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#### Abstract

Vegetarianism can be described as a form of nutrition that, in its most general terms, completely eliminates certain foods. The last point that vegetarians come up with is veganism, refusing to use animal-based clothing and all other by-products, and the world's vegan population is gradually increasing. Studies to meet the growing demand of vegetarian and vegan populations is the basis of this work. In this study, firstly the concepts of vegetarianism and veganism were examined in depth and then the vegetarian and vegan industries were tried to be analyzed by comparing the current situation in Turkey with the examples in the world. This study was carried out in order to reveal the current situation of vegetarianism and veganism in Turkey and to prepare the groundwork for further studies.


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## INTRODUCTION

Vegetarianism can be described as a form of nutrition that, in its most general terms, completely eliminates certain foods (Larousse Gastronomique, 2005, p. 1120). However, there are a lot of evidences showing that vegetarianism is a lifestyle rather than a diet. When the survival struggles of the first humans are put aside (because the decision to completely stop the consumption of all kinds of meat is something that can only be achieved by reaching a secure nutritional source that can provide necessary nutritional inputs), it is known that there have been various concerns, prohibitions, taboos and avoidances related to eating and drinking since people have had choices about what to eat and drink (i.e. in agricultural societies who have become sedentary). Religious motives or moral motifs are at the front row of these concerns, prohibitions and the taboos. However, since the rules about religion and morality always exist in the world, how should we interpret the population that adopts this increasing vegetarianism and its types? In today's world, which is also known as the digital era, the reasons such as the emergence of technology, entry of internet into human life, the fact that people can meet and share information with many people who think like themselves in social areas, increasing population, increasing educational levels and more sensitivity about animal rights played a role in the growth of vegetarianism and its types. As it is known, the last point that vegetarians come up with is veganism, refusing to use animal-based clothing and all other byproducts, and the world's vegan population is gradually increasing. Studies to meet the growing demand for vegetarian and vegan populations are the basis of this work. In this study, firstly the concepts of vegetarianism and veganism were examined in depth and then the vegetarian and vegan industries were tried to be analyzed by comparing the current situation in Turkey with the examples in the world.

## Vegetarianism and Types

Tezcan (2000) defines vegetarianism as the continuation of life without eating any kind of meat, including fish and birds, based on various motifs. According to another definition, vegetarianism is a type of diet that involves the consumption of animal products (red meat, fish, poultry, dairy products, eggs, etc.) in limited quantities or not at all (Tunçay, 2016, p. 51). The etymological origin of the word 'vegetarian' is the Latin word 'vegetus'. Contrary to popular belief, it was not derived from the word 'vegetable'. Vegetus means alive, healthy and full of life. In 1842, the term vegetarian diet was referred to as vegetarian diet, in which meat, fish and poultry were not consumed, while dairy products and eggs were preferably consumed depending on the diet (Encyclopedia Britannica, 2017).

The reason of choosing vegetarian/vegan diet differs according to people's preferences. These reasons may be respect to living things' life, being against to exploitation of animals, reducing ecological damage, being healthy and religious purposes (Tunçay Son \& Bulut, 2016, p. 830). People have to go through a variety of nutritional choices, for whatever reason they choose vegetarianism/veganism. The type of diet the one will follow depends on what type of vegetarian/vegan he/she is. In this context, vegetarians take various names according to the food they consume. That is, individuals who define themselves as vegetarians have very different dietary patterns. It is possible to explain them as follows (Özcan \& Baysal, 2016, p. 101):

- Lacto-ovo Vegetarians: Diets contain herbal foods, dairy products and eggs.
- Ovo-vegetarians: Meat and dairy products are not included in the diet; however, there are vegetable-derived foods and eggs.
- Polo-vegetarians: In addition to herbal products, there are poultry meats in nutrition programs.
- Semi-vegetarians: Meat is not consumed in this diet. The diet includes vegetable-based foods as well as limited amounts of poultry meat and aquaculture. Milk and dairy products and eggs can also be consumed.
- Lacto-vegetarians: Lacto means milk in Latin. Such vegetarians do not consume eggs as they do not eat meat, but they consume milk and dairy products (Hatipoğlu, 2010, p. 73).
- Pesco-vegetarians: Pesce, the Italian word for fish, is being associated with people who add aquatic animals to vegetarian diet. Pescetarians or pesco-vegetarians eat fresh water and salt water fish and shell fish in addition to the fruits, vegetables, grains, legumes, eggs, and dairy that vegetarians typically consume. Today, while it is not known how many people follow pescetarian eating pattern, interest in impact of this diet has its own followers appear to be rising (Thalheimer, 2015, p. 33).
- Vegans: Vegan nutrition is a form of a diet consisting of vegetables, fruits, cereals, legumes and nuts, without involvement of meat, fish, milk and dairy products and eggs (Francione \& Charlton, 2016, p. 14). There are also sub-groups of vegans (Karabudak, 2012, p. 7):
- Vegans who use Zen macrobiotics Diet: The diet consists of cereals, vegetables and fruits and legumes. Some of them are fed only with cereal products, removing vegetables, fruits and legumes from the diet.
- Rawists: These people do not believe that food is cooked. They believe that the nutritional value of the food will be lost with cooking.
- Fruitarians / Fruitists / Fruit-fed: Vegetables that only enter the fruit group in terms of botany, fruits and nuts are included in this diet (Özcan \& Baysal, 2016, p. 101). These people believe in the continuation of their growth cycle, when the food they eat turn back to the soil (Karabudak, 2012, p. 7).


## Short History of Vegetarianism

Deliberate avoidance of flesh eating probably first appeared sporadically in ritual connections, either as a temporary purification or as qualification for a priestly function. Advocacy of a regular fleshless diet began about the middle of the 1st millennium BC in India and the eastern Mediterranean as part of the philosophical awakening of the time. In India, followers of Buddhism and Jainism refused on ethical and ascetic grounds to kill animals for food. Human beings, they believed, should not inflict harm on any sentient creature. This principle was soon taken up in Brahmanism and, later, Hinduism and was applied especially to the cow. The 17th and 18th centuries in Europe were characterized by a greater interest in humanitarianism and the idea of moral progress, and sensitivity to animal suffering was accordingly revived. Certain Protestant groups came to adopt a fleshless diet as part of the goal of leading a perfectly sinless life (Encyclopedia Britannica, 2017).

The first vegetarian society was formed in England in 1847 by the Bible Christian sect. This association was born as an institution that was influenced by economic reasons, emphasizing the rise of agricultural production,
beyond not killing animals for traditional reasons and defending the naturalness and nobility of eating vegetable (Montanari, 1995, p. 167). And the International Vegetarian Union was founded tentatively in 1889 and more enduringly in 1908 (Encyclopedia Britannica, 2017). Later, in Europe, western vegetarians which were dependent to Indian and Buddhist traditions joined this union (Hatipoğlu, 2010, p. 75). By the early 20th century vegetarianism in the West was contributing substantially to the drive to vary and lighten the non-vegetarian diet. In the second half of the 20th century, the work of the Australian ethical philosopher Peter Singer inspired a revival of philosophical interest in the practice of vegetarianism and the larger topic of animal rights (Encyclopedia Britannica, 2017). In the 21st century on the other hand, the number of vegetarians is increasing gradually due to many reasons related to religion, morality and health. While the relevant population is drawing attention to various issues both for themselves and for the world, there are some arrangements that are being made around the world by entrepreneurs who consider this population as a market.

## A General Overview of Vegetarianism in Countries

As emphasized earlier, vegetarianism is based on reasons about religion, morality and health. Thanks to these reasons, some geographies or some countries seem to adopt vegetarianism more. In Figure 1, there is a map of the Vegetarian Cuisine.


Figure 1: Map of the Vegetarian Cuisine
Source: (Fumey, \& Etcheverria, 2007).
When Figure 1 is examined, it is seen that geographies where vegetarianism is widespread have fallen to areas of rice civilization on one hand, and areas where vegetables and fruits are widely grown on the other hand. This brings to mind the idea that is "geography is fate". On the other hand, when it comes to the relationship between the vegetarian cuisines in Figure 1 and religion, it is known that Hinduism, Buddhism and Jainism are common in the said territories. The countries where these religions are intense are India and China. Since it is difficult to include all the countries individually in terms of the current status of the vegetarianism, short information was provided for the two countries (India and China) in terms of being an example, statistics about other countries were given only in terms of population.

Contrary to popular belief, not all Hindus are vegetarian (Polat, 2016, p. 90). Most of the people who are mostly Hindu of the southern part of India, which have been away from the Mongolian and Muslim occupations, are mostly vegetarians (Fumey \& Etcheverria, 2007, p. 15; Polat, 2016, p. 90). Brahmans in Hindu priests caste in

India do not usually consume meat and fish. In India, for example, consumption of animal food and eggs (developing embryos) is forbidden for hygiene concerns. However, milk products are considered to be clean. Indian vegetarian cuisine culture is based on Ayuverda from the sacred texts that process the therapeutic and diseaseinhibiting qualities of foods.

In China, the vegetarian cuisine goes to the historic Song dynasty (960-1279). This cuisine consists of green leafy vegetables, fruits, mushrooms, soya and vegetable oil. Vegetarian meals are often referred as meats because they taste like meat (Fumey \& Etcheverria, 2007, p. 15).

A survey conducted in 2012 shows that $5 \%$ of the adult American population is vegetarian and $2 \%$ of the population is adopting vegan nutrition (Le \& Sabaté, 2014). It is known that this number was $1 \%$ in 2009. Ruby (2012) included statistics compiled from various sources in the study and found that $8 \%$ of Canadians, $3 \%$ of the UK population, $1-2 \%$ of New Zealand, $3 \%$ of Australia, $6 \%$ of Ireland and $40 \%$ of India are vegetarians. On the other hand, around $10 \%$ of vegans and vegetarians are living in Germany ( 80,000 citizens are vegan only in Berlin), $10 \%$ in Sweden and $7 \%$ in Italy. According to May 2016 data, 542,000 people adopt vegan diet in Great Britain, and about 120,000 of these people live in London. It is known that this number was 150,000 in 2006 and it can be clearly seen that vegan population has increased considerably in the last decade (Happy Cow, 2017; Warkentin, 2017; Vegan Motivation, n.d).

## An Overview of Vegetarianism Based on Religions

According to a research conducted in the USA, there are 2.2 billion Christians (32\%), 1.6 billion Muslims ( $23 \%$ ), 1 billion Hindus ( $15 \%$ ), 500 million Buddhists ( $7 \%$ ) and 14 million Jews ( $0,2 \%$ ) in the world. In addition to that, there are 400 million people ( $6 \%$ ) who believe in traditional religions in Africa, America, Asia and Australia. There are also 58 million people ( $1 \%$ ) who believe in other world religions such as Jainism, Sikhism, Shintoism, Taoism, Tenrikyo and Zoroastrianism. On the other hand, 1.1 billion people ( $16 \%$ ) do not believe in any religion (Yeni Şafak Newspaper, 2012). It is remarkable that all these religions on the earth have commonly put emphasis on the rules concerning meat too often. These rules regarding to meat appear in various forms such as not consuming certain animals, not consuming some parts of animals, and not consuming meat at all (Hatipoğlu, 2010, p. 69). In this part of the study, examples of some religions' views on meat have been tried to be given. For example, of the 613 rules in Leviticus and Deuteronomy, the biggest chunk consists of rules related to food. Some of these rules are related to sanitation, some to kindness to animals (Feeley-Harnik, 1994), some to symbolism and logic and some simply forbid usages typical of the religions of enemy tribes. Related to the topic, Tezcan (2000) investigated the status of various meats in various religions and revealed the following list:

- Pork has been rejected in Judaism and Islam because it is not appropriate for humans to consume and is not clean.
- Bovine meat was rejected in Hinduism in India. It is forbidden based on being a sacred animal, thus the status of it.
- There are beliefs in Ceylon (Sri Lanka) that chicken meat and eggs are dangerous. For example, it is believed that chicken meat is toxic to pregnant women. For also vegetarian Hindu, chicken meat is not eaten because it is not clean. In Buddhist beliefs, chicken meat is not consumed and bird feeding habits are also not desired. In Tibet, chickens are considered sinful and dirty because they eat worm.
- Horse meat is not eaten because of the influence of Christianity in Europe. It is related in Pagan beliefs. In Islam and India, horse meat is consumed in some groups.
- Camel meat is extensively consumed in the Islamic world. The camel is also sacrificed for meat. But camel meat is not consumed by non-Muslim people of the Middle East. In the Far East, camel meat is avoided. In Mongolia, camel meat is not consumed while camel milk is consumed.


## Veganism

The Vegan Society describes veganism as "Veganism is a way of living which seeks to exclude, as far as it is possible and practicable, all forms of exploitation of, and cruelty to, animals for food, clothing or any other purpose". Veganism is the deliberate deterrence of behaviors that is caused by direct or indirect feelings of the pain and ethical reasons. People choose veganism for two main reasons: they are ethical concerns for animal rights/welfare/freedom and concerns for the natural environment. Vegans, who are also known as strict vegetarians, do not consume any animal nutrients (honey, ice-cream, yoghurt, milk pudding) as they do not consume milk, meat or eggs. Veganism, which is a philosophy of life, also denies the use of clothes made of animal products and all the other side products. Vegans also do not participate in entertainment forms using animals, do not use soaps containing animal fats, do not consume milk-containing chocolates, cakes, pastries, and do not watch movies where live-animals were used (Tunçay, 2016, p. 52).

Veganism is a concept that is handled separately, even though it is a kind of vegetarianism. Vegans, on the other hand, do not find vegetarianism satisfactory and criticize them severely because they consume animal products in certain terms. Although there are bioethical differences in the opinions of the vegans, the main opinion is to support equality of living things (Tunçay, 2016, p. 51). For example, there may be disagreements between vegans that honey should not be consumed or consumed, or that leather shoes and some drugs obtained from animals other than food should be used or not (Beardsworth \& Keil, 2011, p. 364). Another issue that vegans argue is about the palm oil consumption. Palm oil is a vegetable oil produced from the fruit of the palm tree and is found in many frozen ready-to-eat foods and snacks. A large part of the palm oil that has become popular in the last 30 years and whose production has increased about 3 times is produced in Indonesia and Malaysia. The reasons why the palm oil is so preferred are being cheap, not including trans-fat and its taste (neutral). The source of concerns about the palm oil is that the rain forests in Indonesia are destroyed because of their production and that the orangutans are taken from the living areas. It is stated that orangutans were killed during the forest destruction. For this reason some vegans do not consume palm oil even though it is herbal (Tunçay, 2016, p. 56). These differences of views on veganism have also led to the emergence of concepts such as carnism, Abolitionist veganism, navegan, flexible veganism, principled veganism and ethical veganism.

Besides the opinions that defend veganism, there are also some opinions in the literature which argue that it is very difficult to implement veganism and thus it is unsustainable. Pollan (2009), for example, has expressed in some instances that a certain veganism is not possible. Some of these examples are:

- The cereal that a vegan eats are collected by a harvester, which savages field mice. The wheels of the farmer's tractor crush the mountain rats and pesticides cause the birds to be erased from the sky.
- In many parts of the world, the best way to supply food is to graze animals. To give up animal food means to leave these places by people. But in this case too, all people will be dependent on highly advanced industrialized national food chains. This will mean more fossil fuel and more chemical fertilizer. Because the food will have to cover longer distances. In other words, the demand for the feces obtained from animals will be very low.
- Sustainable agriculture does not seem possible where animals do not participate in the food cycle and where food production is not supported (Pollan, 2009, pp. 386-387).

Despite the disagreements among vegans or the existence of various criticisms of veganism, the philosophy of veganism is spreading all over the world consequently and the number of vegans is increasing day by day. Two important points that vegans basically defend have already been emphasized: ethical concern for animal rights and concern for the natural environment. In this part of the study, the reasons for the concerns of the vegans for the natural environment were tried to be explained with statistics and examples. A statistic published by the United States Environmental Protection Agency (EPA) shows that the vast majority of farming in the United States is done in order to feed animals, not to feed people. The data are as follows:

- The United States is, by far, the largest producer of corn in the world. Corn is grown on over 400,000 U.S. farms. In 2000, the U.S. produced almost ten billion bushels of the world's total 23 billion bushel crop. According to the National Corn Growers Association, about eighty percent of all corn grown in the U.S. is consumed by domestic and overseas livestock, poultry, and fish production.
- Approximately 2.8 billion bushels of soybeans were harvested from almost 73 million acres of cropland in the U.S. in 2000. Over 30 million tons of soybean meal are consumed as livestock feed in a year. Even the hulls are used as a component of cattle feed rations.
- Over 240,000 farms in the United States produce wheat. Of the wheat consumed in the United States, about $22 \%$ is used for animal feed.
- Fewer than 32,000 farms in the United States produce cotton. Cottonseed and cottonseed meal are used in feed for livestock, dairy cattle, and poultry (USEPA, 2005).

In the report called Water-More Nutrition Per Drop (Towards Sustainable Food Production and Consumption Patterns in a Rapidly Changing World) and prepared by Stockholm International Water Institute (SIWI) and the International Water Management Institute (IWMI), the amount of water used to produce animals that are raised to be eaten by humans is compared with other crops that are grown. Relevant data are given in Table 1.

Table 1. Water Requirements in $\mathrm{m}^{3}$ to Produce 1 kg of Various Food Items and Trends in Demand

| Food <br> item | Water requirement m3/kg (avg.) | Trends in demand |
| :--- | :--- | :--- |
| Beef <br> (grain <br> fed) | 15 or more | Increased by about 5\% annually during last 20 years in LDCs, <br> although not all countries. A continued rapid increase expected in <br> LDCs $^{1}$ |
| Lamb | 10 |  |
| Poultry | 6 | Its share in meat consumption has more than doubled over the last <br> three decades |
| Cereals | $0.4-3$ | Current world output of 1.7 billion tonnes expected to increase to 2.6- <br> 2.8 billion tonnes in 2025 |
| Citrus <br> fruits | 1 |  |
| Palm oil | 2 | Growth by 3\% expected |
| Pulses, <br> roots and <br> tubers | 11 |  |

The study by Pimentel \& Pimentel (2003) also supports this perspective. According to the study; producing 1 kg of animal protein requires about 100 times more water than producing 1 kg of grain protein. Livestock directly uses only $1.3 \%$ of the total water used in agriculture. However, when the water required for forage and grain production is included, the water requirements for livestock production dramatically increase. For example, producing 1 kg of fresh beef may require about 13 kg of grain and 30 kg of hay. This much forage and grain requires about 100000 L of water to produce the 100 kg of hay, and 5400 L for the 4 kg of grain. On rangeland for forage production, more than 200000 L of water is needed to produce 1 kg of beef (30). Animals vary according to amounts of water required for their production. In contrast to beef, 1 kg of broiler can be produced with about 2.3 kg of grain requiring approximately 3500 L of water.

Another data is about straw production. While approximately 22 million hectares of US soil are used to produce straw for livestock, vegetable production for human consumption occurs only in the area of approximately 2 million hectares, and livestock cause more than half of the soil erosion in the US (Francione \& Charlton, 2016, pp. 52-53).

As a result, statistics help to bring out the conclusion that if people live a life without consuming meat, a lot of positive contributions can be made to the environment, and that even people who starve in the world, lacking basic foodstuffs in many parts of the world will be able to produce enough food. So regardless of what we ate, food production in the world gives serious ecological harm to the world. Meat production damages the world's biological diversity due to pollution, deforestation, soil erosion, efficient land loss, greenhouse gas release and many other effects (Francione \& Charlton, 2016, p. 54).

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## The Current Situation of Vegetarianism and Veganism in Turkey

Turkey is a country where about 80 million people live -the majority of them are Muslims- and has hosted many civilizations throughout the history. Most of the territory of Turkey is located in Asia, and some of it is in Europe. Turkey, which is geographically divided into seven regions, has a very developed and very tasty cuisine culture, and this cuisine culture varies from region to region. Turkish Cuisine is a cuisine that has been formed as a result of the meeting of the nomadic tribes migrating from Central Asia with the food items in Anatolia, the Seljuk and Ottoman Empires blending with the palace cuisine, and it is a cuisine which has been supporting self with meat and meat products, milk and milk products and cereals. A wide variety of dishes prepared in the Turkish cuisine are especially the sheep meat, including goat, lamb and beef meat. Therefore, vegetarianism and veganism are not very common in Turkey. It is often seen as an unusual situation. For this reason, this study was carried out in order to establish the current situation of vegetarianism and veganism, and the studies conducted in Turkey and to prepare the groundwork for future studies, revealing the possibility of mentioning vegan tourism in following studies. There are significant developments in the world about vegetarianism and veganism, and there is a need for studies on these issues since there is not enough study showing Turkey's position among these developments. From this point of view, it would be appropriate to mention some of the most important developments in the world in terms of vegetarianism/veganism in 2015 before presenting the current situation in Turkey and then to give information about the current situation of Turkey (Turkey Vegan \& Vegetarian Association, n.d.):

- One of the world's leading investors, California-based Impossible Foods Company, which includes Horizons Ventures, Khosla Ventures and also Bill Gates, has announced that it has raised investor financing to \$108.000.000 to support the development of herbal-based food products. Impossible Foods is a company that produces vegan foods such as cheese, milk, bacon, steak and chicken using only herbal products. Google, which wants to buy the company, has begun negotiations in July 2015 and has offered $\$ 300.000 .000$ to the company, but the negotiations have been resulted negatively.
- According to a research report by the world's leading market intelligence agency Mintel, vegetarian menus grew by $66 \%$ from 2012 to 2015. According to the same research, vegetarian/vegan product launches have doubled in the last five years. Nasdaq, one of the most important stock exchanges in the world, has warned investors to be cautious about investing in animal products.
- For those who can not give up meat, the vegetable meat tissue, which does not contain any animal cells, has been developed. For the first time in the world, Dutch scientists have succeeded in producing an alternative but most importantly "sustainable and vegetable" protein tissue using a unique new production technique. This structure, which is produced by patented technology called Cutting Cell Technology, requires less energy in production process than the conventional methods and can sustain twice as much.
- The Follow Your Heart Company has developed a new product that does not contain any animal products but can be used instead of eggs. The so-called vegan egg carries all the functional properties of the egg and is unshelled at the same time.
- The world famous coffee chain Starbucks has announced that they are working on vegan options by accepting this recommendation as the result of a signature campaign initiated with the request of the Vegan menu.
- The famous Irish-based beer brand Guinness, which has been using animal gelatin for distillation and clarification for over 256 years, has now announced that it will go through a vegan production.
- Ben \& Jerry Company has announced that they are working on an ice cream that does not contain animal traces. It is estimated that ice cream will be produced from almond milk.
- The world's leading Fast Food chain, Taco Bell, has launched its 26 options-vegetarian menu, guaranteed with supervised certification, at its stores.
- The popular sports shoe company ASICS has produced sports shoes with a choice of artificial leather and suede for vegans.

When the reflections of the listed items above in Turkey are examined, it can be said that almost none of the brands mentioned except Starbucks and Guinness are found or known in Turkey or are known by very small population. Therefore, it is estimated that many developments mentioned are not influenced in the Turkish public and the possibility of the people being conscious about these issues is low. On the other hand, in Turkey there are some developments in terms of vegetarianism and veganism and some steps are taken. These developments have been included with examples from the world comparatively below.

## a) Literature Review

When the scientific studies on vegetarianism and veganism are examined, it is seen that there is almost no scientific work on this subject in Turkey. For example, Güzin Yasemin Tunçay Son's doctoral dissertation in the field of anthropology written in 2016 called "Vegan and vegetarianism in the frame of bioethics", which is accessible in Turkey is the only doctoral dissertation which includes the word "vegan" in the title. When the search is done with the keyword "vegetarian", the same thesis is encountered and no other result is obtained. In this dissertation, Tunçay Son (2016) conducted interviews with people who were aged 18 or older and were vegan/vegetarian for at least two months within the provincial borders of Ankara for his study. When the borders of the research are further expanded and the keywords "vegan" and "vegetarian" are searched in the list, master's thesis of Silvia Ilonka Wolf named "We are all animals: The emergence of grassroots nonhuman animal rights movement in Istanbul" (2015) is reached. Wolf's study is in the field of sociology, written in English in the Department of Turkish Studies. When it is thought that there are about 200 universities in Turkey, it is very thoughtful that the subjects of veganism and vegetarianism have not been studied as thesis. The search has been repeated with the key words related to vegetarianism such as Lacto, Ovo, Pesco and so on., but no results have been obtained (Council of Higer Education Thesis Center, n.d.).

When it is searched in scientific articles and books on veganism and vegetarianism in Turkey, Özcan \& Baysal's article titled "Vegetarian Nutrition and Its Effects on Health" which was published in 2016 and the article written by Ongan \& Ersoy in 2012 "Vegetarian athletes: Special Needs" are reached. Apart from this, Karabudak's (2012) book entitled "Nutrition in Vegetarianism" and the book named "Vegetarian Cuisine of the World" by

Müheyya İzer (2004) are reached. All books in Turkish except these books are foreign sources that were translated into Turkish.

## b) Cosmetic Animal Experiments Should Be Banned Also in Turkey! Campaign

As it is known, animals are widely used in the pharmaceutical industry and a drug is tested on animals before it is marketed. As of March 11, 2013, the sale of all cosmetic and personal care products tested on animals in the European Union is prohibited. This prohibition is also applied to products imported from countries outside the European Union. Animal testing in the Union has been prohibited since 2004 for cosmetic products and since 2009 for cosmetic ingredients. It is also prohibited to market cosmetic products containing components tested on animals since March 2009 in the Union (Turkish Vegan and Vegetarians Association, n.d.). It is known that about 38,000 animals in the EU countries are unnecessarily exposed to various pains and killed by euthanasia in order to test new products every year. In Turkey, animal experimentation was allowed for scientific researches with Law No. 5199 on Protection of Animals. However, as a result of effective campaigns carried out, from 15 January 2016 on, testing of cosmetics products on animals is officially prohibited (Hürriyet Newspaper, 2015).

## c) Turkey's First Vegan Municipality: Didim

In history, Didim was linked to Milet by sacred way full of sculptures. Today, the town of Aydin is a peninsula of the Aegean Sea. Didim is a touristic center around the world with its precious historical monuments, ruins and facilities on the coast. Didim is one of the two regions in the world that is good for asthma due to its low moisture content and its geographical structure. There are nearly 200 tourist facilities in Didim, which has 57 km coastline (Didim Guide, n.d). Didim, where the Temple of Apollo is located, is the second vegan city of the world after Barcelona. There are vegetarian menus in the menu of hotels and restaurants in Didim. Officially a vegetarianvegan friendly city means creating a vegetarian guide for the city and encouraging all city dwellers to eat without meat for 1 day a week. This practice is located in Barcelona, the first Vegan city in the world. Launch of only Didim itself as a vegan-friendly city and making regulations in the city according to vegans in Turkey, which has 81 provinces and numerous cities, can be related to awareness level of local administrators and recognition of the high potential of the city. It is thought that the number of vegan-friendly cities in Turkey will increase in the near future as how İzmir Seferihisar became the leader about being the first quiet city in Turkey when the philosophy of slow food has started to spread in the world and it was followed by Ordu Perşembe and Isparta Yalvaç.

Barcelona, which Didim has imitated on the road to become a vegan city, declared in 2016 that it is a vegan and vegetarian friendly, vegetarian culture city. In addition, the city's executives and the society have supported the campaign since 2009 on campaigns to not eat meat on Mondays. The Meatless Monday campaign was launched in 2009 to raise awareness about the harmful environmental effects of meat, but nowadays it has become a form of knowledge about almost the entire world (Jones, 2016). Nevertheless, it has been a common practice in traditional diets, including for religious reasons, not to eat meat on certain days of the week, usually Wednesdays and Fridays, as well as meatless Mondays from World War 1 in the US. Because in the years of the war, people have not been able to make production and the poverty had begun. For this reason, people have continued their lives finding
substitute products, and they have not consumed certain products on certain days of the week (Van Hise, 1918; exhibits.mannlib.cornell.edu). Although this relevant development has been actually related to patriotism and the binding up wounds of war, it has been also considered to be the establishment of healthy nutrition rules to be applied in the future years.

Considering the other examples of vegan-friendly cities in the world, Chiang Mai (Thailand), Hong Kong (China), San Francisco (USA), Turin (Italy), Toronto/Ontario (Canada), Bankok (Thailand), Melbourne (Australia), Bangalore (India), Prague (Czech Republic), Austin/Texas (USA), Honolulu (Hawaii), Portland/Oregon (USA), Chennai (India), Vancouver (Canada), Kyoto (Japan), Ho Chi Min (Vietnam), Paris (France), São Paulo (Brazil), Montreal/Quebec (Canada), Seattle/Washington (USA), Lisbon (Portugal), Barcelona (Spain), Rome (Italy), Berlin (Germany), Los Angeles (USA), Warsaw (Poland), Taipei (Taiwan), New York/Brooklyn (USA), Singapore and London (UK) are found to be among the most preferred and vegan-friendly cities by vegans in the world (Happy Cow, 2017; Warkentin, 2017; Vegan Motivation, n.d).

On the other hand, India's Palitana city has declared itself as the first vegetarian city. In the city of Palitana, which has a population of 65,000 , the majority of which is made up of Jainists, $20-25 \%$ of the population is Muslim and the fact that the city of Palitana is a vegetarian city has led to negative reactions of Muslims. During the work of becoming a vegetarian city, 200 Jainist monks made hunger strike and demanded that the butchers to be closed (Niazi, 2014; Buncombe, 2014).

## d) Use of V-Label Certified Products in Turkey

The V-Label is an internationally recognized, registered symbol for labelling vegan and vegetarian products and services. For consumers, it is a simple and reliable guide to help them when they are shopping. With the V-Label, companies promote transparency and clarity. Standardized criteria ensure that the V-Label is a unique seal of quality for vegan and vegetarian products all across Europe (V-Label, n.d.). The V-Label document, a licensed symbol developed by the European Vegetarians Union (EVU), is designed separately for vegetarians and vegans. Consumers' demand for products with V-Label certification, which entered Turkey by the end of 2014, has increased. The fact that the cosmetics sector lionizes in this document especially in Turkey is very popular. However, V-Label license requirements of enterprises have also increased. The first certificate in Turkey was given to the Nudo brand. It followed Komagene, Eriş UN, Gloria Jeans Coffees, Upper West Side Falafel, Kurme, Vegan Peynir, Oses and Entabi Çiğköfte brands. In addition, the French-based world-famous dairy and water products company Danone has stepped into the vegan market and bought the American White Wave Foods brand, which includes Alpro from the world's largest vegetable milk brands. The $\$ 12.5$ billion deal is seen as the highest investment Danone has made since 2007 (Karaboğa, 2016). The Danone brand is a very demanding brand in Turkey and because of this step that it has taken for the vegan market; it has succeeded to attract the attention of the vegetarians and vegans in Turkey once more. A visual of the V-Label certificates in order to provide insight is given in Figure 2.


Figure 2: V-Label Certificates
Source: (V-Label, n.d.).

## e) Vegan / Vegetarian Population in Turkey

In previous sections of the study, information about the vegetarian/vegan population in the world was tried to be given on the basis of countries. However, there is no data on how many vegan/vegetarians there are, how many and in which region of the country vegan/vegetarian population is, or how the population has increased/decreased over the years when Turkey is in question. This situation is an issue that must be resolved urgently. It is expected that a population census will be conducted in 2017 to determine the vegan/vegetarian population.

## f) Didim Vegfest

Turkey's first Vegan and Vegetarian Festival was held in Aydin, Didim on 29-30 April 2017. Didim Municipality established a festival site at the historic Apollon Temple for the Vegfest event organized by Turkish Vegan Vegetarians Association (TVD), Tourism Research Association (TURAD) and Didim Tourism Infrastructure Association (DITAB) organization. In the festival, a special program of activities on entertainment, shopping, live presentations of the chefs and sports events, as well as panels and interviews in which specialists were attended, documentary screenings, an event about healthy life for children and love of nature and animal was planned (NTV, 2017). It is expected that the festival, where tens of thousands of people from Turkey and many parts of the world were be able to shop by visiting the stands, will be organized in the next year and followed by more participants (Didim Municipality, n.d.).

Although Didim Vegfest was the first in Turkey, it is possible to give examples of vegan festivals from many parts of the world. But the oldest is Phuket's Vegetarian Festival, which was held in Phuket, Thailand. This festival has been mentioned in detail because it is the oldest vegan festival. What can be said about the festival are:

- Phuket's Vegetarian Festival began in 1825. Participants in the fest keep to a strict vegetarian diet for a varying number of days, usually no less than three. This they do to make themselves strong in mind and body; they refrain from all vice, eating animal flesh, and killing animals. The festival thus promotes good hygiene, brightness and inner peace. The Vegetarian Festival has ten rules: Cleanliness of bodies during the festival, Clean kitchen utensils and to use them separately from other who do not join the festival, Wear white during the festival, Behave
physically and mentally, No meat eating, No sex, No alcoholic drinks, People at mourning period should not attend the festival, Pregnant ladies should not watch any ritual, Ladies with period should not attend the ritual (Phuket Vegetarian Festival Brochure, 2016).
- During this festival, restaurants use regular meals but they use wheat gluten and soy instead of meat and fish. Since ancient times, Buddhist vegetarian chefs have been providing and shaping soybeans and wheat glutens like meats for non-vegetarians to make sure that they are not strangers. There are also food benches on the edge of many main roads during the festival, and these benches sell vegetarian food (Bellows, 2011).


## g) Vegan Picnics

Vegan picnics are held at various times in big cities in Turkey, especially in Istanbul and Ankara. These picnics are aimed at telling non-vegan people about veganism, doing yoga in a collective way, sharing everyone's selfprepared vegan dishes with others and exchanging ideas. The following explanations about cocoa and coconut to be brought to picnic are quite remarkable (Yeşilist, 2015):
"Since we have the responsibility to make sure that goods such as cocoa and coffee are fairly obtained from disadvantaged economies, such as sub-Saharan Africa, among the materials we use in food, we will use resources that have fair trade certificates while using these products or give similar commitments."
"If you bring a picnic food with coconut, please make sure that the coconut you use is not obtained with monkey slavery."

## Examples about Vegetarian and Vegan Industry Which Can Be Adapted to Turkey

In this part of the research, some examples were presented in the vegetarian and vegan industry according to the practices in foreign countries. When these examples are adapted to Turkey, it is expected that Turkey will also get a share from the vegetarian and vegan industry.

## a) Vegetarian and Vegan Wine

In the production of both organic and non-organic wines, animal products are used during the clarification process. Such agents attract the particles to be filtered, like a magnet, and precipitate into the bottom of the tank. Clarifying wine is separated from the descending particles, but the agent used in the sedimentation may leave some traces on the wine. Wines suitable for consumption of vegans are produced using soil-based substances (bentonite, diatomaceous earth, carbon or kaolin, which is bentonite-like clay) as sedimentation agents. However, since it is not possible to get information about these agents from the label on the bottle, some research is needed. Vegan wine is not something that is hard to find, but such wines are not sold under a special name.

Kosher wine often meets expectations of vegans, but in some cases the sedimentation agent used may not fit the vegans. Some of the manufacturers use gel obtained from fish hulls or from bovine and pork skin during clarification. The Jews do not classify it as meat, as the product is not real animal meat and has undergone significant changes during the kosher process. On the other hand, it should be remembered that wines' fitness to
beliefs may change from one harvest period to another, and that producers may not want to work with the same sedimentation agents at all times. It is beneficial to call the manufacturer or exporter to make sure that the wine is suitable. An easier way to apply is to prefer wines that have not gone through the clarification process. This information is easily accessible from the labels on the wines. The letter "Did not pass through the clarification process" in the tag indicates that no sedimentation agent was used (Nowak \& Wichman, 2010, p. 33).

In Turkey, about $2.5 \%$ of the agriculture-based areas are bound. The share of grapes in vegetable production is $3.5 \%$ and in the total fruit production it is $31 \%$. There are 1,200 species of grapes in Turkey, but only 34 of them are used in wine production. Of these 34 species, 22 are of foreign origin and 12 of them are native. However, in Italy, which is in the same climate as Turkey, this number is 324 . Most of the grapes produced in the world are used for wine making. In Turkey, $40 \%$ of the grapes are used for fresh table, $35 \%$ for dried food, $23 \%$ for molasses, dried fruit roll-up and similar products, and only about $2 \%$ of the grapes are used for wine production. Only grapes used in winemaking in Thrace and Central Anatolia reach $20-40 \%$ (Vinotolia, n.d.). As a result, Turkey has a grape variety and a substructure and a soil structure which can produce vegan wine and market it to the world. For Turkey, which advertises to the world with limited grapes and wine for table wine, the vegan wine market is definitely a market to be evaluated.

## b) Vegan/Vegetarian Supermarkets

Vegetable tastes and requirements, based on the food industry, provide opportunities for entrepreneurs to provide a new market and profit. Thus, special products and services are emerging that will be response to their requests, will meet the needs of the new minority, and target vegetarian consumers. Vegan supermarkets and vegan sections / aisles in supermarkets, which are very common in Europe, are gradually coming to Turkey. However, most of the vegan products come from abroad for now. Today, consumer calls for more transparency regarding vegan and vegetarian products are having an effect. In 2012, just $1.5 \%$ of food and drink products on the global market were declared vegan. By 2015, this figure had risen to $4.3 \%$, which represents an almost three-fold increase in the number of vegan-declared products in just three years (V-Label, n.d.).

## c) Vegetarian Meals in Primary School

The Peck Slip School administration, the second state school that serves vegetarian food in the United States, aims to make their students more successful by offering healthy food. At Public School 244 (Queens, New York), the first state school to serves vegetarian food, students can also bring food from their home. After the vegetarian menu application, it was determined that the number of overweight students decreased by $2 \%$ at the end of a semester (Yeşilist, 2015). Just as it is in the whole world, the number of individuals fighting with obesity in Turkey is rather high. The dependence on nutrition based on fast food, especially in children and young people, is at a high level. A research conducted in 2008 showed that fast food industry in Turkey has a market size of $\$ 3.5$ billion (Women Entrepreneurship Support Project, 2008). For this reason, the project of preparation of menus composed of vegetarian meals in the schools can be put into practice in Turkey.

## CONCLUSION

It is known that people kill more than 57 billion animals and at least one trillion of marine animals every year to get food (Francione \& Charlton, 2016). While this number is quite large, it is not enough to fully feed the population of the world and a serious part of the world population still struggles with hunger. Studies show that people can not hurt nature and can fight hunger by using plants as a food source instead of using animals. On the other hand, animal rights are now among the issues that are emphasized on the world. Vegetarians and vegans are at the head of those who support these views. Vegetarians and vegans, who have a growing population all over the world, are adopting a philosophy of life without consuming meat or using animal products in order not to approach the issue only in a nutritional way. Meeting the ever-increasing needs of vegetarian/vegan population has become a sector in itself. When compared to Turkey, it is remarkable that the number of scientific studies conducted on vegetarians and vegans in many parts of the world, the number of products developed and offered for sale, and the variety of products are great. Considering the fact that the nutrition system of the Turkish people is based on meat, milk and cereal products and that there is a worship like a sacrifice in the religion of Islam where the majority of people belong to, there is an expected result that people living in Turkey who are vegetarian and vegan will face various problems. A similar problem is expected to be encountered by vegetarian/vegan tourists who are visiting or will be visiting Turkey. However, there are still some steps taken in Turkey regarding vegetarianism and veganism. For example, in large cities in Turkey, there are now restaurants that offer only vegan food, the number of restaurants that present some vegan meals in their menu are increasing, vegan supermarkets are opening and web sites selling vegan food are available on the internet. When dealt with in this respect, the vegan industry has become a remarkable marketing area and it is important for the entrepreneurs to make a breakthrough. It is thought that these steps taken in recent years are quite important, as it is thought that the first vegetarian restaurant in Turkey opened 20 years ago but it has been bankrupt without being able to hold.

As emphasized earlier, this study was carried out primarily in order to reveal the current situation of vegetarianism and veganism in Turkey, the studies conducted and the steps taken. Later on, it was carried out in order to draw attention to the possibility of mentioning vegan tourism, vegan cities, vegan restaurants and vegan menus in Turkey, and to prepare a groundwork for future studies. The result obtained from this study, which has been prepared in the form of a literature review, shows that although Turkey is still at the beginning of vegetarianism and veganism, it will succeed to be among the countries preferred by vegetarian and vegan population meeting their gradually increasing needs in the world with the help of consistent studies to be conducted.

Vegetarianism, more particularly veganism, is a lifestyle that involves a lot of drawbacks, and maintaining this lifestyle requires special effort. There are a limited number of places where the special needs of this special group can be met, and vegan products are relatively more expensive than the other products. It is thought that the selection of the destination of the vegan population will be compatible with the views of life and that they will prefer the vegan cities. In this regard, it is necessary to make various regulations and increase the number of vegan cities in order to add Turkey to the list of places where this special group members will visit. The vast majority of
the vegan-friendly cities previously mentioned in the study are known by the whole world and host many tourists. The fact that Turkey can find its place in this list is very important for the promotion and recognition of the country.

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[^1]:    ${ }^{1}$ In order to meet the high demand in the US and Europe, the global meat industry has been moved to Latin America and at least $20 \%$ of the Amazon forests have been turned into feeds for producing grass and forage plants (Francione \& Charlton, 2016, p. 52).

