different Stages of Life," stemming from a prior investigation. The primary objective of their study was to delve deeper into the understanding Peruvian dietitians possess concerning vegetarianism across various life stages. The questionnaire, consisting of twenty-three items, employed a Likert scale ranging from strongly disagree to strongly agree. The crux of the investigation centered on exploring the knowledge and vegetarian inclinations of individuals belonging to the Gen Z and millennial generations. The study assessed participants' understanding of vegetarian diets, associated health benefits and risks, and the nutritional adequacy of vegetarian diets across various life stages through a true-false questionnaire. Additionally, the questionnaire featured a demographic profile section aimed at gathering information on participants' age, sex, years of experience as vegetarians, diet type, educational background, employment status, religion, ethnicity, dining habits, food allergies or health restrictions, and frequency of visits to a specific vegetarian restaurant under survey.

#### Data Gathering Procedure:

The researchers survey as their instrument which will be given to the respondents. The survey questionnaire is composed of suitable questions derived from relevant research and custom questions created by the researchers to ensure that the collected data will provide adequate information needed for the study. After validating the survey instrument, the researchers went to Vege Select and asked for permission from the manager to conduct a study at their restaurant. At the same time, the researchers began to distribute their survey questionnaire to the respondents and explained the purpose of the study. After collecting the data and information from the survey questionnaire given to the respondents, the researchers assessed and evaluated the answers.

#### Statistical Treatment:

Exploring vegetarian knowledge in Binondo, Manila, we analyze data using Microsoft Excel and IBM SPSS, employing metrics like Frequency Distribution, Weighted Mean, and Standard Deviation for insights into the community's understanding of vegetarianism.

#### Results

##### Demographic Profile

Sex	Frequency	Percent
Female	75	51.7
Male	68	46.9
Prefer not to say	2	1.4
Total	145	100.0

Table 1: Demographic Profile of Respondents based on Sex

Sex. The study was conducted by researchers at Vegetable Select in Binondo, Manila, with 145 respondents: 75 (51.7%) female, 68 (46.9%) male, and 2 (1.4%) prefer not to say.

Age	Frequency	Percent
18-26	42	29.0
27-42	55	37.9
42-58	48	33.1
Total	145	100.0

Table 2: Demographic Profile of Respondents based on Age

Age. Vege Select is visited by most millennials aged 27–42 (37.9%), followed by those aged 42–58 (33.1%) and 18–26 (29%), who are less likely to visit the Chinese restaurant.

Type of Diet	Frequency	Percent
Vegan	41	28.3
Non-vegan	104	71.7
Total	145	100.0

Table 3: Demographic Profile of Respondents based on Type of Diet

Type of Diet. Most respondents in the "Type of diet" category are non-vegan with a frequency of 104 (71.7%) and vegan with a frequency of 41 (28.3%).

Educational Background	Frequency	Percent
Basic Education	20	13.8
Tertiary Education	74	51.0
Postgraduate	45	31.0
Non-Formal	6	4.1
Total	145	100.0

Table 4: Demographic Profile of Respondents based on Educational Background

Educational Background. The respondents' highest educational attainment is tertiary education, 74 (51.0%). And others are post-graduate 45 (31.0%).

Employment Status	Frequency	Percent
Employed	86	59.3
Self Employed	25	17.2
Unemployed	34	23.4
Total	145	100.0

Table 5: Demographic Profile of Respondents based on the Employment Status

Employment Status. Binondo is one of the places that are commonly visited by tourists and workers since it offers diverse food establishments, most of the people are employed with the frequency of 86 (59.3%). While unemployed respondents with 34 (23.4%) and 25 (17.2%) self-employed customers seldom visit the restaurant.

Religion	Frequency	Percent
Catholics	111	76.6
Non-Catholics	34	23.4
Total	145	100.0

Table 6: Demographic Profile of Respondents based on Religion

Religion. Most of the respondent's religion were Catholic, 111 (76.6%), while the remaining are non-Catholics consist of 34 (23.4%).

Ethnicity	Frequency	Percent
Filipino	103	71.0
Filipino-Chinese	25	17.2
Others	17	11.2
Total	145	100.0

Table 7: Demographic Profile of Respondents based on Ethnicity

Ethnicity. Based on the gathered data, 103 (71.0%) are Filipinos who frequently eat in the restaurant. And 25 (17.2%) are Filipino-Chinese. Binondo is a place of fusion as well as a social relationship of both races.

<b>Approximation amount spent per dine-in the vegetarian restaurant</b>	<b>Frequency</b>	<b>Percent</b>
Less than Php500.00	86	59.3
Php500.00-1000.00	44	30.3
More than Php1000.00	15	10.3
<b>Total</b>	<b>145</b>	<b>100.0</b>

Table 8: Demographic Profile of Respondents based on Approximate amount spent per dine-in the vegetarian restaurant

Approximate amount spent per dinner in the vegetarian restaurant. Vege Select offers budget-friendly food with a wide proportion in every meal. With that, the majority of 145 respondents consisting of 86 (59.3%) spent less than 500 pesos while 44 (30.3%) and 15 (10.3%) spent more than 500 pesos.

<b>Frequency of eating out in this vegetarian restaurant</b>	<b>Frequency</b>	<b>Percent</b>
First Time	54	37.2
Second Time	30	20.7
Third Time	13	9.0
More than Three Times	48	33.1
<b>Total</b>	<b>145</b>	<b>100.0</b>

Table 9: Demographic Profile of Respondents based on Frequency of eating out in this vegetarian restaurant

Frequency of eating out in this vegetarian restaurant. The Vegetarian-Chinese restaurant engages people in trying a vegetarian diet, which is why the result of the study shows that most of the respondents' frequency of eating out in the restaurant were first-timers, consisting of 54 (37.2%) while 30 (20.7%) were second timers, 13 (9.0%) for third timers, and 48 (33.1%) visited the restaurant more than three times respectively.

<b>Accompany</b>	<b>Frequency</b>	<b>Percent</b>
Solo	31	21.4
Family	51	35.2
Friends	55	37.9
Workmates	8	5.5
<b>Total</b>	<b>145</b>	<b>100.0</b>

Table 10: Demographic Profile of Respondents based on Accompany

Accompany. Most customers who eat-out at the vegetarian restaurant establishment in Binondo, Manila prefer to dine-in with their friends which has a frequency of 55 (37.9%). Since it strengthens their social connection and has an impact on their food choices. And 51 (35.2%) is with their family.

<b>Food allergies or other health restrictions</b>	<b>Frequency</b>	<b>Percent</b>
Yes	20	13.8
No	125	86.2
<b>Total</b>	<b>145</b>	<b>100.0</b>

Table 11: Demographic Profile of Respondents based on Food allergies or other health restrictions

Food allergies or other health restrictions

Finally, the 20 (13.8%) respondents show that checking of ingredients is a must when consuming plant-based foods to avoid such allergies, while the 125 (86.2%) clears the fact that plant-based foods are focused more on a healthy diet than a health risk factor.

<b>Statement</b>	<b>Frequency</b>	<b>Percent</b>
<b><i>Definition of a Lacto-Ovo-Vegetarian and Vegan Diet</i></b>		
Lacto-ovo is a vegetarian diet that includes dairy product and eggs	112	77.24
Vegan diet includes foods like vegetables and fruits and nothing that comes from an animal	128	88.28
<b><i>Knowledge about Risk and Benefits Associated with Vegan Diet</i></b>		
An animal-based diet provides more health benefits than a plant-based diet.	61	42.07
A vegan diet does not further reduce the risks of cardiovascular disease namely stroke, coronary heart disease, peripheral heart disease, aortic disease, and diabetes.	78	53.79
Many chronic diseases like heart diseases, obesity, diabetes, etc. are more common in people who eat both plant and meat than in vegetarians.	83	57.24

<i>Critical Nutrients in the Vegan Diet</i>		
Plants proteins have less bioavailability (a multiplex process with several phases like absorption, digestion, metabolism, etc.).	95	65.52
In the first 2 years of life, the amount of fiber must be limited	77	53.10
Iron is a critical nutrient only for vegetarian/vegan children under 2 years of age.	75	51.72
The sources that meet the calcium requirements are breast milk, formula, calcium high-salt water.	94	64.83
Zinc has lower bioavailability in an omnivorous diet (a type of diet that has both meat and plants).	62	42.76
Vitamin D levels appear to be influenced by diet and are lower in vegetarian children.	78	53.79
The long-chain omega-3 fatty acid levels are lower in vegetarians, typically absent in vegans.	96	66.21
Critical nutrients of the vegetarian diet proteins, vitamin D, omega-3, vitamin B12, iron, zinc, and calcium.	107	73.79
<i>Vegetarian Diets at different Stages of Life</i>		
A planned vegetarian diet is nutritionally adequate during all stages of the life cycle.	116	80.00
A plant-based diet is able to satisfy the nutritional demands of an infant in the first 1000 days of life.	60	41.38
Vegetarian/Vegan older adults are at higher risk of deficiency in Vitamin B2.	64	44.14
Planned vegetarian and vegan diets during pregnancy present higher risks of pregnancy difficulties and birth defects.	94	64.83
Lacto-ovo vegetarian mothers can breastfeed without supplementation.	87	60.00
Vegan mothers can breastfeed without supplementation.	52	35.86
Children who follow a planned vegetarian diet have an adequate energy intake similar to those omnivorous children.	96	66.21
During complementary feeding, the infant must receive a sufficient amount of Vitamin B12, vitamin D, iron, zinc, folic acid, omega 3 and 6, protein, and calcium.	128	88.28
A vegetarian/vegan diet is a protective factor against infant overweight.	98	67.59
The supplemental nutrient that should not be missing for a vegetarian/vegan child is Vitamin B1.	41	28.28
A teenager who chooses a vegetarian diet is potentially at risk for making impulsive choices, ill-informed choices, and having an eating disorder.	58	40.00

Table 12: Assessment on the Knowledge on Vegetarianism

Based on Table 12, 128 (88.28%) of the respondents answered correctly for both questions on a vegan diet that has both vegetables and fruits and nothing from animals and the nutrients that an infant should have during complementary feeding. 116 (80.00%) of the customers answered true to the statement, that a planned vegetarian diet is nutritionally adequate in all stages of life. And 112 (77.24%) also agree that lacto-ovo is a diet that consists of eggs and other dairy products. Lastly, 107 (73.79%) acknowledged that the critical nutrients present in a vegetarian diet are proteins, vitamin D, omega-3, vitamin B12, iron, zinc, and calcium.

<b>Knowledge on Vegetarian</b>	<b>Frequency</b>	<b>Percent</b>
Beginner	0	0.0
Developing	8	5.5
Approaching Proficiency	69	47.6
Proficient	66	45.5
Advance	2	1.4
Total	145	100.0

Table 13: Overall Assessment on Level of Knowledge on Vegetarianism

Overall Assessment

The respondents' knowledge on vegetarianism resulted in approaching proficiency, with a frequency of 69 (47.6%), indicating their proficiency in the topic.

Table below shows the comparative data of the study:

<b>Grouping Variable</b>	<b>P-value</b>	<b>Qualitative Interpretation</b>
Sex	.748	No Significant Difference
Age	.152	No Significant Difference
Type of Diet	.092	No Significant Difference
Educational Background	.363	No Significant Difference
Employment	.334	No Significant Difference

Religion	.315	<i>No Significant Difference</i>
Ethnicity	.787	<i>No Significant Difference</i>
Approximate amount spent per dine in	.975	<i>No Significant Difference</i>
Frequency of Eating out in the vegetarian restaurant	.369	<i>No Significant Difference</i>
Accompany	.951	<i>No Significant Difference</i>
Food allergies or health restrictions	.942	<i>No Significant Difference</i>

Table 14: Comparison of Knowledge On Vegetarianism

Table 14 exhibits that there is no significant difference in terms of sex (p-value = .748), age (p-value = .152), type of diet (p-value = .092), educational background (p-value = .363), employment status (p-value = .334), religion (p-value = .315), ethnicity (p-value = .787), approximately amount spent per dine-in in the vegetarian restaurant (p-value = .975), frequency of eating out in the restaurant (p-value = .369), accompany (p-value = .951), and lastly, food allergies or other health restrictions (p-value = .942). As, if the p-value > .05, then there is no significant difference.

## Discussion

In table 1, most respondents that are visiting vegan food establishment in Binondo, Manila are female. In the article of (Neale et al., 1993; Ruby; 2012; Rosenfield, 2020; Statista, 2022), meat has a strong connection to masculinity. Therefore, it should come as no surprise that women are more inclined than males to choose a vegetarian diet. With, vegetarian women reported being more pro-socially motivated to follow and carefully stick to their diets (i.e., are less inclined to cheat and consume meat) than vegetarian males. As visitors enter the vegan restaurant in Binondo, Manila food such as fully vegetable-based Beef Noodles and the plant-based Xiao Long Pao were the two primary meals offered despite the absence of animal products like meat in their components.

Table 2 shows that young individuals in their early to mid-adult years who are popularly known as Generation Y or millennials are said to possess greater environmental awareness and concern than previous generations. Consequently, current research on food sustainability has focused on millennials as the target demographic. The fact that a large portion of millennials are currently parents of small children makes them an influential consumer demographic as well because parents play a crucial role in influencing their children's eating habits (Consumers Who Are Vegan or Vegetarian by Age U.S. 2018, 2018; Bruce & Ballard, 2020; Knaapila et al., 2022). This article shows that age plays a significant relation as the respondents of this study were mostly aged from 27-55 years old that are more aware of environmental awareness and health benefits of having a vegan/vegetarian lifestyle.

Based on table 3, most of our respondents are non-vegetarian. According to the study of (Chen et al., 2021; Ion, 2007), the reasons why some individuals decide to eat vegetarianism even if they are not vegetarians. This study shows that moral food consumption is influenced by social factors. Consumers' decisions about what to eat are increasingly influenced by their growing concerns about food's beginnings and methods. The study may also look at how these cultural values affect customer behavior and how they are mirrored in the restaurant sector. Additionally, culture affects eating habits and emphasizes the value of cultural sensitivity in advancing just and sustainable food systems.

Table 4 shows based on the gathered data, most of the respondents were college graduate, who's making a remarkable adjustment in terms of their health choices including physical activity and general well-being as these changes have positive impact during their developmental phase. (Currie et al., 2012; Wimitzer et al., 2023). And according to a study conducted by Anacin et al. (n.d), changes in health including physical activities and food choices tend to happen during adolescence.

Based on the response among 145 respondents, 59.3% of vegetarian restaurant diners are employed, indicating a growing popularity among working professionals who prioritize health, sustainability, and affordability in their food choices as shown on Table 5. The findings from the study on Food Sources and Nutrient Intakes of Filipino Working Adults by Angeles-Agdeppa and Custodio (2020) suggest significant health implications for most of the employees. Some individuals exhibit conditions such as obesity, obesity, and malnourishment. This observation is compounded by the limited food options available in their workplaces, prompting them to frequent restaurants that provide healthier meal choices essential for their nutritional needs.

In table 6, based on the survey conducted, Catholicism is the predominant religion of the respondents, as catholics view all foods equally, regardless of whether it comes from animals or plants, as it gives the power and energy vegans need to go carry out their daily activities. Nonetheless, Catholics also is required to be mindful of choosing their diet but the most important thing in life for Roman Catholic is to nourish every food that comes from family as it is blessed by non-other, Jesus Christ (Catholic and Vegetarian, 2015; Tardiff, 1998). Regarding vegan-Catholics who have various perspectives on vegetarianism, the emphasis is more on experiencing these types of scenarios, mainly on their story that enables one's belief. One of the motives are, decision makings based on moral behavior through animal killings is important to vegan-Catholic when it comes to having a reasonable outlook as it gives additional knowledge to choose (Pitas, 2017).

Data shown on Table 7, reveals that most of the respondents who frequently eat at the restaurant are Filipino, as beyond physical attributes, practicing vegetarianism is associated with positive effects on personality, stress resiliency, and overall physical activity levels. As Biong & Cudal (n.d) stated, individuals inevitably experience health deterioration in old age, maintaining a healthy



dietary regimen becomes crucial for promoting a beneficial and abundant life. This lifestyle choice is seen as instrumental in enabling individuals to perform skillfully despite the challenges associated with aging.

Table 8 exhibits that on the survey conducted 86 (59.3%) reported spending less than Php 500.00 per dine-in at a vegetarian restaurant. This finding suggests that price sensitivity remains a factor for many consumers when it comes to dining out at vegetarian establishments. According to recent studies, the demand for vegetarian cuisine has significantly increased in the past decade due to growing concerns about environmental and health effects (Admin & Admin, 2022). Firstly, a few customers may order fewer vegetarian meals and spend less money because they believe that vegetarian cuisine is less substantial and fulfilling than dishes prepared with animals. Second, compared to regular meat-based restaurants, vegetarian restaurants could have a smaller menu. This could mean that customers have less selections and that average order values may be lower. Thirdly, rather than being a normal option for dining out, some customers could consider vegetarian restaurants to be specialized or niche restaurants (Choi et al., 2021, Neacsu et al., 2021).

Food provides several benefits that significantly influence human perceptions, shaping individual senses and experiences regarding various events (Antenor et al., 2022). According to gathered result of the survey, 54% (37.2%) reveal that the number of individuals are first timers in vegetarian restaurants. This data highlights the growing popularity of plant-based cuisine suggesting that more people are exploring the health and environmental benefits of vegetarianism. Whether it's due to dietary restrictions, personal preference, or a desire to reduce their carbon footprint, these newcomers are discovering the delicious and nutritious world of vegetarian dining, as shown on Table 9.

Most customers who eat-out at the vegan restaurant establishment in Binondo, Manila in table 10, prefers to dine-in with their friends during their delightful pastime. The reasons behind this choice include the desire for social connection, emotional support, cultural immersion, and the opportunity to lower expenses. Dining with friends enhances life and fosters deep ties through shared enjoyment and experiences during meals. The study of (Salvy et al., 2012) shows how peers and friends can impact food decisions, eating behaviors, and physical activity. It might investigate factors, for example, accepted practices, peer pressure, and the job of social help in molding these ways of behaving. Understanding these impacts can be significant for advancing good dieting and actual work among youngsters.

In table 11, based on the data gathered, most of the respondents (125 or 86.2%) as shown on the table have no food allergies or other food restrictions. According to the articles, "Is Vegan Food Safe for People with Food Hypersensitivities?" published last 2023 by SafeFood.net and "Vegan and Allergies" published by erudus.com, (n.d.) vegetarian foods consist of different types of peanuts, milk, dairy products, and even eggs, that have been known to cause allergic reactions. However, Vegans should treat their foods the same way normal foods would any other for a restriction free meal. It is still marked as a caution for other ingredients before vegans ingest it. And based on the article published by R-biopharm in 2022 entitled "Plant-based food: Vegan diet as a risk for people with allergies?", vegans view them as a novel approach of having a healthy lifestyle that practices and improves their symptoms when it comes to allergies. Moreso, reducing the slaughter of animals has a major impact in their belief of nurturing their vegan diet.

According to 77.24% or 112 respondents, the lacto-ovo diet, incorporating dairy and eggs, is widely recognized as a vegetarian meal, showcasing a high level of knowledge across dietary practices. This dietary approach is associated with cardiovascular health benefits (Garousi et al., 2021). Respondents exhibit awareness of veganism, with the majority understanding its definition and distinction from vegetarianism, noting that a vegan diet excludes all animal-based foods. Vegetarian diets, as emphasized by Foster & Samman (2015), may have poorer zinc bioavailability due to phytic acid inhibitors and fewer animal tissue sources. Furthermore, 73.79% or 107 respondents in Binondo, Manila, recognize the need for essential nutrients in a vegan diet, emphasizing the risk of deficiencies, particularly in vitamin B12 (Mariotti & Gardner, 2019). The study highlights misconceptions about vegan diets and the urgency for comprehensive dietary guidelines. A consistent sentiment among 80.00% of participants underscores the importance of vegetables in maintaining a healthy and balanced diet (American Dietetic Association and Dietitians of Canada, 2003). The study asserts that carefully planned vegetarian meals are nutritionally adequate across all life stages, offering numerous benefits to the human body. The importance of specific nutrients for infants during complementary feeding is stressed by 88.28% of respondents, emphasizing the need for Vitamin B12, Vitamin D, iron, zinc, folic acid, omega-3 and 6 fatty acids, protein, and calcium for optimal growth and development (Mariotti & Gardner, 2019). Adequate intake of these nutrients, particularly Vitamin B12 and iron, is crucial for preventing deficiencies and promoting overall health.

The data gathered shown in Table 13 about the knowledge of Filipinos regarding vegetarianism is approaching proficiency. This is evident through their responses to questions related to fundamental aspects of vegetarianism, as consumers exhibit a higher understanding of vegetarianism despite not identifying themselves as adherents to a vegetarian lifestyle. Contrary to the study conducted by Azhar et al. in 2023, examining knowledge, attitudes, and factors related to vegetarianism in the Saudi population, the findings indicate that a significant majority of both vegetarian and non-vegetarian individuals possess limited knowledge about vegetarianism. Only a small segment of the population demonstrates a moderate to high level of knowledge on the subject.

In Table 14, all variables regarding the demographic have the same result of no significant differences. The data from the researchers indicates that women are more likely to adopt a vegetarian or vegan lifestyle, aligning with Eldridge & Gluck's (1996)

findings that women advocate tighter controls on animal use and show greater concern for animal welfare. The study shows no significant age-based differences, with Vergeer et al.'s (2019) research supporting a preference for sustainable food production among Canadian teens and young adults. In terms of diet, 71% of respondents maintain a balanced intake of plant-based and animal foods, emphasizing the health benefits associated with appropriate product consumption (Mayo Clinic Staff, n.d.).

Educational background plays a role in nutrition understanding, as per Freeland-Graves (2022), suggesting that those with higher education levels may possess a better grasp of vegetarian nutrition. However, varied personal views and cultural influences can also impact dietary choices, highlighting the need for improved nutritional education across educational levels. Employment status appears linked to affordability, with Baska's (2019) study suggesting that employment helps vegetarians afford plant-based diets. Despite diverse religious beliefs, there is no significant difference in vegetarianism, with some individuals adopting it for health benefits (Vegetarianism Relation with Health and Religion Research Paper, 2022).

Regarding dining expenses, the cost at vegetarian restaurants varies, and while they may be more affordable, it depends on factors such as location and cuisine. Pais et al.'s (2022) study in Portugal found that plant-based consumers don't necessarily spend more on food but allocate a higher percentage of income to fruits and vegetables. The study supports the idea that non-vegetarians are attracted to vegetarian restaurants due to health concerns, countering reasons for heart disease, diabetes, and cancers. Nutritional planning is emphasized for vegetarians to meet their dietary needs (Mayo Clinic Staff, n.d.).

Non-vegetarians visit vegetarian restaurants for various reasons such as curiosity, health concerns, environmental consciousness, social dynamics, and convenience. They look for diverse plant-based dishes with unique flavors and textures, nutritional alternatives, and eco-friendly dining options. The study (Choi et al., 2021) aims to identify factors that influence vegetarian customers' satisfaction and behavioral intentions towards vegetarian restaurants. By understanding these factors, restaurant owners and managers can make informed decisions to improve customer satisfaction and increase patronage, potentially leading to a higher frequency of visits by vegetarians. Some possible factors that could be explored in the paper include the variety and quality of vegetarian menu options, the ambiance and atmosphere of the restaurant, the level of service provided, and the price point of the meals.

The presence of companions in vegetarian restaurants mirrors the social nature of both vegetarian and typical establishments, aligning with Salvy et al.'s (2012) and Ali et al (2013) findings on the significant impact of peers on eating and exercise habits among adolescents and children. While most respondents have no allergies to vegetarian foods, caution is advised due to potential allergies in certain plant-based alternatives lacking specific nutrients found in animal-based products. Vigilance is essential for vegans when consuming plant-based foods to avoid health restrictions (Mayo Clinic Staff, n.d.).

As for the ethnicity, it contradicts to the researchers findings, the researchers surveyed a diverse group of respondents in Binondo, Manila. indicating that, within this cultural mix, there is no discernible difference or impact based on one's ethnicity. This observation is attributed to the restaurant's location in Binondo, a renowned tourist destination in the Philippines and a melting pot that fosters cultural interactions between Filipino and Chinese communities. , as the study "Racialized Perceptions of Vegetarianism: Stereotypical Associations That Undermine Inclusion in Eating Behaviors," exploring the relationship between ethnicity and race, the research reveals prevalent stereotypes related to a sense of belonging among US citizens. It may contribute to a lack of interest in adopting vegetarianism among individuals within the black community (MacInis et al., 2015; Bailey, 2020; Rosenfeld et al, 2022).

### **Conclusion and Recommendations**

This study shows that respondents, especially Female in Binondo, Manila, prefer vegetarian food at Vege Select, a popular Chinese vegetarian restaurant, among Millennials. Social factors push non-vegetarians towards vegetarianism, which reflects concerns about ethical and sustainable food consumption. Peer influence, cultural immersion and emotional support shape eating habits. Dining experiences often include companions. The perceived health benefits of a plant-based diet are highlighted, including natural health benefits and nutritional content. The Catholic community, the largest religious group, embraces plant-based foods. Employment rates are strongly correlated with vegetarianism, highlighting the link between economic stability and a plant-based diet. Cost is still an important factor because the consumption of vegetarian restaurants remains below a certain limit. Research points to growing popularity among first-time eaters, indicating a growing awareness of nutritional needs and the importance of vegetable consumption. Education about vegetarianism is critical to obtaining accurate information and responding to dietary concerns. Overall, researchers say vegetarianism improves between generations.

Changing the world to become more vegetarian-centric requires a comprehensive approach that involves major stakeholders at all levels. Researchers recommend that stakeholders at all levels should fund a research, encourage collaborations between academic institutions, and launch a public awareness campaigns. Individuals should also be informed and empowered by means of educational programs in schools and workplaces, and their popularity can be expanded through celebrity endorsements and targeted media campaigns. Activities that are useful, such as cooking lessons, nutrition seminars, and food tastings, can provide people the information and abilities they need to follow a plant-based diet. A supportive environment may be established by government regulations that favor vegetarian enterprises and sustainable agriculture, in addition to clear labeling on products and menus.



Supporting local farmers' markets and community gardens may improve the relationship between people and their food supplies, while community involvement through forums, activities, and viewings of films can promote understanding and a feeling of community.

An important part of this change is carried out by healthcare professionals. By learning more about vegetarian diets, they may better advise patients, build their reputation, and draw in new business. With their knowledge of plant-based nutrition, nutritionists may assist people in identifying and addressing possible deficiencies, creating balanced meals, and overcoming social and cultural obstacles. Lastly, we can guarantee the continuous development of evidence-based tactics for a future powered by plants by funding future studies on dietary habits and the public's growing knowledge of vegetarianism.

Researchers may construct an ensemble of support for vegetarianism by combining these several lines of action, opening the door to a world that is more compassionate, sustainable, and healthy for everyone.

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