

Health Effects of a Vegan Diet

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ABSTRACT

This qualitative study aims to understand the health-related aspects of vegan individuals' nutritional preferences and to evaluate the participants' experiences within the framework of the Theory of Planned Behavior. In line with this purpose, interviews with 63 vegan participants addressed the reasons why individuals decided to go vegan, deficiencies encountered in their diet, use of supplements, health effects, social perceptions and sustainability. The study determined that emotional reasons and sensitivity to animal rights were effective in most participants' decisions. It was observed that there were difficulties in accessing dairy products, especially cheese and it was determined that the most commonly used supplements were B12 and vitamin D. When the health aspect of vegan nutrition was evaluated, it was revealed that increased energy and general well-being were the most frequently reported positive effects, but negative effects such as weight gain, iron and B12 deficiency were also experienced. It was understood that the common perception in society regarding vegan nutrition is inadequate nutrition. It was determined that individuals had expectations for increased awareness and product variety for this diet to be sustainable. The study concluded that individuals continued this lifestyle with strong attitudes.

Keywords: Tourism, Gastronomy, Plant-Based Nutrition, Vegan Nutrition, Health.

1. INTRODUCTION

Dietary habits are constantly evolving in response to individuals' ethical, environmental and health concerns. One important example of this transformation is the widespread adoption of vegan diets. In industrialized countries, a significant increase has been observed in the number of individuals following vegan diets and in the demand for vegan foods. Vegan foods are defined as products that do not contain any animal-derived ingredients. Vegans reject not only products derived from animal deaths, such as meat and gelatin, but also all animal-derived foods, such as milk and eggs (Janssen et al., 2016). In this context, vegan and vegetarian diets are often based on plant-based nutrients such as grains, legumes, nuts, fruits and vegetables. When the nutritional content of these diets is evaluated, it is found that they are rich in carbohydrates, n-6 fatty acids, dietary fiber, carotenoids, folic acid, vitamins C and E, and magnesium, but lower in protein, saturated fat, long-chain n-3 fatty acids, retinol, vitamin B12 and zinc. It is stated that vitamin B12 and calcium intake may be insufficient, especially in vegan individuals (Key et al., 2006). Vegetarian and vegan diets have become increasingly popular in many developing countries for reasons such as health, animal welfare and environmental reasons. Numerous studies have been published on the health effects of these dietary styles (Özcan & Baysal, 2016). A review of the literature reveals various studies and discussions regarding the positive and negative health effects of vegan diets. For example, Veronese & Reginster (2019) stated that vegan diets contribute positively to human health due to their high daily consumption of vegetables, fruits, grains, nuts, legumes and oilseeds. Şener & Kaplan (2024) stated that inadequate consumption of animal-sourced foods increases the risk of protein and micronutrient deficiencies, especially in children and the elderly.

Veganism has become a popular lifestyle in recent years for reasons such as health, ethics and the environment. However, debates continue regarding the potential health effects of a vegan diet. Studies generally address both the potential benefits and potential harms of a vegan diet. Therefore, this study aimed to hear from vegan individuals about the health effects of a vegan diet. Through interviews with 63 vegan participants, the study explores a wide range of questions, from the reasons individuals decide

to become vegan to the health effects of this diet. This study is framed within the framework of the Theory of Planned Behavior. This theoretical framework attempts to understand decisions about vegan diets. In this context, the study focuses on vegan individuals' perceptions of these health effects. The study aims to contribute to the literature on vegan nutrition and directly address the debates surrounding the health effects of vegan diets through the testimonies of individuals. Considering the current debates in the literature, this study is expected to contribute significantly to the development of the field by providing more data on the health effects of vegan diets.

2. CONCEPTUAL FRAMEWORK

2.1. History of Vegan Nutrition

Veganism is not a uniquely modern approach. It has deep roots in historical, religious and cultural contexts. Individuals who choose to limit the use of animal products for ethical, religious or spiritual reasons have existed throughout history. However, it is noted that the concept of veganism, as understood today, derived from vegetarianism in the 20th century and gained an independent identity (Gheihman, 2021). When examining the relationship between eating habits and belief systems, it is noteworthy that some religions embrace values that overlap with veganism. Vegetarian diets are particularly prevalent in ancient religions such as Buddhism, Hinduism and Jainism (Kumar, 2021). One of the first systematic vegetarian approaches in history can be traced to the philosophy of Orphism, which emerged in Ancient Greece around 500 BC. It is known that societies that adopted Orphic beliefs avoided meat consumption. The ancient Greek philosopher and mathematician Pythagoras (570-495 BC), a key figure in the development of vegetarianism, associated the consumption of animal flesh with violence (Tunçay Son & Bulut, 2016). Similarly, his contemporary, Empedocles (494-434 BC), proposed that vegetarianism was linked to reincarnation, the belief in the reincarnation of the soul (Canbolat & Çakiroğlu, 2021). Thanks to Pythagoras' philosophical influence, plant-based nutrition became widespread in Ancient Greek society and influenced Roman culture. In fact, there is archaeological evidence that even gladiators, who were assumed to have a meat-based diet due to their high protein needs, followed vegetarian or vegan diets (Akıncı & Türkay, 2020).

The vegetarian diet, prominently present in ancient Greek and Roman civilizations, disappeared from European historical records for a long time from the 6th century AD onward. However, this silence was broken again during the Renaissance. During this period, Leonardo da Vinci, known for his pioneering work in art and science, is known to have adopted a vegetarian lifestyle. It is known that da Vinci strongly believed that in the future, people would condemn the consumption of animal flesh in a similar way to the current opposition to consuming human flesh. With the Enlightenment, many thinkers such as Tyron, Rousseau, Voltaire and Wesley also adopted vegetarianism, basing this lifestyle on both ethical and philosophical foundations. While there is no definitive data on the number of vegetarians during this period, it is believed to have been quite limited. However, it is suggested that most individuals ate a predominantly plant-based diet for economic reasons (Leitzmann, 2014).

In the 19th century, London-based scientist Alexander Haig was one of the first to consider vegetarianism as a health-based approach. Haig highlighted the negative effects of red meat on human health. He/She claimed that such meat products increased uric acid levels in the body and completely eliminated meat from his own diet. Vatan & Türkbaş, pioneers in medicine who adopted a similar perspective, discussed the relationship between uric acid and diseases in their work "Hastalıkların Nedeninde Bir Faktör Olarak Ürik Asit" published in 1892, and highlighted the potential positive effects of a vegetarian diet on health (Vatan & Türkbaş, 2018). As a result of all these developments, the establishment of the International Vegetarian Society in 1908 demonstrated the beginnings of institutional organization of this lifestyle (Leitzmann, 2014).

The term "vegan" was coined in 1944 by Donald Watson in Leicester, England, to describe a subgroup of vegetarians who also excluded milk and dairy products. Following opposition from some members of the Vegetarian Society, Watson and his colleagues founded the Vegan Society, a separate organization advocating for a completely plant-based diet. This society believes that ending all forms of animal exploitation is essential to building a more just and compassionate society (Jovandarić, 2021). According to the Society's official definition, veganism is "a way of life and philosophy that aims to prevent, to the extent possible and practicable, the exploitation and harm of animals for food, clothing, or any other purpose. It also encourages the development and use of animal-free alternatives for the benefit of animals, humans and the environment. In terms of nutrition, it refers to avoiding all animal-derived products."

This definition demonstrates that veganism is not merely a dietary choice but also a holistic lifestyle with ethical and environmental dimensions. Furthermore, the widespread use of animals in various sectors today has led to differing opinions on the applicability of veganism (Doğan & Yalçın, 2023).

Inspired by Donald Watson's approach based on the principle of non-harm to living beings, Hom Jay Dinshah founded the American Vegan Association in the United States in 1960, pioneering the institutionalization of the veganism movement in that country (Tunç, 2023: 8). From this date until the 1990s, many new vegan organizations emerged in different parts of the world. In parallel, the term "vegan" gained wider usage (Davis, 2012). Internationally, October 1st is recognized as "World Vegan Day" and is celebrated with various events. In Türkiye, "Vegetarian Day" was first organized in 2010 by the Vegetarian Club to raise similar awareness. Subsequently, the "Turkish Vegetarian Association" was established on March 3, 2012. This association is the first and only non-governmental organization representing the rights of vegetarian and vegan individuals in Türkiye. On the other hand, Barcelona, which attracts attention with its veganism policies on a global scale, has become the settlement that defines itself as the "first vegan city" in the world (Fusté-Forné, 2021).

2.2. Health Effects of a Vegan Diet

Vegetarian diets, in their various forms, have increased significantly in recent years. Among these diets, vegans are the most restrictive, completely eliminating all animal foods and by-products from their diets. Other vegetarian subgroups include lacto-vegetarians, who consume only dairy products; ovo-vegetarians, who only allow eggs; lacto-ovo-vegetarians, who consume both dairy and eggs; and pescatarians, who limit meat consumption to seafood only (Bali & Naik, 2023). Research suggests that vegetarians generally have lower body mass indexes and higher levels of health awareness. Furthermore, some scientific studies suggest that vegetarians may have longer lifespans. These positive effects are thought to be largely due to the high consumption of fruits, vegetables, whole grains, legumes and nuts rich in fiber, antioxidants and phytochemicals, along with the limitation of potentially harmful dietary elements such as saturated fat, cholesterol, animal protein, red meat and heme iron (Marsh et al., 2012).

Vegan diets generally tend to be higher in dietary fiber, magnesium, folic acid, vitamins C and E, iron, and phytochemicals, and lower in calories, saturated fat and cholesterol, long-chain n-3 (omega-3) fatty acids, vitamin D, calcium, zinc and vitamin B-12. Vegan diets appear beneficial for increasing the intake of protective nutrients and phytochemicals and minimizing the intake of dietary factors that play a role in various chronic diseases. Furthermore, high consumption of fruits and vegetables rich in fiber, folic acid, antioxidants and phytochemicals has been associated with lower blood cholesterol levels, reduced stroke incidence and lower mortality rates from stroke and ischemic heart disease. Vegan individuals also consume more whole grains, soy products and nuts. These foods offer significant cardioprotective effects that support heart health (Craig, 2009). Some studies in the literature addressing the health effects of vegan diets are presented below.

Fraser (2003) noted that vegans have lower body weight, total and LDL cholesterol levels and moderately lower blood pressure compared to other vegetarian groups. Ströhle et al. (2006) examined the metabolic and epidemiological effects of plant-based food groups in preventing chronic diseases and found that, according to World Health Organization and Food and Agriculture Organization criteria, high fruit and vegetable consumption likely provides a benefit in reducing cancer risk and convincingly reduces the risk of cardiovascular disease. They also noted a possible lower risk of osteoporosis.

Pilis et al. (2014) demonstrated that properly implemented vegetarian diets are more effective than other dietary patterns, not only reducing body weight but also improving plasma lipid profiles, lowering blood pressure and preventing serious health problems such as cardiovascular disease, cerebrovascular disease, metabolic syndrome and atherosclerosis. Furthermore, individuals following this diet have been observed to have increased insulin sensitivity and a reduced risk of diabetes and cancer.

Cramer et al. (2017) noted that the decision to adopt a vegetarian or vegan diet for health reasons is largely influenced by the public's perception of the health benefits of these diets. Clinical and epidemiological studies have shown that vegetarian diets can be associated with reductions in body weight, a lower incidence of metabolic syndrome and diabetes, improvements in blood pressure and dyslipidemia and a reduced mortality rate from ischemic heart disease.

Based on data from the American and Canadian Dietetic Associations, Wang et al. (2023) emphasize that properly planned and balanced vegan and lacto-ovo vegetarian diets are nutritionally adequate for individuals at all stages of life and offer health benefits in the prevention and treatment of diseases.

Lemale et al. (2018) conducted a survey among French pediatricians between 2005 and 2015 to examine the adverse health effects of long-term consumption of non-dairy beverages during infancy. The study identified clinical findings such as growth retardation, fatigue, edema, hypocalcemia, seizures, anemia, hyponatremia and metabolic bone diseases due to calcium and vitamin D deficiencies, with one case resulting in death.

Dwyer (1988) found strong evidence that vegetarian individuals have a lower risk of diseases such as obesity, atonic constipation, lung cancer and alcoholism. He also noted a lower risk of hypertension, coronary artery disease, Type II diabetes and gallstones. However, data on lower risks for diseases such as breast cancer, colon diverticular disease, colon cancer, calcium kidney stones, osteoporosis, dental erosion and tooth decay are more limited, and risk reduction for these diseases can be achieved through appropriate diet and lifestyle changes.

2.3. Theory of Planned Behavior

The theory of planned behavior is an expectancy model that explains the relationship between behavior and attitudes and has achieved some success in predicting various behaviors. This theory thoroughly examines the factors that influence individuals' decisions to engage in a particular behavior. The theory of planned behavior is considered an extension of the theory of reasoned action in social psychology (Ajzen, 2002: 2-3). Both models assume that individuals make behavioral decisions by carefully evaluating available information and are therefore classified as deliberative processing models (Conner & Armitage, 1998: 1430). In the theory of planned behavior, three main factors influence an individual's intention to exhibit a particular behavior. These factors are attitude toward the behavior, personal norm, and default behavioral control, or perception of self-efficacy (Mercan, 2015: 5; Bayram, 2018: 22).

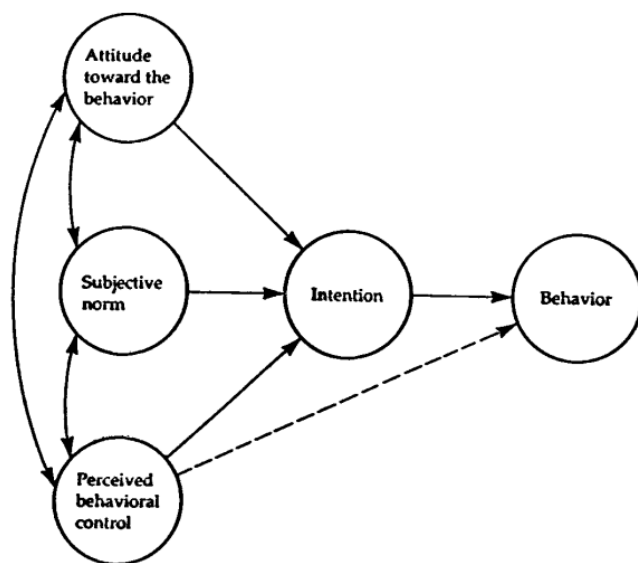


Figure 1. Theory of Planned Behavior Model

Source: Ajzen, (1991: 182).

Attitudes refer to the positive or negative emotional tendencies individuals have toward a thought, object, behavior or event. Individuals mentally evaluate and group these objects, thoughts, or behaviors as positive or negative (İnceoğlu, 2010: 13). Previous experiences, information received from the environment and other environmental factors play a significant role in the formation of attitudes. In the theory of planned behavior, attitude toward a behavior is explained by individuals' beliefs and personal evaluations regarding the likely outcomes of a behavior. This attitude is considered a personal factor (Küçük, 2011: 148).

Perceived (assumed) behavioral control refers to individuals' perceptions of whether they can voluntarily perform a behavior. In other words, this concept represents an individual's beliefs about how easy or difficult the process of performing a behavior will be. The more an individual believes in the existence of opportunities and possibilities for a behavior, the greater their perceived behavioral control over that behavior will be. In this context, when evaluating the opportunities and resources available to them for the behavior, they will also consider the obstacles they will face in performing that behavior. As the perception that opportunities and resources are abundant and obstacles are few strengthens, the

individual's perceived control over the behavior will also increase (Kocagöz, 2010: 1-36; Kocagöz & Dursun, 2010: 141).

A personal norm refers to the ease and social pressure an individual perceives to perform or refrain from performing a behavior. Social pressure is influenced by an individual's motivation to comply with norms and normative beliefs. The motivation to comply with norms is defined as an individual's tendency to be guided by the influences of surrounding social groups, while normative beliefs are beliefs formed based on the individual's belief that the social environment they are influenced by dictates that they should or should not perform a certain behavior (Küçük, 2011: 148).

3. METHOD

The primary objective of this qualitative study is to understand the health-related aspects of vegan individuals' dietary choices and to evaluate participants' experiences within the framework of the theory of planned behavior. The study aims to investigate the relationship between a vegan diet and individuals' energy levels, health status, dietary supplement use and sustainable living approaches and to uncover how this lifestyle is experienced at an individual level. Vegan diets are shaped by individual preferences for various reasons. Given that veganism is not merely a dietary pattern but also a holistic lifestyle with ethical and environmental dimensions, participants' perspectives on this process were assessed. The theory of planned behavior was utilized to uncover the health impact of these vegan choices. Erten (2002: 220) stated that the theory of planned behavior states that individuals' social behaviors occur in a planned manner, under the control of specific factors and based on specific reasons. In this context, the study examined the reasons why vegan individuals choose this diet, the challenges they face, their perceptions of their health and how they experience this process. Seven interview questions were developed to guide the research, based on the information obtained from the literature review. An interview technique was chosen to gain an in-depth understanding of the participants' feelings and thoughts on the topic (Dömbekçi & Erişen, 2022: 143). During the finalization of the questions, opinions were sought from four gastronomy academics. The study sample was determined using a snowball sampling method, and a total of 63 participants were included. Data obtained from the participants is presented in the findings section. Considering the literature's coverage of both positive and negative findings regarding the health effects of a vegan diet and the ongoing debate on this topic, the significance of the study becomes even more evident. In this context, the information individuals share based on their own experiences will both contribute to the scientific literature and help raise public awareness. The study sought to answer the following questions:

- What are the reasons why individuals decide to become vegan?
- What are the effects of a vegan diet on individual health?
- How do vegan individuals identify the nutrients they find lacking or difficult to access in their diets?
- What nutritional supplements are needed?
- What are the effects of a vegan diet on energy levels and overall health?
- What are the common misconceptions about vegan nutrition in society?
- What are the participants' future expectations regarding the sustainability of a vegan diet?

4. FINDINGS

Data obtained from interviews with vegan individuals are presented. When presenting participant statements, the concept of "vegan" was symbolized with the letter "V" and each participant was assigned a unique code number. Participants who made noteworthy statements were prioritized for inclusion in the study. Demographic information of the individuals who participated in the interviews is presented in Table 1. Of the participants, 74.60% were female, 65.08% were single, 33.33% were in the 31-40 age group and 53.97% had a bachelor's degree.

Table 1. Demographic Information of Participants

Demographic Characteristics		Frequency	Percentage
Gender	Female	47	74.60
	Male	16	25.40
Marital Status	Married	22	34.92
	Single	41	65.08
Age	21-30	19	30.16

	31-40	21	33.33
	41-50	10	15.88
	51 Age and +	13	20.63
Educational Status	High School	1	1.59
	Associate Degree	5	7.94
	Undergraduate Degree	34	53.97
	Postgraduate Degree	23	36.50

The research process examined how individuals decide to become vegan. Participants' responses on this matter are presented in Table 2. The majority of participants stated that they made this decision for emotional reasons. Second most prominent was the belief that all living beings' right to life should be respected.

Table 2. Findings Regarding the Reasons Why Individuals Decided to Become Vegan

Reasons for Deciding to Become Vegan	Frequency	Percentage
Healthy eating	1	1.30
Adopting animals	3	3.90
Witnessing animal cruelty	7	9.09
The equal right to life of all living beings	15	19.48
Books and documentaries	9	11.69
The unhealthiness of animal products	5	6.49
Emotional impact	16	20.78
Decision making after receiving education	1	1.30
Influenced by people around	7	9.09
Not consuming animal products since childhood	1	1.30
Impulse decision making	2	2.60
Social media influence	1	1.30
Decision making after studying veterinary medicine	1	1.30
Staying away from animal products over time	4	5.19
Not consuming animal products after psoriasis	1	1.30
Not consuming animal products after Covid-19	1	1.30
Decision making after studying biology	1	1.30
Decision making after starting yoga	1	1.30
Total	77	100.00

Some participants' answers to the question are as follows:

V21: "Because I love animals and don't want them to be harmed, I realized they have feelings and offspring. I realized that just as we don't eat humans, we shouldn't eat animals either. I approach animals much more emotionally and ethically, I'm developing my empathy and becoming more aware. Thanks to this, I feel much healthier."

V27: "Eating meat had been bothering me for a long time, so I started researching and following vegan accounts on social media to learn more. I first stopped eating meat. Around that time, my cat was diagnosed with FIP, and I was deeply affected by her suffering and death. After her death, I decided to become vegan. I started fighting against the environment in my life. After a while, those around me got used to it. I started cooking my meals at home and taking them to work. Although it's sometimes difficult to find food outside, I find a solution."

V38: "I became a vegetarian in 2016 after my friend said, 'You love animals, but you eat them, I bet you can't go a month without eating meat.' After that day, I realized that what was done to animals was ethically wrong. In 2020, I realized that being a vegetarian didn't mean anything to animals, so I decided to become vegan."

The aim was to determine the effects of a vegan diet on individual health. Some participants provided more than one answer to the relevant question. The majority of participants stated that they experienced no difficulties after adopting this diet. It was observed that individuals generally reported positive effects during this process. The most frequently emphasized among these positive effects was the increase in energy levels. However, some participants also reported negative effects. In this context, the most frequently mentioned problem was weight problems. Participants' responses to this question and the number of repetitions are presented in Table 3.

Table 3. Findings Regarding the Effects of A Vegan Diet on Health

The Health Effects of A Vegan Diet	Frequency	Percentage
No difficulty	27	38.57
Relief from stomach problems	1	1.43
Increased energy levels	8	11.43
Improved digestion	7	10.00
B12 deficiency	7	10.00
Psychological impact	1	1.43
Weight problems	2	2.86
Stop taking diabetes/blood pressure medications	1	1.43
Improvement in joint problems	1	1.43
Improvement in bile problems	1	1.43
Improvement in skin problems	1	1.43
Improvement in need of supplements	3	4.29
Improvement in blood values	4	5.71
Dark circles under eyes	1	1.43
Improvement in vitamin values	2	2.86
Hair loss	1	1.43
Reduction in migraine attacks	1	1.43
Improvement in eczema	1	1.43
Total	70	100.00

Some responses to the relevant question are as follows:

V3: “I’ve been vegan for 20 years. I’m healthy and energetic. Our country is rich in fruits, vegetables, and legumes, and I don’t experience any difficulties.”

V7: “It’s had a positive impact on my health, especially mentally. I feel more vigorous and healthy. My physical health has also changed for the better. My intestines, which weren’t working properly while I was on a vegan diet, started working properly after I switched to a vegan diet. Since I don’t drink milk, the bloating, pain, and spasms caused by milk have disappeared.”

V11: “I sometimes worry about whether my diet is adequate. Peer pressure was stronger in the beginning. I haven’t seen any negative effects on my health. My iron levels can only drop. I take supplements.”

When examining the factors participants perceived as deficient in their diets, the most prominent finding was the perception that iron-containing foods were inadequate. Among the foods that were hard to find, cheeses ranked first, while yogurt, a dairy product specifically mentioned, ranked second. Furthermore, 34.38% of participants stated that they did not perceive any deficiencies in their diets and did not experience difficulties obtaining food. Table 4 presents the participants' opinions.

Table 4. Findings Regarding the Foods You Find Deficient or Difficult in Your Diet

Nutritional Deficiencies/Hard-to-Find Foods	Frequency	Percentage
Yogurt	7	10.94
Fast food	2	3.13
Chocolate	1	1.56
Meat products	2	3.13
Protein	5	7.81
B12	1	1.56
Cheese types	9	14.06
Dessert	4	6.25
Omega-3	1	1.56
Iron	2	3.13
Calcium	1	1.56
Dairy products	1	1.56
Protein powder	1	1.56
Buttermilk	1	1.56
Tofu/Tempeh	2	3.13

Processed legumes	1	1.56
Seitan	1	1.56
None	22	34.38
Total	64	100.00

Some participant responses are below:

V32: “We have very few yogurt options; it's hard to find anywhere. I miss yogurt so much.”

V43: “It's hard to find cheese alternatives, and it's hard to make. Other than that, I don't see anything missing.”

V54: “The only thing missing is that I don't experience hunger because there's a limited variety of proteins I can practice with, and I don't try to supplement with carbohydrates from time to time.”

The study sought to determine the supplement needs of vegan individuals after adopting this diet. A large portion of participants reported using more than one supplement. Table 5 shows that vitamin B12 is the most frequently taken supplement. Vitamin D is followed by B12. On the other hand, there are ten participants who stated that they don't use any supplements.

Table 5. Findings Regarding the Nutritional Supplements Needed by Individuals

Supplements Taken	Frequency	Percentage
B12	42	39.25
Vitamin D	20	18.69
B6	1	0.93
Iron	8	7.48
Calcium	2	1.87
K2	1	0.93
Magnesium	7	6.54
Zinc	3	2.80
Multivitamin	4	3.74
Omega-3	4	3.74
Vitamin C	2	1.87
D3K2	2	1.87
Magnesium Bisglycinate	1	0.93
No	10	9.35
Total	107	100.00

Some participant responses are listed below:

V41: “I use B12, vitamin D, and collagen. I always use B12, and the others only when needed.”

V55: “I only use B12. Besides that, because I'm an athlete, I also take magnesium, zinc, vitamins C and D.”

V60: “No, I don't. I do what I would do if I were living in ancient times and refused to eat and exploit animals. I think modern technology and medicine are dangerous.”

When examining the effects of a vegan diet on individuals' energy levels and general health, the most common response is an increase in energy levels. This response is followed by feeling healthier. However, negative effects such as respiratory infections, depression, and low energy are also among the notable feedback.

Table 6. Findings Regarding the Effects of A Vegan Diet on Energy Levels and General Health

Effect on Energy Levels and Overall Health	Frequency	Percentage
Improvement in insulin resistance	1	1.25
Waking up refreshed	5	6.25
Increased energy level	28	35.00
Improvement in mental health	3	3.75
Depression	1	1.25
Feeling healthier	20	25.00
Improvement in digestive problems	3	3.75
Weight loss	5	6.25
Improvement in chronic anemia	1	1.25
Low energy	1	1.25

Reduction in migraine attacks	1	1.25
Respiratory tract infections	1	1.25
Improvement in sleep quality	1	1.25
None	9	11.25
Total	80	100.00

Some responses to the relevant question are as follows:

V18: “My blood pressure has improved, and my iron and insulin resistance are gone. My energy levels have increased significantly.”

V33: “My energy levels are good, but I can say I'm a little depressed. A psychiatrist told me that my serotonin secretion might not be sufficient because I'm lacking certain nutrients from animal products.”

V41: “I think I have more energy. My overall health has also improved. I lost about 10 kilograms and have since stayed at a near-ideal weight.”

Participants expressed varying opinions regarding common misconceptions about vegan nutrition. Table 7 shows that the most frequently repeated response is the belief that a vegan diet is not nutritious. This is followed by the belief that a vegan diet is unhealthy. The third most common misconception is that this diet is expensive.

Table 7. Findings Regarding Misconceptions About Vegan Nutrition

Misconceptions About Vegan Nutrition	Frequency	Percentage
The thought of not getting enough nutrition	13	20.00
It may cause intestinal laziness	1	1.54
It may cause calcium deficiency	3	4.62
It is an expensive diet	10	15.38
It is unhealthy	11	16.92
It is a type of diet	1	1.54
The thought of having few food options	5	7.69
It is a difficult diet	3	4.62
The thought of eating only grass	3	4.62
The thought of plants being alive	1	1.54
It is not filling	1	1.54
It is an unpalatable diet	3	4.62
Total	65	100.00

Some participants' responses to the question are as follows:

V13: “Unfortunately, the belief in protein and calcium deficiency is very common. Specialist physicians and dietitians are needed. Their explanations will be effective.”

V25: “It's thought to be difficult, expensive, and unhealthy. I constantly try to provide information and support it with my blood test results.”

V53: “Misconceptions about protein and B12 being obtained from animals, and questions about whether plants have life. I don't believe these common myths will be easily changed.”

Finally, participants were asked to identify their future expectations regarding the sustainability of vegan diets. An examination of Table 8 reveals that the most frequent response was an increase in options. The second most common response was the need for increased awareness to increase the sustainability of veganism. Other responses and their frequency are presented below.

Table 8. Findings Regarding Future Expectations Regarding the Sustainability of Vegan Diets

Future Expectations for Sustainable Living	Frequency	Percentage
Increased options	28	41.79
Increased recycling facilities	1	1.49
Reduced plastic packaging	4	5.97
Emphasis on non-toxic agriculture	1	1.49
Correct production	1	1.49
Easy access to products	1	1.49
Reduced prejudices	1	1.49
The idea that veganism cannot progress	1	1.49

Increased preference for home-cooked meals	1	1.49
Social solidarity	1	1.49
Low prices	7	10.45
Making veganism a mandatory diet	2	2.99
Increased awareness	14	20.90
Easier imports	1	1.49
Changing attitudes towards veganism	1	1.49
Expansion of the refill movement	1	1.49
Closing meat restaurants	1	1.49
Total	67	100.00

Below are some participant responses:

V28: “Frankly, I think a vegan diet should become a necessity for ecological and health reasons. I believe this is the only way to achieve sustainability.”

V36: “The widespread availability of vegan products, increased variety, greater accessibility, and balanced pricing will ensure sustainability.”

V61: “I expect vegan products to be sold more widely and in larger outlets. Since it's difficult to travel halfway across the city to buy vegan cheese, I'm choosing not to buy it for now.”

5. CONCLUSION AND DISCUSSION

Nutrition refers to the entire process by which organisms obtain nutrients, metabolize them and utilize them to sustain life functions. If the body does not receive sufficient amounts of essential nutrients, the functioning of physiological systems can be disrupted, leading to serious health problems. Nutrition is a fundamental requirement for the sustainability of life for every individual. It is also one of the fundamental processes that provide the energy needed to perform physical and mental tasks in daily life. Inadequate intake of nutrients is directly related to negative health outcomes such as various diseases, weakness and even permanent disability (Alamgir et al., 2018). Based on this perspective, this study aimed to understand the health-related aspects of the dietary preferences of vegan individuals who consume no animal products and to explain these individuals' experiences within the framework of the theory of planned behavior.

The study's findings provide valuable data for understanding the effects of a vegan diet on individuals. First and foremost, the fact that most participants chose to be vegan for emotional reasons demonstrates that dietary choices are shaped by ethical approaches and individual values. This, in line with the Theory of Planned Behavior, demonstrates the strong relationship between subjective norms and attitudes, which are among the key factors influencing individuals' behavior. In addition to embracing a healthy lifestyle, individuals have also integrated their compassion for animals into their dietary choices. In his study on ethical veganism, Alvaro (2018) stated that animal rights are prioritized over personal pleasure for vegan individuals and revealed that killing animals is considered an unethical and immoral act. This demonstrates that ethical and moral concerns are important determinants of individuals' dietary choices. The majority of participants in the study provided positive feedback about their diets, indicating that adopting a vegan diet provides beneficial effects, such as increased energy and improved overall health. However, some participants also experienced negative effects, such as weight problems. These findings suggest that a vegan diet has the potential to improve individuals' health but also carries a risk of nutritional deficiencies. Supporting this, Koutentakis et al. (2023) conducted a study that indicated that a well-planned vegan diet can provide health benefits. The fact that individuals maintain a vegan diet despite facing criticism from their social circles and misconceptions about this dietary approach indicates a high level of perceived behavioral control. This can be explained by the interplay of social norms and food-related values, as Wendler (2023) noted. Ochs & Shohet's (2006) approach, which emphasizes social bonds formed through food sharing, also supports this process. The authors noted that individuals' dietary choices express not only their physical needs but also their identities and social relationships. Some individuals discussed the challenges of eating out and stated that they prepare meals at home when going to work, meeting with friends, etc. This demonstrates that individuals have strong self-efficacy for a vegan diet despite the restrictions. Positive responses, particularly those related to increased energy levels, improved health and improvements in mental well-being, indicate that individuals view vegan diets favorably and are therefore motivated to maintain their behaviors. The widespread belief in society about

inadequate nutrition and the unhealthiness of veganism can be linked to the subjective norms component. A large portion of participants were observed not to change their behavior despite these norms. This supports the theory's assumption that individuals view intrinsic motivations as more influential than external pressures. Koeder & Perez-Cueto (2024) also reported in their study that the most common belief about vegan diets is inadequate nutrition. This finding supports the results of the current study.

In conclusion, it was revealed that a vegan diet has both psychological and physical impacts on individuals' lives. It was determined that the majority of participants adopted this diet out of moral and ethical concerns and that conscientious and moral factors influenced their decisions. Within the framework of the Theory of Planned Behavior, a strong perception of behavioral control can be explained by positive attitudes and individual determination that develops despite societal norms. In particular, positive effects reported by individuals, such as improved health and increased energy levels, support the intrinsic motivation to maintain this behavior. Conversely, coping with negative effects such as nutritional deficiencies or weight problems tests an individual's perceived control over the behavior, making long-term sustainability dependent on this balance.

This study provides important data on the health effects of a vegan diet, potential nutritional deficiencies and the use of supplements, but does not make any medical or health claims. Several recommendations were developed within the scope of the study. It is recommended that each individual act based on their individual characteristics, such as age, gender, genetic predispositions and current health status and seek professional support from a nutritionist when necessary. Education about vegan nutrition should be provided and awareness should be raised. Providing public information on the subject will help dispel misconceptions. To increase the sustainability of vegan diets, more alternative foods and nutritional supplements should be offered. This will allow vegan individuals to develop a more balanced diet. Further research on the long-term health effects of a vegan diet will allow for more comprehensive data on the long-term health benefits and risks of this diet. Restaurants, educational institutions, public institutions and private sector businesses can support individuals in maintaining this lifestyle by including more vegan options on their menus.

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