Food-Related Barriers to Gastronomy and Tourism: The Role of Food Allergies and Diet Preferences

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Abstract
The increasing number of tourists with food allergies and different eating preferences triggers a wide array of problems within the gastronomy and tourism service establishments. Thus the need to understand the behavior of people assist the tourism stakeholders in adopting the changing nutrition paradigms to their operations. This study attempts to diagnose the prominent components that disturb travelers with food allergies and distinct diet preferences within their gastronomy and tourism experiences. To understand their eating experiences through tourism activities major affecting groups identified by reviewing the related literature. Two critical groups determined as celiac patients and vegan/vegetarian travelers. The qualitative research methodology is used by sending open-ended questionnaires to various groups associated with the sample. Data obtained from the study classified into three dimensions as acceptance and empathy, Education and Training, Ethics, and Sustainability. Findings reveal that travelers encounter a wide array of problems during their gastronomy and tourism-related experiences.

Keywords: Food Barriers, Gastronomy, Tourism, Celiac, Vegan

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Introduction

Food-related barriers affect the quality of life during the tourists travel experience and problems related to such restrictions are increasing in prevalence through different tourism establishments. Food-related barriers are divided into three groups as – food allergens, food intolerances, and healthy lifestyles. Travelers having related conditions or lifestyles frustrate about finding the appropriate food items during their holidays (Ahuja, & Sicherer, 2007; Barrero, 2016; Edwards, 2013; Altuğ, 2016).

Food allergy is a hypersensitivity reaction of our body against several food items utilizing the immune system (Sampson, 1999; van Putten, Frewer, Gilissen, Gremmen, Peijnenburg, & Wichers, 2006). In contrast, the food intolerance is not related to immune system. People with food intolerance can tolerate when they consume the food in small quantities, but when they consume too much or too often, their bodies start to react (Mills & Breiteneder, 2005). Some exceptional food items cause allergies and intolerances more than the others. These are; Gluten-containing products (Wheat, Wheat germ, Rye, Barley, Bulgur), Milk products (Any type of milk, cheese, cream, butter, Ghee), Animal products (Meat, Beef Fish, Shellfish), Nuts and Grains (Peanut, Tree nuts, Soy, Corn) and some fruits (Kwon and Lee, 2012; Lee & Sozen, 2016). Some foods cause allergic reactions, especially in early childhood (cow's milk allergy), while others continue for life (peanut allergy).

Healthy lifestyles is a food-related barrier to tourism as it empowers the nutritional diet styles that grow into vital for the quality of life, such as vegan-vegetarian, raw food, and varied well-being diets. It becomes popular within the enthusiasts of decent and healthy living. Moreover, with the increasing ethical and ecological concern, Vegan tourists seek local food about healthy living (Benelam, 2009; Besirli, 2017). Hospitality and Travel establishments serving food and beverage are among the most common places that are influenced by food-related barriers (Barrero, 2016). Although the disabled food travelers plan to use the safe items, communicate with the establishments about their situation and follow the best practices on their situation, many incidents happen which threatening the tourist's health (Bordelon, 2016). Also, healthy lifestyle diet followers have strong beliefs and tendencies to certain foods which may trigger significant pressure on the foodservice providers.

The Gastronomy and Tourism literature has growing attention to the perception of food-related barriers. Research has various subjects such as; restaurant staff knowledge and practices (Borchgrevink et al., 2009; Lee, & Sozen, 2016), employee awareness (Pratten, & Towers, 2003), regulations in different sectors (Bordelon, 2016). Moreover, there is limited research on how food barrier travelers solve their problems related to food barriers during their vacations and how compatible is the industry through ethical and ecological concerns. The focus of this study is to point out the problems related food barriers to tourism and put forward the issues associated to it by focusing two stakeholders including, ethical and healthy lifestyle (vegan, vegetarian, etc.) and food intolerant (Food allergy, Celiac, etc.) travelers. Also, the need to understand the extent to which the recent trends in gastronomy are reflected in the production and operation processes have been determined as secondary objectives.

Food Allergies and Food Intolerances

The quality of the food and beverage services, which are essential for the tourist's visit to the destination, is more prominent, especially in the case of permanent disturbances. These obstacles in tourism are intolerances, allergies and related diseases that tourists have under different conditions before travel, which depend on the nature of the food and which require their diet. (Duzlu Ozkaya, Akbulut, & Tulga, 2017). Even though there is no evidence about the statistics of food-related suffering travelers, latest projections suggest that 1% of the population endure from food-related allergies and intolerances (Barnett, Botting, Gowland, & Lucas, 2012; Özden, 2015).

According to parental reports of the ages between 0-18 years old, there are varied food allergy symptoms seen within a rate of 2%-4% in Turkey (Tham, & Leung, 2018). Most of the food-related allergy and intolerances are seen in Turkey are; Celiac (Gluten allergy), Peanut Allergy, Lactose intolerance, Sesame Allergy, Milk and Eggs (Ozturk, & Besler, 2012). Borchgrevink et al. (2009) note that food intolerances burden more prominent figure of consumers mostly suffering from lactose intolerance and gluten intolerance. Among such dietary restrictions, the Celiac disease, Gluten-free, is a small intestinal disease triggered by the consumption of cereal products such as barley, wheat, oats and rye in people with a genetic predisposition. Although celiac disease is the only food-related disease that lasts a lifetime, consuming a small amount of gluten can cause damage. According to the Public Health Agency of Turkey
among the number of patients diagnosed with 10% is estimated to be 750,000 patients. As they fed the gluten-free diet not only in the patients but in their families, it is estimated that three million people need to be gluten-free. A reaction occurs in the small intestine immediately upon a person with celiac disease consumes glutinous produce. There is no remedy for celiac disease, but can be effectively controlled by dietary change. A person with celiac disease can eat gluten-free foods such as meat, fish, dairy products, fruits, vegetables, rice, potatoes. Pursuing a strict non-gluten diet is not easy to manage.

Ethical and Healthy Life Styles

It is essential that the foods that are found in tourism destinations and food products made from them to be suitable for human health, to meet the dietary needs of people according to their lifestyle and to meet all health-related requirements(Cohen, & Avieli, 2004). Considering that the people who are involved in tourism are more of the industrialized cities, it can be said that the tendencies towards the products resulting from the health, diet and different nutritional needs of the consumption have increased. The demand for dietary and functional dishes that combine certain benefits in a common point is continually increasing (Palzer, 2009).

The Vegan / Vegetarian group is one of the most critical trends that implement these functional dishes and develops rapidly in the world. (Son, Güzin, & Bulut, 2016). This group includes all or part of the animal foods from their diet, which is defined as a lifestyle or consists of people who do not consume ethical or philosophical values and animal products. (Mendes, 2013). The distinction between vegetarians and vegans is linked with following strict rules, Vegetarians have varied types by the food they are consuming and Vegans, are individuals who do not consume any animal flesh or animal products (Markowski, & Roxburg, 2019). Among the reasons that people apply the Vegan/Vegetarian practices to their diets is mainly to respect the right to live. Different reasons are exhibiting an ethical viewpoint against the slaughtering of animals (Barrero Toral, 2016), resisting of the harm to nature, sustaining the health and preserving their religious beliefs (Tezcan, 1999; Onçel, Guldemir, & Yayla, 2018). Vegan/Vegetarian nutrition has different styles that people have determined and implemented according to their living standards (Vesanto, & Davis, 2003). Such styles are shown in Table 1.

| Vegetarian Styles    | Description                                                                 |
|----------------------|-----------------------------------------------------------------------------|
| Flexible vegetarians:| They are vegetarians, but they eat meat products periodically to sustain nutritional benefits of a balanced diet |
| Half vegetarians:    | They eat most of the animal products, but they bypass the red meat.          |
| Pescatarians:        | They nourish with dairy products, seafood, and eggs. However; they do not consume other animal products. |
| Milk and Eggs:       | They consume dairy and eggs but never eat the other animal produce           |
| Dairarians:          | Among all animal products, they only consume dairy.                          |
| Egg eaters:          | Among all animal products, they only consume dairy.                          |
| Raw Food:            | They eat everything uncooked, and they do not consume animal flesh.         |
| Fruitarians:         | They nourish with fruits, nuts, and seeds.                                  |

Vegan Styles

| Conformed Vegans:    | Even if they do not follow the dietetic rules very strictly, Those people like to share and spread the ideology behind veganism. They like to attend vegan related social events. |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Organized Vegans:    | They never consume or use any animal or related products. They defend animal rights, solidarity, equality and sustainability as a strict activist. They organize social group events and activism meetings. |
| Individual Vegans:   | They are the strict vegans who never present in the groups. They do not follow or attend any event. They do not have activist tendencies. |

Healthy Food and Food Preferences

As a natural result of tourism activities, tourist eats Eating away from home causes long-term weight gain (McCrory et al. 1999). To prevent such effects tourists tend to choose healthy foods by calculating the calory, sodium and examining the nutritional suitability of the food items. They are beginning to change their health perceptions (Ozdemir, & Çalışkan, 2015). In order to provide the energy that the body

Table 1. Vegan/Vegetarian Eating Styles

Source: Shani & DiPietro (2007), Fox & Ward (2008), Riviera & Shani (2010), Larsson et al. (2003).
can work with, people tend to eat healthy foods to consume fresh and locally grown foods such as fruits and vegetables and all vitamins and foods (Independent living Canada, 2008). In the field of foodservice, there is a new debate focusing that the consumers’ expectations in restaurants have a diversifying character through the prevalent health problems. Antun et al., (2010) have examined the critical domains of restaurant guests’ expectations which are determined by the most severe problems linked with health and healthy food, is one of the critical areas as well as food, service, atmosphere and social factors. In a selection of restaurant choices in the selection of consumers, health problems are the second most crucial factor affecting the behavior of consumers in choosing restaurants in South Florida. In this study, it is pointed out that the health problem should be examined under four factors such as low calorie, food that supports personal nutrition plan, whole food variety and nutritional value (Choi, & Zhao, 2010). Also, Myung et al. (2008) describe the choice of four types of food selection as expanded, repetitive, exploration and economical procurement. From this point of view, people are becoming more cautious about choosing healthy food even if they do not have a particular lifestyle or nutritional resources.

Existing Research on Tourism and Food-Related Barriers

An essential part of the studies on food barriers and lifestyle in the literature is aimed at examining the motivations underlying nutrition. However, some researchers addressed the food allergies, food intolerances, vegetarianism/veganism, local food, and healthy eating preferences of tourists through their travel and tourism experience. Among these subjects, food allergies and food intolerance researches are mostly focused on the knowledge of the hotel and restaurant personnel, their unwanted behavior to tourists having dietary restrictions (Christensen, & Borchgrevink 2005; Ahuja, & Sicherer, 2007; Borchgrevink et al. 2009). According to Sverker, Hensing and Hallert (2005), the restricted diet and lifestyle associated consumers may feel isolated or ashamed because of the inappropriate behavior of the workers. Therefore allergic or lifestyle eating based travelers may change the thoughts of their family to access safe food with a better presentation. (Roma et al., 2010; Bordelon, 2016).

The literature linked with Vegan and Vegetarian travel has focused on vegan tourist motivations and tourist demands. Vegan tourists were often having difficulties with finding the appropriate food to support their dietary preferences. It is mainly as a result of chefs or waiters who want to sell food. Servers present the items incorrectly ends up the vegans taste meat products in a dish and feels like cheated (Kansanen, 2013). In a study conducted to investigate the suitability of the local foods to the diet and lifestyle, which are useful in choosing a destination, the vegetarian tourists are not satisfied with the taste and quality of the dishes served at different destinations (Son, & Xu, 2013, p. 253).

Moreover, for vegetarian individuals, it was observed that there were no separate menus in most of the hotel businesses and the expert cooks were not employed in the preparation of vegetarian food (Ikiz, & Solunoglu, 2018). Barrero Toral (2016), in his study on tourists participating in cruise tourism; vegan menus in restaurants at the cruise ship are not efficient enough to cater to the needs of vegan tourists. Most of the Vegan tourists eat what they have brought with them during the trip and seem to leave the ship with dissatisfaction. Such incidents make vegan tourist plan carefully at the beginning of the activity and have more demanding traits than the other tourists throughout the quality of establishments (Kansanen, 2013).

Recent years some studies are stating that the local food became a junctor within the ethics, health, lifestyle, and food-related barriers. For instance, Ceylan and Guven (2018) researched the recognition of local dishes in the province of Kutahya, even though most of the local dishes are known, these dishes were not included in the menus, and the most soups were included in the menus. The most important reason for not giving too much space to local food menus is that the enterprises make purchases of raw materials from large grocery stores and these grocery products are composed of semi-ready standard items (Hatipoglu et al., 2013).

Method

The purpose of the study is to reveal the problems of travelers having a food allergy, healthy food preferences, and diverse nutrition styles during their tourism activities. In addition to what extent the recent trends in gastronomy are reflected in the production and operation processes affect such travelers during their vacation have been determined as secondary objectives. The qualitative research methodology was deemed most appropriate, through the use of open-ended questions in a question form. Question
form consists of a demographic question, four questions related to the research subject, and one additional comment space (see table 2).

The aim of using qualitative analysis technique in the study is to show a vivid and rational picture to the reader about the subject researched and to present the views and experiences of individuals directly to the extent possible. This type of methodology provides the opportunity to engage complicated issues while retaining the ability to reduce them to their essence (Bernard & Bernard, 2013). The data obtained by these question forms were analyzed by content analysis. Content analysis is used in the social sciences to investigate diversified schemes of conversations, stand on written evidence (Vitouladiti, 2014; Camprubí & Coromina, 2016).

### Table 2. The Question Form of the Study

| Demographics | Questions | Additional Comments |
|--------------|-----------|---------------------|
| Name | 1. What are your problems with your eating preferences in tourism or leisure activities that are the subject of outdoor dining? | 5. Can you tell us about the other things you want to add in this section? |
| Age | 2. What are the approaches of restaurant staff towards you regarding your nutrition preferences? | |
| Sex | 3. Which precautions should be established to cater to the needs and wants of different food preference guests? | |
| Profession | 4. What improvements need to be achieved at the operations of F&B to eliminate the food preference problems? | |
| Educational Background | | |
| Nutrition or Eating Style | | |
| Eating establishments Preferred | | |

Purposive sampling is used in the study. It is an approach utilized in qualitative research. It provides an adequate use of narrow means to describe and collect prosperous data cases (Patton, 2002; Creswell & Clark, 2017). Since the study focuses on the sensitive subject and entering such organizations can be complicated (Okumus, Altinay, & Roper, 2007), question forms sent to the related associations like “Turkish Vegan Groups” and “Turkish Celiac and Pku Friends” through e-mail. The data collection took over four months between November 2018 to March 2019. In qualitative research, the required sample size may best be determined by suitable factors including the time, resources and objectives concerning the research (Mason, 2010). In light of such a rationale, the researcher found points of additional academic guidance for a suggested minimum of 15 people (Flick, 2014).

Question forms are prepared by using the information gathered from the existing literature and by asking the experts related to different disciplines such as a food engineer, a doctor who is a vegan, a tourism professor and an executive officer working in a Celiac Ngo. The study conducted in the Turkish language and then translated to English with the help of two academic English teachers. A total of 16 participants, within an age range between 16 to 58 (Mean: 34.5), found eligible to be analyzed in the study. In terms of food allergies and food preferences, Celiac patients have superiority (44%), followed by Vegetarians (31%) and Vegans (25%). Among the 5 Vegetarian participants, two of them have food allergies such as peanut allergy and Lactose intolerance. The majority of them were White-collar workers (62.5%), followed by students (25%), and blue-collar workers (12.5%). Their education level ranged from a minimum of high school (25%), then to bachelors degree(18%), followed by master degree (32%) and Ph.D. degree (25%). Further details of the participants are presented in Table 3.
Table 3. Socio-Demographic Descriptions of Interviewees

| No | Age | Sex  | Profession  | Education  | Eating Preference      |
|----|-----|------|-------------|------------|------------------------|
| 1  | 16  | Male | Student     | High School| Celiac Patient         |
| 2  | 36  | Female | IT          | MBA        | Celiac Patient         |
| 3  | 58  | Male | Lawyer      | MA         | Vegan                  |
| 4  | 54  | Female | Dentist    | MA         | Celiac Patient         |
| 5  | 43  | Female | Academics  | PhD        | Vegan                  |
| 6  | 33  | Male | Academics  | PhD        | Vegetarian             |
| 7  | 26  | Female | Student    | BA         | Vegetarian             |
| 8  | 21  | Female | Student    | BA         | PeanutAllergy/Vegetarian|
| 9  | 37  | Male | Farmer     | High School| Celiac Patient         |
| 10 | 35  | Male | Academics  | PhD        | Celiac Patient         |
| 11 | 17  | Female | Student    | High School| Celiac Patient         |
| 12 | 40  | Female | Finance    | PhD        | Vegan                  |
| 13 | 22  | Male | Mechanics  | High School| Celiac Patient         |
| 14 | 45  | Female | Finance    | MA         | Vegetarian             |
| 15 | 28  | Female | Accountant | BA         | LactoseIntolerant/Vegetarian|
| 16 | 42  | Male | Real Estate | MBA        | Vegan                  |

The data collected with question forms filled by the respondents are analyzed through computerized qualitative Data analysis program by word counting and visualization analysis. The research process from data to dimensions are shown in Table 3. Analyzing process with data coding is accomplished with a qualitative analysis package program. The coding process consisted of three steps. The data divided and coded by sentences, reduced of 138 initial codes at the first step. The second step consisted of choosing the most important and constant initial codes to categorize the data into a powerful analytic image. This step is a detailed analysis of the codes in which resemblances, enhancements and refinements are performed. Subsequently, Three dimensions found from the analysis process as; Acceptance & Empathy, Education & Training, and Ethics & Sustainability. Third Phase is to complete by connecting the data found and the literature to provide solutions to the existing problems. A detailed process including, coding, themes and the dimensions found are presented in Table 4.

Table 4. The Process of Data Analysis

| Data                                           | Coding                                                                 | Themes                                | Dimensions                         |
|------------------------------------------------|------------------------------------------------------------------------|---------------------------------------|------------------------------------|
| Food-related barriers to Gastronomy and Tourism | Alienation, Exclusion, Insulation, Humiliation socialize, together, isolation, Shame, Guiltiness | Emotional Manipulation, Social Acceptance, Loneliness. | Acceptance and Empathy              |
|                                                | Knowledge, Incapabilities, skills, creativity, Cross-Contamination, Permanency, commercial, lack of inspiration, lack of variety. | Education and Training, tourism workers tendencies, research, and development. | Education and Training              |
| Findings                                       | Environment, animal suffering, respect, mass production, future, pollution, High Prices, Rip off, Cheating, weak promotion, availability, deceptive advertising. | Ethical Considerations, Sustainability, Price, Manufacturing skills, Promotion, and Demand. | Ethics and Sustainability           |

Data gathered from the study reveals that three critical dimensions affect the experience that food allergy/intolerance and food preference of the participants. These dimensions are explained with the interpretations of participants in this section.

Acceptance and Empathy

In connection with a person who has a specific disorder or has a different lifestyle than individuals own, one may feel an enhanced sense of perception encompassing their own lifestyle choices. Sometimes this manifests into a fear that one person is judging to others, which then lead to a feeling of isolation or exclusion (Edwards, 2013). Respondents explain their opinions in this situation as:

*I usually bring my food when I go out to hang out with friends. When they eat a juicy hamburger, I envy it. Those are the times I feel insulated and lonely (Respondent 2).*
I do feel alone sometimes in a room of people who are eating food I can not (Respondent 10).

People do not care about my disease; I had to bring my food to the class when I was at school. Many kids were continuously humiliating me because I was not able to eat regular food. It is so hard while you are a kid. I felt ashamed and insulated most of the time back then (Respondent 1).

One of the reasons that I dropped out of school is that some students were making fun of my disease. I was feeling very lonely and sad. I work as a mechanic in a factory now. People do not understand my situation at first, but then they accept me as who I am (Respondent 13).

Past behavior, insufficient knowledge, and hearsay information of people may reflect as contingent practice in daily life. Even though they do not intend to be cruel, the words, mimics, and reactions they are using may hurt the others. Such behavior or actions lead that some of the participants constitute their complaints as:

Polemics and their pseudo-harassment can become a problem, especially with people I travel (Respondent 5)

People, especially the staff at the restaurants, think that being Vegan is a new trend or more like a lifestyle. They treat me like I am coming from outer space when I say I do not eat meat. Especially the waiters insult me by looking with a mean face. That feels very ashamed. That is because I stopped going to non-vegan establishments (Respondent 3).

Being offered a cake in a hotel as they realized that it is my birthday. I could not eat it. I feel ashamed of being celiac sometimes because declining food or a gift is very disgraceful in my culture (Respondent 4).

I never judge anybody because s/he eats meat or uses animal products. However, especially at restaurants, people tease me because I am a vegetarian. This alienation and exclusion direct me to hang out with vegetarian or vegan friends in a friendly environment. I will never go to a typical restaurant again (Respondent 7).

Education and Training

Education and training of the staff working in various tourism establishments became an essential dimension in the findings of the study. Professional knowledge of the staff and working practices may cause severe sickness within the customers having a food intolerance and the food allergy. This phenomenon is identified by respondents as;

I have to be careful in a restaurant because of the practices of staff. I can get sick in situations like cross-contamination (Respondent 11).

Chefs use the same grills for cooking vegan and for preparing meat dishes. It feels disgusting to me (Respondent 5)

I think most of the diners who have gotten food-borne illnesses at food establishments because of the staff do not take their job effectively (Respondent 4).

My sister has spent more than one night in the emergency room in a life-threatening situation because a restaurant did not understand that her peanut allergy was something that needed to be taken seriously (Respondent 8).

Professional knowledge is also associated with cooking skills and inspiration of kitchen staff. Research and development of new recipes and unique menu items is also a crucial factor which attracts both groups of customers since it is hard to find haute cuisine. Four of the respondents expressed their feelings about the issue as:

Having gluten-free ingredients is not enough to ensure that gluten is not making its way into the food. It should be cooked totally in another section of the kitchen (Respondent 9).

Vegan food can be more than just an olive oil starter or stuffed grape leaves (Respondent 16).

Chefs usually serve what is available on the menu; there is no inspiration and new product development (Resp. 12).

I visited a Celiac friendly restaurant in the UK last year. There were tons of different variety of dishes. I can not find this in Turkey. Chefs need to have respect for my disease (Respondent 2).

In a restaurant setting both servers and the chefs need to take care of their customer’s needs and wants. However, when the customer’s sickness or preferences are different from the others, it seems the
restaurant staff has difficulties in dealing with the current demands. This situation explained by the respondents as:

1. **The biggest issue I struggle is that restaurant servers do not understand the contrast among the presence of celiac disease and going gluten-free as a lifestyle choice. Even if it is a lifestyle choice, the staff needs to have respect for preferences (Resp. 10).**

2. **It is pathetic to make fun of people with the disease, disability, or preferences. Last year I went to a holiday resort, and I ate only salad. The kitchen staff was very rude to my vegetarian preferences (Respondent 14).**

3. **Restaurant staff thinks that Vegan or Vegetarian is related to a permanent ideology or a fashionable trend (Respondent 6).**

4. **When the restaurant staff is not trained and trying to help, they usually give many rubbish suggestions from the menu, or they try to criticize my preferences (Respondent 5).**

**Ethics and Sustainability**

Both Vegetarian, Vegan, and Food allergy respondents addressed to the same point to solve their problems within the tourism and restaurant industry. They complain about the sincerity and trustfulness of the marketers both within the Tourism and restaurant industries. Four of the respondents expressed their feelings as:

1. **I have ethical reasons to be a vegan. I can not see when an animal is suffering. It seems that most of the professionals working in hospitality are not familiar with the vegans and their reasons to live on those manners (Respondent 16).**

2. **Vegan is healthier and more environmentally. I started to observe that some young generation restaurant owners started to think about environmental ethics and ecology, which I hope will spread to all our country in the future (Respond. 12).**

3. **As a celiac patient, I can always bring my food to any place that I visit. Sometimes companies start promotions for us, especially when the economy slows down. The promotions are not enough and well-characterized (Respondent 10).**

4. **Food allergies become a severe fact that the restaurant owners need a consistent strategy to support the sustainable solutions of the problem (Respondent 15).**

Tourism and manufacturing companies started to add nutrition-related expressions to cater to the needs of customers and to maximize the attraction. Some of them are “light,” “organic,” Gluten-Free,” or “Vegan-Label.” Most of the respondents have the same complaints regarding the marketing of products. Six respondents stated them by having different sectoral examples:

1. **Restaurants started to put vegan or vegetarian items on their menus. However, they usually think spinach cooked with chicken stock is a vegetarian. They need serious nutrition training (Respondent 7).**

2. **To attract food allergy or celiac customers, hotels advertise their “Gluten-friendly” menus, but whenever I order something, I understand that it smells weird and risky to my stomach (Respondent 9).**

3. **I tried a variety of different brands for “Gluten-free Pasta” sold at the supermarkets. However, still, have not found a real one (respondent 1).**

4. **Establishments take advantage of celiac disease by adding menu items that are “Gluten-free.” It is a matter of health, not a marketing tool (Respondent 4).**

5. **Hotels or Restaurants use “Vegan Label” to promote their products and to maximize their sales (Respondent 12).**

6. **Producers started to promote with vegan junk food like vegan hamburgers which is totally against the idea of veganism (Respondent 16).**

**Discussion**

It is imperative to recognize its connotations from both stakeholders perspectives to understand the significant grants of the present study. On the focus of staff and the people who have general eating preferences, it is always hard to get used to adapt to the changing environments. New styles and the necessity to change the existing habitus of the staff can be struggling through the entire process.
From the viewpoint of acceptance and empathy, the present research showed that uncontrolled behavior of ordinary customers to the health-conscious travelers is ruthless. Many malicious behaviors are affecting travelers decision and perceptions through their eating experiences. Such tendencies cause problems of loneliness, isolation, shame, and guiltiness. In order to prevent such incidents, media channels shall be used to teach about the most common disease and preferences related to food. Moreover, online articles, blogs, and the omnivorous public media views veganism as “aesthetic” experience, over-sensitive to the situations, physically and mentally weak personal choice which leads this phenomenon called as “vegephobia” (Potts, & Parry, 2010; Cole, & Morgan, 2011). Such incident is also associated with conservatism within the people who follow the majority food choices which cause behaving others disrespectfully along with marginalizing them (Hudson, & Earle, 2018). This adverse treatment needs to be changed and only when people start to respect others choices.

The findings revealed that the inadequacy of competence among the staff become evident in multiple cases. The chronic problem linking with the lack of knowledge and skills necessary to prepare various styles of eating has become a chronic issue and remains as a cold case unit of today’s tourism and hospitality establishments (Bacon, & Krpan, 2018). Among those multiple causes, the first case is methodological cooking skills, including hygiene and sanitation. Both Vegan/Vegetarian and Celiac travelers usually cautious about the cross-contamination with different angles (Comert, & Durlu Ozkaya, 2014; Sunnetcioglu et al. 2017). To get rid of these problems, gluten, and gluten-free operations must be separated. Thus can also be applied to vegetarian groups by dividing the meatless or gluten-free working stations. The second case within the skills and knowledge of the staff is creativity. Chef’s creativity and skills around presentation usually portray the knowledge gained from previous recipes which the cooking techniques and various reactions based on specific ingredients such as meat or gluten.

Working with vegetable products without iron or not enough protein (Lean, & Worsley, 2001) or finding a gluten-free substitute thickening agent for the sauce (Oliveira et al. 2014). In addition there is a broad consensus on the idea that plant-based diets do not provide the absolute fulfillment in the stomach (Reipurth et al. 2019). Such reasons may prevent chefs from changing their habitual cooking styles (Shani, 2010). Moreover, the last, the third case is the behavior of tourism-related food and beverage personnel. Their lack of knowledge and continuous offers from the menü create dissatisfaction on both vegan and celiac customers. Such attitudes of personnel to offer from the menü provoke the ambivalence in customers (Povey et al. 2001). One can argue that the knowledge of personnel in celiac disease directly affects the behavior it is patients negatively. Patience and the practice must be controlled throughout the training of the restaurant workers to avoid such problems.

One of the most important findings of the study is ethics and sustainability. While meat or gluten eating diet followers are content with the menu items, Celiac patients, Vegetarians, and Vegans are having trouble to find the appropriate and accurate food items on the menus. Also, accuracy based problems occur occasionally in tourism establishments (Wilson, 2004; Thomas, & Mills, 2006). These obstacles are seen in various ways as playing with the words on the menu and ingredients (Lerner et al. 2019), consistency with the labels used (Corcoran et al. 2001), offering very limited options and unappetizing food for people who don’t eat meat, adding inappropriate items to the dishes (Kansanen, 2003). Such incidents are the forms of cheating experienced by the respondents of the present research. It can be deducted from the study that as the restaurants may see the disability customers as a financial benefit and they may not realize the harmful effects of cheating. To prevent such technical attempts, the tourism ministry of the Republic of Turkey shall control the establishments more carefully. New legislation with intimidating penalties should be transferred into practice. Such legislation should examine having tourism establishments and restaurants maintain the knowledge relating to allergies and food preferences which consumers worry about. The offered legislation shall also be involved with the sustainability which is a common concern of patrons both having a food allergy and vegan/vegetarian food preferences. For instance, such food-barrier relating groups are more sensitive to environmental concerns which are associated with their daily diets and healthy living concerns (Fox, & Ward, 2008; Greenbaum, 2012).

Conclusion

The present work indicates that travelers encounter a wide array of problems during their gastronomy and tourism-related experiences. Such experiences create food-related barriers to tourism and the restaurant business in general. Acceptance and Empathy is the first factor gained from the study. The impacts of acceptance continue through the lifetime of both groups, which is a reason for the complexity
of individual behavior. The current study has also highlighted the facets linked with education and training by displaying their priority in food barriers travelers’ preferences. From professional cooking techniques to methodological knowledge of staff need to be developed, and new applied courses shall be taught to gastronomy and tourism staff.

The growing tourist expectations for different food varieties and the real food-related barriers leads the stakeholders of the tourism sector to search and develop new business opportunities. It can be observed from the study that while catering the needs of travelers entrepreneurs shall consider the ethical and environmental concerns by provisioning the sustainable products and services. Today the world economy becomes more integrated; the expectations of travelers change drastically. Moreover, lifestyles and health conditions transform new paradigms through the development of technology. Thus, further studies need to investigate the physical features of on-going transition and shifting character of the current products.

Further studies may focus on different dimensions of the phenomenon. The results of this research have clues that food-related barriers and dietary problems have strong ties within destination competitiveness, pro-poor gastronomy, tourism education and inter-personal relationships among the employees. Moreover, new studies may use more creative qualitative methodologies, such as Photo-Voice or NeuroGastronomy, to explain the paradigms related to food barriers and diet preferences in Tourism and Gastronomy.

**Ethical Declaration**

In the writing process of the study titled “Food-Related Barriers to Gastronomy and Tourism: The Role of Food Allergies and Diet Preferences”, scientific, ethical and citation rules were followed; No falsification was made on the collected data and this study was not sent to any other academic media for evaluation.

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TÜRKÇE GENİŞ ÖZET

Gıda bağılı engeller turistlerin seyahat deneyimi strasında yaşam kalitesini etkileme ve bu tür kısıtlamalarla ilgili sorunlar, farklı turizm işletmeleri nezdinde yaygın olarak artmaktadır. Gıda ile ilgili engeller gıda alerjileri, gıda intolerałarı ve sağlıklı yaşam tarzları olarak üç gruba ayrılabilir. Gıda ile ilgili farklı koşullara veya yaşam tarzlarına sahip olan turistler, tatillerinde uygun gıda maddelerini bulma kısıtlamalarla ilgili sorunlar üzerine bir araştırma. Food-related barriers to gastronomy and tourism: The Role of food allergies and diet preferences.
engeldir. İyi ve sağlıklı yaşam meraklıları arasında popüler hale gelir. Ayrıca, artan etik ve ekolojik kaygılara birlikte, Vegan turistler sağlıklı yaşam hakkında yerel gidalar aramaktadır.

Gıda servisi yapan Turizm işletmeleri, gıdaya yönelik engellerden en çok etkilenen yerler arasındaki gidaya bağlı engellerin bilinirliği (Borchgrevink ve diğerleri, 2009; Lee ve Sozen, 2016), çalışanların farklılıkları (Pratten ve Towers, 2003), sektörve düzenlemeleri (Bordelon, 2016), gibi alanlara ağırlık verilmiş olmasına rağmen turistlerin tatillerinde sahip oldukları gıda engelleriyle ilgili sorunları nasıl çözümlerleri ile sektörün etik kaygılarla ne kadar uyumlu olduğu konusunda sınırlı araştırma vardır.

Çalışmada Nitel araştırma metodu kullanılmıştır. Açık uçlu soruların bir soru formu olarak kullanılması uygun görülmüştür. Araştırmada amaçlı örnekleme kullanılmıştır. Bu örnekleme türü, nitel araştırmada, sınırlı kaynakların en etkin kullanımı için bilgi yönünden zengin vakaların belirlenmesi ve seçilmesinde yaygın olarak kullanılan bir yaklaşımdır (Patton, 2002). Ayrıca amaçlı örnekleme istisnai bir durum hakkında belirlenmesi için ayrıntılı bir işlemdir (Cresswell ve Clark, 2017). Çalışma hassas bir konuya odaklanmıştır ve bu tür hassas organizasyonlarla girmek karmasık olabileceğinden (Okumus, Altnay ve Roper, 2007), “Türk Vegan grupları” ve “Türk Çölyak ve Pku Dostları” gibi ilgili derneklerle c-posta yoluya gönderilen soruları değerlendirilmiştir. Veriler toplanma işlemi Kasım 2018 - Mart 2019 arasında gerçekleştirilmiştir.

Çalışma sonuçları gezginlerin gastronomi ve turizmle ilgili deneyimleri sırasında çok çeşitli sorunlarla karşılaştıklarını göstermektedir. Bu tür deneyimler, turizm ve genel olar açıdan gıda ile ilgili engeller yaratmaktadır. Çalışmadan elde edilen ilk faktör kabul etme ve empatidir. Kabul etmenin etkileri, bireysel davranışların karmaşıklığının bir nedeni olarak önlenen bir nedeni olan her iki grubun ömrünü boyunca devam etmektedir (Patton, 2002). Ayrıca kabul örneklemesi ve sertifikalı bir hizmet olarak da düşünülebilir ve teknoloji acenteleri ve coğrafi hizmetlerde (Ortalama: 34,5) bulunmaktadır. Yiyiçek alerjileri ve yiyiçek tercihleri açısından Çölyak hastaları (% 44), vejetaryenler (% 31) ve Veganlar (% 25) önemlidir. 5 Vejetaryen katılımcı arasında, ikisinde yer fıstığı alerjisi ve Laktoz intoleransı gibi gıda alerjileri olduğu görülmüştür. Katılımcıların meslekleri ise beşyaz yakalı işçiler (% 62,5), öğrenciler (% 25) ve mavi yakalı işçilerdir (% 12,5). Eğitim düzeyleri en az lise (% 25), ardından lisans derecesi (% 18), ardından yüksek lisans (% 32) ve doktora derecelerine kadar değişmiştir (% 25).

Araştırmının sonuçu gezginlerin gastronomi ve turizmle ilgili deneyimleri arasında çok çeşitli sorunlarla karşılaştıklarını göstermektedir. Bu tür deneyimler, turizm ve genel olarak restoran isteklerinde gıda ile ilgili engeller yaratmaktadır. Çalışmadan elde edilen ilk faktör kabul etme ve empatidir. Kabul etmenin etkileri, bireysel davranışların karmaşıklığının bir nedeni olarak önlenen bir nedeni olan her iki grubun ömrünü boyunca devam etmektedir. Mevcut çalışma aynı zamanda eğitim ve öğretimle ilgili niteliklerin rolünü altına almış ve gezginlerin seçiminin yönlendirmeye önemini göstermiştir. Profesyonel pişirme tekniklerinden personelin metodolojik bilgisine kadar tüm öğeler tekarda ele alınmalı, geliştirilmeli ve gastronomi ve turizm personeline yeni uygulamalı dersler verilmelidir. Farklı gıda çeşitleri için artan turist beklentileri ve gıda ile ilgili gerçek engeller, turizm sektörünün paydaşlarının yeni iş fırsatları aramasına ve geliştirmesine neden olmaktadır.

Çalışmadan elden eden bir diğer sonuç ise, gezginlerin ihtiyaçlarına karşılık gelen çözmelerin sürdürülebilir ürünlerin ve hizmetlerin sununun etki ve çevresel kaynaklar göz önünde bulundurulması gerektiğiıdır. Bugün dünya ekonomisi daha bütünleşmiş hale gelmek ve turistlerin beklentileri büyük ölçüde değiştiği gözlenmektedir. Dahasi, yaşam tarzları ve sağlıklı koşulları, teknolojinin gelişmesiyle ortaya çıkan yeni paradigmalar üzerinde daha fazla araştırma yapılmalıdır. Söz konusu dejisimin yaratığı fiziksel özelliklerin ve yeni ürünlerin değişen karakterini araştırmaya ihtiyaç duyulmaktadır.