

Marina Tomić Maksan, PhD

Postdoctoral Researcher
University of Zagreb
Faculty of Agriculture
Department of Marketing in Agriculture
E-mail: matomic@agr.hr

Kristina Deronja, mag. ing. agr.

Master student
University of Zagreb
Ms programme Agribusiness and Rural Development
Faculty of Agriculture
E-mail: kristinaderonja0208@gmail.com

Milna Tudor Kalit, PhD

Assistant Professor
University of Zagreb
Department of Dairy Science
Faculty of Agriculture
E-mail: mtudor@agr.hr

Željka Mesić, PhD

Assistant Professor
University of Zagreb
Faculty of Agriculture
Department of Marketing in Agriculture
E-mail: zmesic@agr.hr

FOOD NEOPHOBIA AS A DETERMINANT OF CONSUMER BEHAVIOUR IN ETHNIC FOOD CONSUMPTION

UDC / UDK: 366.1:392.8:640.43

JEL classification / JEL klasifikacija: D10, D12, Q11

Preliminary communication / Prethodno priopćenje

Received / Primljeno: September 21, 2019 / 21. rujna 2019.

Accepted for publishing / Prihvaćeno za tisak: December 4, 2019 / 4. prosinca 2019.

Abstract

Since ethnic food consumption has proven to be a fast-growing food trend, this study examines the impact of food neophobia on consumer behaviour in ethnic food consumption. The aim was also to identify consumers' motives for visiting an ethnic food restaurant, the importance of certain attributes of ethnic food in restaurants, and consumers' attitudes towards ethnic food. Study was conducted

via an online questionnaire on a sample of 230 consumers in Croatia. Statistical analysis included univariate, factor and bivariate analysis (SPSS, version 21). Based on the level of food neophobia, two groups of consumer segments were identified: food neophilic and food neophobic consumers. Food neophilic consumers are more motivated to visit an ethnic food restaurant in order to meet new flavors and new cultures. Also, they have more positive attitudes towards ethnic food compared to food neophobic consumers. Respondents with higher level of food neophobia consider origin to be a more important attribute of ethnic food as compared to those who have lower food neophobia level. Since food neophobia has influence on consumer's preferences toward ethnic food in restaurants, it is an important issue for ethnic food restaurant sector and ethnic food marketers.

Keywords: *food neophobia, ethnic food, restaurants, consumers*

1. INTRODUCTION

With the increasing tourism, migration of world population and trade, there is high increase of ethnic food market. Furthermore, consumers interest in ethnic food grows (D'Antuono & Bignami, 2012; Choi et al., 2018) because consumers seek new food experience and diversity in their diets (Bell et al., 2011). Mintel (2011) found that media (cooking programs, culinary magazines and recipe websites) also have influence on ethnic food market trend. Growing interest in ethnic food on the global level is supported by the recent report by the National Restaurant Association (2015), which showed that 80% of American consumers eat at least one ethnic cuisine per month and two thirds of them eat a wider variety of ethnic cuisines. Moreover, there has been an increase in the organization of the international food festivals, where cuisines from all over the world are presented and tasted by the public at large (Mordor Intelligence, 2018).

Modern busy lifestyles make dining out more common, and ethnic food restaurants are interesting options to many consumers. This trend can be explained by increased consumer interest in food which is caused by higher income, improved living standards (Min, 2016) and convenient lifestyle (Dohee, 2018). According to Strickland (2013) ethnic food restaurant is defined as one that prepares and sells food that is geographically, historically or ethnically linked to a culture that is perceived as distinct. Marinkovic et al. (2015) defined ethnic restaurants as restaurants whose offer is solely concerned with the cuisine/dishes of one country/area combined with an authentic dinning setting mainly consisting of physical artefacts found in that country/area. Main motive for consumers to visit an ethnic food restaurant is that they can eat food from another country without visiting it. So, ethnic foods provide consumers from other culinary traditions opportunities to experience new cuisines (new flavors) and cultures (Dwyer & Bermudez, 2003; Sukalakamala and Boyce, 2007). Similarly, Jang et al. (2012) noted that consumers dining at an ethnic restaurant would like to have unique foods and experience different cultures through the dining experience. Previous research showed that consumers eating in ethnic food restaurants look for an

ethnic ambiance and that restaurant authenticity plays an important role in generating overall satisfaction for consumers (Bell et al., 1994; Gaytán, 2008).

For ethnic food restaurant managers, it is very important to know which food attributes are most important for consumers in order to provide greater priority to those attributes. Previous studies identified food taste and appearance (Verbeke and Lopez, 2005), service quality (Qu, 1997; Thongyim et al., 2011; Ryu et al., 2012), price and convenience (George et al., 2007), price and value ratio (Qu, 1997) as important attributes in determining preferences for different ethnic foods.

Food attitudes are important factor in individual's food choice and predict food related behaviours (Birch, 1987; Galef, 1988; Rozin, 1988). Earlier study by Tomić et al. (2018) found that attitudes play an important role in consumer ethnic food consumption behaviour. Consumer attitudes toward ethnic food have become more positive because of the following: 1) increasing availability of ethnic food restaurants (Lee et al., 2014; Fanelli and Di Nocera, 2018); 2) specific ethnic food images, such as "healthy," "fresh," and "authentic" (Lee et al., 2014); 3) wish to learn about a different culture (Sukalakamala and Boyce, 2007); 4) growing concern about the nutritional value of ethnic foods and increasing awareness of healthy eating in general (Leung, 2010).

Previous studies identified also other important factor which have influence on ethnic food consumption. One of them is food neophobia. Food neophobia is defined as one's reluctance to eat and/or avoid novel foods (Pliner & Hobden, 1992). According to Camarena et al. (2011) food neophobia level has a marginally increasing influence on the decision to reject ethnic food consumption.

Research about role of food neophobia as a determinant of consumer behaviour in ethnic food consumption is still in its infancy even though psychological variables are important determinants of consumer behaviour and investigating the role of these variables would help in developing effective and efficient ethnic food marketing strategies.

Therefore, the purpose of this study was to identify how food neophobia influence consumers' behaviour in ethnic food consumption. The specific objectives of this study were to (1) test food neophobia scale and group respondents according to the food neophobia level; (2) to investigate key motives to visit an ethnic food restaurant and their relation to food neophobia; 3) to determine importance of certain attributes of ethnic food in restaurants and their relation with food neophobia; and 4) to explore attitudes towards ethnic food and their relation with food neophobia. The findings of this study are significantly important to the ethnic food restaurant industry.

2. LITERATURE REVIEW

2.1. Food neophobia

Food neophobia is a characteristic of omnivorous animals, including humans. Therefore, rejection to eat unfamiliar foods has its roots in the animal instinctive desire to survive by avoiding possible dangerous and life threatening food sources (Frewer et al., 2001; Shepherd & Raats, 2006; Guidetti et al., 2018). There is considerable interindividual difference in peoples' willingness to try novel foods, with some individuals showing great pleasure in eating novel foods and others showing strong fear and rejection to them (Ritchey et al., 2003).

Based on the assumption that food neophobia is a personally trait Pliner and Hobden (1992) developed Food Neophobia Scale (FNS) that is consisted of 10 agreed or disagreed statements. Numerous studies have applied FNS to research factors influencing the reluctance to eat and/or avoid novel foods which include gender, age, education level and type of food. FNS has been used and validated in several previous studies (Fernández-Ruiz et al., 2013; Stratton et al., 2015).

Guidetti et al. (2018) stated that measuring individuals' level of food neophobia is a critical task since it can negatively affect diet variety and quality. Greater child food neophobia is significantly associated with greater dietary risk in early childhood (Bell et al., 2018). Maiz and Balluerka (2016) research showed that neophobic children and adolescents have a poorer quality of Mediterranean diet, due to a lower intake of fruit, vegetables, and fish as well as a higher intake of sweets or candy. Similar consequences have older adults (>65 years), those with higher neophobia are at greater nutritional risk (Soucier et al., 2018).

According to Pliner and Hobden (1992) individuals can be categorized on a food neophilia - neophobia continuum, depending on their propensity to willingness to try novel foods. People with less neophobia are more likely to accept unfamiliar food, in this case ethnic food, while those with higher neophobia scores tend to avoid or reject novel foods. This confirms study by Choe and Cho (2011) who found that food neophobia predicted the willingness to try non-traditional ethnic foods in Korea.

In previous studies demographic and socio-economic variables were used to segment ethnic food restaurant consumers (e.g. gender, education, income, age, or ethnicity) (Kim et al., 2009; Honkanen, 2010; Hwang et al., 2015). In addition to the demographic and socio-economic variables it is also necessary to collect data about the social-psychological variables (e.g. values, lifestyle, personality, preference) (Camarena & Sanjuán, 2009; Camarena et. al, 2011; Choe & Cho, 2011). Camarena and Sanjuán (2009), for example, have examined the influence of three psychological variables as possible sources of rejection of ethnic food: personal values, food neophobia, and the ethnocentrism level. They found that the probability for a consumer deciding not to choose ethnic food increases in the segments defined as a relatively more food neophobic, ethnocentric and

focused more towards personal development rather than socialization. Same results were achieved by Camarena et al. (2011), where they concluded that consumer ethnocentrism and food neophobia have an important impact on the decision to consume ethnic food. Increase in both character traits (food neophobia and ethnocentrism) have increasing influence on the decision to reject ethnic food consumption.

3. MATERIAL AND METHODS

3.1. The survey

An online survey with 230 Croatian consumers older than 18 was conducted in 2017 (from March until May). The questionnaire was tested before starting the survey on a small sample of consumers (n=20) in order to test the appropriateness and the clarity of the questions. The survey link was sent to the respondents via e-mail and it was posted on private Facebook pages. An on-line survey was created using the Google Forms tool. At the beginning of survey the respondents were acquainted with its purpose. The time required for each respondent to complete a questionnaire was about 5-7 minutes. In this research, the snowball sampling method was used to recruit participants. In the snowball sampling technique each of the individuals in the first stage is asked to name different individuals (Goodman, 1961). In this research, few consumers were recruited in the first stage and they were asked to recommend additional respondents.

3.2. Questionnaire

The survey consisted of the following parts: 1) key motives to visit an ethnic food restaurant; 2) the importance of certain attributes in ethnic food restaurants; 3) food neophobia scale; 4) attitudes towards ethnic food and 5) sociodemographic characteristics.

Participants were asked about key motives to visit an ethnic food restaurant (curiosity, introducing new cultures and new flavors, hanging with family members/friends and convenience), whereby respondents could choose yes or no for every motive. Motives that were used in this study were already identified as important motives for ethnic food consumption in earlier studies (Verbeke & Lopez, 2005; George et al., 2007).

They were also asked to evaluate the importance of different ethnic food attributes in restaurants (taste, price and quality ratio, price, origin/country of origin, service, appearance). Ethnic food attributes used in this survey were already determined in previous study related to ethnic food (Dwyer and Bermudez, 2003; Gaytán, 2008; Jang et al., 2012; Jang, 2017; Dohee, 2018). The importance

of certain ethnic food attributes in restaurants was measured on a 5-point scale ranging from 1 - totally unimportant attribute to 5 - very important attribute.

Food neophobia was measured with FNS taken from Pliner and Hobden's (1992). The internationally validated FNS consisted of 10 items that were measured using a 5-point Likert scale (1=completely disagree, 2= disagree, 3= neither agree, nor disagree, 4= agree, 5=completely agree). The scores for items 1, 4, 6, 9 and 10 (Table 2) were reversed. The FNS scores ranged from 10 to 50, with a higher value indicated greater food neophobia.

The attitudes towards ethnic food were measured by a set of eight items that were created for the purpose of this research, for which the respondents showed a level of agreement on the five-point Likert- scale (1-completely disagree, 5-completely agree). The scores for items 2 and 8 were reversed.

At the end of the questionnaire there were sociodemographic variables related to gender, age, education, income and employment status. Additionally, participants were asked if they consume ethnic food.

3.3. Data analysis

All statistical analyses were conducted using the SPSS, version 21 with $p \leq 0.05$ considered significant. Univariate analysis was conducted to describe sample. The mean value of all 10 FNS items was 23.99 (SD=7.35), a median was 24 and range of 10-44. Respondents whose mean value for all statements for measuring food neophobia was 10-23.99 were classified as "food neophilic", while those with a mean value higher than 23.99 were named "food neophobic". The cut-off point was mean value of all items.

The internal reliability of the FNS and attitudes towards ethnic food were evaluated by Cronbach's alpha coefficient. Internal consistency is good if Cronbach's alpha is above 0.7 (Kline, 2000). Principal component analysis with Varimax rotation was used for factor analysis. As proposed by Kaiser (1960) factors with eigenvalues greater than 1 and variables with factor loadings greater than 0.6 were used for further analysis because only those variables are statistically significant for interpretation purposes.

Bivariate analysis (chi square test and ANOVA) were used to test if there are difference between neophilic and neophobic respondents regarding key motives to visit an ethnic food restaurant, the importance of ethnic food attributes in restaurants, attitudes towards ethnic food and sociodemographic characteristics.

4. RESULTS AND DISCUSSION

4.1. Food neophobia scale

The reliability of the FNS, the Cronbach's alpha coefficient reached 0.86, which means high degree of internal validity. Same results were achieved in research done by Fernández-Ruiz et al. (2013) and Siegrist et al. (2013), where FNS Cronbach alpha was 0.82 and 0.80. Factor analysis showed the FNS have two factors (similar like Paupério et al., 2014), with statements 1, 4, 6, 9 and 10 loading on one factor, and statements 2, 3, 5, 7 and 8 loading on the other factor. The first factor accounted for 32.05% and the second factor for 31.25% of the variance, in total 63.3%. The statements loaded on the first factor were related to enjoyment in new food sampling, while the statements loaded on the second factor appear to relate to scepticism and distrust towards new food (Table 1).

Table 1

Food neophobia scale (n=230)

	Factor 1	Factor 2	Cronbach α
1) I am constantly sampling new and different foods. (R)	0.72		0.86
2) I don't trust new foods.		0.75	
3) If I don't know what is in a food, I won't try it.		0.73	
4) I like foods from different countries. (R)	0.84		
5) Ethnic food looks too weird to eat.		0.76	
6) At dinner parties, I will try a new food. (R)	0.83		
7) I am afraid to eat things I have never had before.		0.77	
8) I am very particular about the foods I will eat.		0.79	
9) I will eat almost anything. (R)	0.63		
10) I like to try new ethnic restaurant. (R)	0.84		

R=Reversed item

According to the results on the FNS (mean value of all items), respondents were divided in two groups; food neophilic (mean 10-23.99) and food neophobic (mean 24-50). There is almost equal share of food neophobic (53.9%) and food neophilic respondents (46.1%). In the research published by Tuorila et al. (1994), 49.6% of the respondents were food neophobics and 50.4% food neophilics.

4.2. Sample description

From the total number of respondents, 60.9% are female. Most of the respondents are younger than 30 (52.6%), which is in line with the previous study by the NRA, who found that generations X and Y (ages 18-34) are leading in ethnic food dining (Hensley, 2000).

More than half of the respondents have high school education (53.5%) and they mostly have lower income (<3.500 HRK; 38.7%). Even 57% of the respondents are employed, while only 3.9% are retired. Most of the respondents (88.3%) earlier consumed ethnic food, while the remaining 11.7% have not consumed such food up to

now. More food neophilic respondents consumed ethnic food (96.2%) in comparison with food neophobic respondents (81.5%). On the other side, there is no difference in sociodemographic characteristics among food neophobic and food neophilic respondents ($p>0.05$) - Table 2.

Table 2.

Sample description according to food neophobia group

		Total (n=230)	Food neophilic (n=106)	Food neophobic (n=124)	P*
Gender	Male	90 (39.1)	47 (44.3)	43 (34.7)	>0.05
	Female	140 (60.9)	59 (55.7)	81 (65.3)	
Age	18-29	121 (52.6)	57 (53.8)	64 (51.6)	>0.05
	30-45	55 (23.9)	27 (25.5)	28 (22.6)	
	46-60	48 (20.9)	21 (19.8)	27 (21.8)	
	>60	6 (2.6)	1 (0.9)	5 (4.0)	
Education	Without education	2 (0.9)	0 (0)	2 (1.6)	>0.05
	Elementary school	8 (3.5)	4 (3.8)	4 (3.2)	
	High school	123 (53.5)	50 (47.2)	73 (58.9)	
	Faculty	97 (42.2)	52 (49.1)	45 (36.3)	
Income	HRK <3.500	89 (38.7)	43 (40.6)	46 (37.1)	>0.05
	HRK 3.501-5.000	44 (19.1)	13 (12.3)	31 (25)	
	HRK 5.001-6.500	42 (18.3)	20 (18.9)	22 (17.7)	
	HRK 6.501-8.000	30 (13)	17 (16)	13 (10.5)	
	HRK 8.001-9.500	9 (3.9)	6 (5.7)	3 (2.4)	
	HRK >9.500	16 (7)	7 (6.6)	9 (7.3)	
Employment status	Unemployed	15 (6.5)	6 (5.7)	9 (7.3)	>0.05
	Employed	131 (57)	63 (59.4)	68 (54.8)	
	Student	75 (32.6)	36 (34.0)	39 (31.5)	
	Retired	9 (3.9)	1 (0.9)	8 (6.5)	
Do you consume ethnic food?	Yes	203 (88.3)	102 (96.2)	101 (81.5)	<0.05
	No	27 (11.7)	4 (3.8)	23 (18.5)	

*Chi square test

4.3. Key motives to visit an ethnic food restaurant

As it is visible from the results presented in Table 3, almost 70% of all respondents (who consume ethnic food) reported that the key motive to visit an ethnic food restaurant is tasting new flavors. Obtained results are in accordance with earlier study by Sukalakamala and Boyce (2007). However, for respondents with lower level of food neophobia (food neophilic) tasting new flavors is significantly higher motive to visit an ethnic food restaurant ($\chi^2, p < 0.05$). Even 42.6% of all respondents claims that meeting new culture is their key motive to visit an ethnic food restaurant, which was already concluded from the study done by Dwyer and Bermudez (2003). Still, for those who are food neophobic meeting new culture is significantly lower motive to visit an ethnic food restaurant than for food neophilic respondents. For other motives (curiosity, hanging with family

members/friends and convenience) there is no statistically significant difference between neophobic and neophilic respondents ($\chi^2, p > 0.05$). In total, convenience is key motive to visit an ethnic food restaurant only for 5% of the respondents.

Table 3

Key motives to visit an ethnic food restaurant

<i>My key motive to visit an ethnic food restaurant is...</i>	Total (n=203)**		Food neophilic (n=102)		Food neophobic (n=101)		P*
	Yes	No	Yes	No	Yes	No	
Tasting new flavors	67.8	32.2	82.4	17.6	53.0	47.0	<0.05
Meeting new cultures	42.6	57.4	52.9	47.1	32.0	68.0	<0.05
Hanging with family members/friends	39.6	60.4	35.3	64.7	44.0	56.0	>0.05
Curiosity	38.6	61.4	43.1	56.9	34.0	66.0	>0.05
Convenience	5.0	95.0	5.9	94.1	4.1	95.9	>0.05

*Chi square test

** only respondents who consume ethnic food

4.4. Importance of certain attributes of ethnic food in restaurant

Most important attribute of ethnic food in restaurant is taste (mean 4.53, Table 4), which is in accordance with earlier studies (Verbeke & Lopez, 2005; Thongyim et al., 2011). Still, taste is much more important attribute for food neophilic respondents (mean 4.70) when they choose ethnic food in restaurant than for food neophobic (mean 4.37). Similar to previous studies (Qu, 1997; Thongyim et al., 2011) price and quality ratio (mean for all respondents who consume ethnic food is 4.20) and service (mean for all respondents who consume ethnic food is 4.01) are also important attributes of ethnic food in restaurant. However, food neophobic respondents consider price/quality ratio and service less important attributes of ethnic food in restaurants (ANOVA, $p < 0.05$) in comparison with food neophilic respondents. Among other attributes of ethnic food in restaurant (appearance, price, origin/country of origin) appearance is most important for all respondents (mean 3.98), but it is again more important for food neophilic respondents than for food neophobic. Although price (mean 3.68) and origin/country of origin (mean 3.48) are less important for all respondents, price is more important for consumers with lower level of food neophobia (mean 3.85) than for respondents with higher level of food neophobia (mean 3.50). In contrary, origin is more important attribute for neophobic (mean 3.65) compared to neophilic respondents (mean 3.31).

Table 4

Importance of ethnic food attributes in restaurant

<i>Importance of ethnic food attributes in restaurant</i>	Total (n=203)**		Food neophilic (n=102)		Food neophobic (n=101)		P*
	Mean	SD	Mean	SD	Mean	SD	
Taste	4.53	0.83	4.70	0.71	4.37	0.90	<0.05
Price and quality ratio	4.20	0.84	4.37	0.82	4.02	0.82	<0.05
Service	4.01	0.96	4.15	0.89	3.87	1.02	>0.05
Appearance	3.98	0.85	4.11	0.90	3.85	0.78	<0.05
Price	3.68	1.04	3.85	1.08	3.50	0.96	<0.05
Origin/country of origin	3.48	1.20	3.31	1.26	3.65	1.13	>0.05

*ANOVA test

** only respondents who consume ethnic food

4.5. Attitudes towards ethnic food

The Cronbach's alpha coefficient of 6 items measuring attitudes towards ethnic food reached 0.7, which means acceptable internal consistency (Kline, 2000).

Generally, respondents have neutral to positive attitudes towards ethnic food (Table 5). Recent research by Fanelli and Di Nocera (2018) found that consumers' attitudes toward ethnic food have become more positive which is explained by increasing availability of ethnic food restaurants. However, food neophilic respondents have more positive attitudes towards ethnic food than food neophobic respondents ($p < 0.05$). Also, they consider ethnic food more authentic (mean 4.17) than food neophobic consumers (mean 3.54). In total, respondents agreed that ethnic food has good taste (mean 3.71), where food neophilic respondents agreed more than food neophobic respondents. Furthermore, respondents had neutral attitudes regarding the easy availability of ethnic food (mean 3.35) and safety of ethnic food (mean 3.30). Still, food neophilic respondents agreed more that ethnic food is easy available and safe for consumption in comparison to food neophobic respondents (ANOVA, $p < 0.05$).

Table 5

Attitudes towards ethnic food

	Total (n=230)		Food neophilic (n=106)		Food neophobic (n=124)		P*
	Mean	SD	Mean	SD	Mean	SD	
1) Ethnic food is authentic.	3.83	0.96	4.17	0.86	3.54	0.95	<0.05
2) Ethnic food doesn't look nice. (R)	3.66	1.06	3.99	1.06	3.39	0.99	<0.05
3) Ethnic food has good taste.	3.71	0.85	3.96	0.74	3.51	0.88	<0.05
4) Ethnic food is easy available.	3.35	0.98	3.56	1.01	3.17	0.92	<0.05
5) Ethnic food is safe for consumption.	3.30	0.82	3.44	0.79	3.18	0.83	<0.05
6) Ethnic food is healthy.	3.17	0.78	3.27	0.75	3.09	0.80	>0.05
7) Ethnic food has high nutritional value.	3.14	0.80	3.24	0.80	3.06	0.80	>0.05
8) Ethnic food is expensive. (R)	3.01	0.82	3.09	0.82	3.00	0.84	>0.05

R=Reversed item

*ANOVA test

5. CONCLUSIONS

The ethnic food market in Croatia is still underdeveloped compared with other developed European countries like France or UK, but it has a growth potential due to increasing tourism and world population migration.

This research showed there is almost equal share of food neophobic and food neophilic consumers in Croatia. In order to reduce food neophobia among food neophobics, it is important to expose consumers to novel foods, whereby experience with novel food should be successful and positive. Furthermore, food neophobia can be decreased with education and presentation of new foods in familiar contexts. Also, education programs (eg. cooking courses, culinary tv shows, culinary magazines) can have influence on food neophobia reduction. Regarding the ethnic food consumption, there is more food neophilic consumers who consumed ethnic food than food neophobic. However, there was no significant relationship between sociodemographic characteristics and food neophobia level.

Generally, the most important motives to visit ethnic food restaurants are tasting new flavors and meeting new cultures. On the other side, convenience is key motive to visit an ethnic food restaurant only for small share of respondents. Tasting new flavors and meeting new cultures are significantly higher motives to visit an ethnic food restaurants for food neophilic than for food neophobic respondents.

The results of this research showed that in total, most important attributes of ethnic food in restaurants are taste, price/quality ratio and service. Therefore, food taste in ethnic food restaurants is core attribute, and ethnic food developers should put emphasis on good taste of ethnic food, prepared with authentic

ingredients. Although service is secondary attribute, it is important for ethnic food restaurant customers. So, ethnic food restaurant managers should continuously invest in improvement of service in their restaurants. However, all those attributes are more important for respondents with lower level of food neophobia (food neophilic) than for those with higher level of food neophobia (food neophobic). Still, respondents with higher level of food neophobia consider origin more important attribute of ethnic food in comparison with those who have lower food neophobia level.

In total, respondents have neutral to positive attitudes towards ethnic food. They consider ethnic food as authentic food with good taste. It is important to emphasize that respondents had neutral attitudes regarding the easy availability of ethnic food, which means we should increase availability of ethnic food in Croatia. However, food neophilic respondents have more positive attitudes towards ethnic food than food neophobic respondents. Communication messages about benefits of ethnic food consumption (e.g. meeting new cultures and flavors, diet variability, health benefits etc.) need to be targeted to the food neophobics consumers in order to make their attitudes more positive.

One of the primary limitations of this study results from the contact technique (on-line survey) and small sample size. Online survey is associated with many advantages (access to individuals in distant locations, reduced researcher time, money and effort) but there are also some disadvantages, which include uncertainty over the validity of the data and sampling issues, and concerns surrounding the design, implementation, and evaluation of an online survey. Sample is relatively small and it is not statistically representative to the total population. So, future research should include face to face surveys because they still deliver the most representative results and larger, statistically representative sample.

The results of this research advances evidence in ethnic food research in several ways. The study's findings are expected to help the ethnic food restaurant sector and ethnic food marketers improve their marketing strategies for both Croatian consumers and international tourists who are interested in ethnic food consumption.

REFERENCES

- Bell, B., Adhikari, K., Chambers, E., Suwonsichon, T. (2011). "Ethnic food awareness and perceptions of consumers in Thailand and the United States". *Nutrition & Food Science*, Vol. 41, No. 4, pp. 268-277.
- Bell, L. K., Jansen, E., Mallan, K., Magarey, A. M., Daniels, L. (2018). „Poor dietary patterns at 1-5 years of age are related to food neophobia and breastfeeding duration but not age of introduction to solids in a relatively advantaged sample". *Eating Behaviour*, Vol. 31, pp. 28-34.
- Bell, R., Meiselman, H. L., Pierson, B. J., Reeve, W. G. (1994). „Effects of adding an Italian theme to a restaurant on the perceived ethnicity, acceptability, and selection of foods". *Appetite*, Vol. 22, No. 1, pp. 11-24.

Birch, L. L. (1987). "Children's food preferences: developmental patterns and environmental influences". In: Whitehust, G., Vasta, R. (eds.), *Annals of Child Development*, pp. 171-208. Greenwich, CT: JAI.

Camarena, D. M., Sanjuán, A. I. (2009). *The influence of psychographic variables on consumer preferences. The case of ethnic food in Spain*. 113th Seminar, September 3-6, 2009, Chania, Crete, Greece 57991, European Association of Agricultural Economists.

Camarena, D. M., Sanjuán, A. I., Philippidis, G. (2011). "Influence of ethnocentrism and neo-phobia on ethnic food consumption in Spain". *Appetite*, Vol. 57, No. 1, pp. 121-130.

Choe, J. Y., Cho, M. S. (2011). "Food neophobia and willingness to try non-traditional foods for Koreans". *Food Quality and Preference*, Vol. 22, No. 7, pp. 671-677.

Choi, S., Liu, S. Q., Mattila, A. S. (2018). "Consumer Response to Authentic-Language Versus English-Language Menu Labeling in Ethnic Dining". *Cornell Hospitality Quarterly*, Vol. 9, No. 2, pp. 125-134.

D'Antuono, F., Bignami, C. (2012). "Perception of typical Ukrainian foods among an Italian population". *Food quality and preference*, Vol. 25, No. 1, pp. 1-8.

Dohee, K. (2018). *Causes, Experiences, and Consequences of Ethnic Food Consumption: A Case Study of Korean Restaurants in Sweden*. Master thesis, Umeå University

Dwyer, J., Bermudez, O. I. (2003). *Ethnic foods, The Encyclopedia of Food Sciences and Nutrition*, Second Edition. Elsevier Science Ltd.

Fanelli, R. M., Di Nocera, A. (2018). "Customer perceptions of Japanese foods in Italy". *Journal of Ethnic Foods*, Vol. 5, No. 3, pp. 167-176.

Fernández-Ruiz, V., Claret, A., Chaya, C. (2013). "Testing a Spanish-version of the food neophobia scale". *Food Quality and Preference*, Vol. 28, No. 1, pp. 222-225.

Frewer, L., Risvik, E., Schifferstein, H. (2001). *Food, People and Society – a European Perspective of Consumers' Food Choice*. Berlin – Heidelberg – New York: Springer-Verlag.

Galef, B. G. (1988). "Communication of information concerning distant diets in a social central-place foraging species: *Rattus novegicus*". In: Zentall, T., Galef, B. G. Jr. (eds), *Social learning: A comparative approach*, pp. 119-140. Hillsdale, NJ: Lawrence Erlbaum.

Gaytán, M. S. (2008). "From sombreros to sincronizadas: authenticity, ethnicity, and the Mexican restaurant industry". *Journal of Contemporary Ethnography*, Vol. 37, No. 3, pp. 314-341.

George, B., Sims, P., Mclean, A. N., Mayer, D. (2007). "Discovering your authentic leadership". *Harvard business review*, Vol. 85, pp. 129-138.

Goodman, L. A. (1961). "Snowball sampling". *The annals of mathematical statistics*, Vol. 32, No. 1, pp. 148-170.

Guidetti, M., Carraro, L., Cavazza, N., Roccato, M. (2018). "Validation of the revised Food Neophobia Scale (FNS-R) in the Italian context". *Appetite*, Vol. 128, pp. 95-99.

Hensley, S. (2000). "Generations X and Y drive surge in ethnic cuisine". Available on: <http://www.restaurant.org/pressroom/pressrelease.cfm?ID=125> (accessed: January 24, 2019)

Honkanen, P. (2010). "Food preference based segments in Russia". *Food Quality and Preference*, Vol. 21, No. 1, pp. 65-67.

Hwang, J., Han, H., Kim S. (2015). „How can employees engage customers? Application of social penetration theory to the full-service restaurant industry by gender”. *International Journal of Contemporary Hospitality Management*, Vol. 27, No. 6, pp. 1117-1134.

Jang, S. S., Ha, J., Park K. (2012). “Effects of ethnic authenticity: Investigating Korean restaurant customers in the US”. *International Journal of Hospitality Management*, Vol. 31, No. 3, pp. 990-1003.

Jang, S. Y. (2017). “Ethnic Restaurants, a Marketing Tool for Culinary Tourism?: An Exploratory Study on Relationship between Ethnic Restaurant Experience and Intention to Visit the Origin Country”. *Journal of International Trade & Commerce*, Vol. 13, No. 4, pp. 93-106.

Kaiser, H. F. (1960). “The application of electronic computers to factor analysis”. *Educational and Psychological Measurement*, Vol. 20, pp. 141-151.

Kim, W., Ng, C. Y. N., Kim, Y. S. (2009). „Influence of institutional DINSERV on customer satisfaction, return intention, and word-of-mouth”. *International Journal of Hospitality Management*, Vol. 28, No. 1, pp. 10-17.

Kline P. (2000). *The Handbook of Psychological Testing*, 2nd ed. London; Routledge.

Lee, J. H., Hwang, J., Mustapha A. (2014). “Popular Ethnic Foods in the United States: A Historical and Safety Perspective”. *Comprehensive Reviews in Food Science and Food Safety*, Vol. 13, pp. 2-17.

Leung, G. (2010). “News and views: ethnic foods in the UK”. *Nutrition bulletin*, Vol. 35, No. 3, pp. 226-234.

Maiz, E., Balluerka, N. (2016). “Nutritional status and Mediterranean diet quality among Spanish children and adolescents with food neophobia”. *Food Quality and Preference*, Vol. 52, pp. 133-142.

Marinkovic, V., Senic, V., Mimovic, P. (2015). “Factors affecting choice and image of ethnic restaurants in Serbia”. *British Food Journal*, Vol. 117, No. 7, pp. 1903-1920.

Min, K. H. (2016). “Selection attributes and satisfaction of ethnic restaurant customers: a case of Korean restaurants in Australia”. *International Journal of Tourism Sciences*, Vol. 16, No. 4, pp. 151-169.

Mintel (2011). “Ethnic food-lovers developing a taste for exotic flavors”. Available at: <http://www.mintel.com/press-centre/food-and-drink/ethnic-food-lovers-developing-a-taste-for-exotic-flavors> (accessed: January 14, 2019)

Mordor Intelligence (2018). “Ethnic Foods Market – Growth, Trends and Forecasts (2018 – 2023)”. Available at: <https://www.mordorintelligence.com/industry-reports/ethnic-foods-market> (accessed: September 15, 2018)

National Restaurant Association (2015). Global Palates. Available at: <https://www.restaurant.org/News-Research/Research/Global-Palates> (accessed: September 15, 2018)

Paupério, A., Severo, M., Lopes, C., Moreira, P., Cooke, L., Oliveira, A. (2014). “Could the Food Neophobia Scale be adapted to pregnant women? A confirmatory factor analysis in a Portuguese sample”. *Appetite*, Vol. 75, pp. 110-116.

Pliner, P., Hobden, K. L. (1992). „Development of a scale to measure the trait of food neophobia in humans”. *Appetite*, Vol. 19, No. 2, pp. 105-120.

Qu, H. (1997). “Determinant factors and choice intention for chinese restaurant dining: A multivariate approach”. *Journal of Restaurant & Foodservice Marketing*, Vol. 2, No. 2, pp. 35-49.

Ritchey, P. N., Frank, R. A., Hursti, U., Tuorila H. (2003). “Validation and crossnational comparison of the food neophobia scale (FNS) using confirmatory factor analysis”. *Appetite*, Vol. 40, No. 2, pp. 163-173.

Rozin, P. (1988). “Social learning about foods by humans”. In: Zentall, T., Galef, B. G. Jr. (eds.), *Social learning: A comparative approach*, 165-187. Hillsdale, NJ: Lawrence Erlbaum.

Ryu, K., Lee, H. R., Gon Kim, W. (2012). “The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioural intentions”. *International Journal of Contemporary Hospitality Management*, Vol. 24, No. 2, pp. 200-223.

Shepherd, R., Raats, M. (2006). *The Psychology of Food Choice*. CAB International in association with The Nutrition Society.

Siegrist, M., Hartmann, C., Keller, C. (2013). „Antecedents of food neophobia and its association with eating behaviour and food choices”. *Food Quality and Preference*, Vol. 30, No. 2, pp. 293-298.

Soucier, V. D., Doma, K. M., Farrell, E. L., Leith-Bailey, E. R., Duncan A. M., (2018). “An examination of food neophobia in older adults”. *Food Quality and Preference*, Vol. 72, pp. 143-146.

Stratton, L. M., Vella, M. N., Sheeshka, J., Duncan, A. M. (2015). “Food neophobia is related to factors associated with functional food consumption in older adults”. *Food quality and preference*, Vol. 41, pp. 133-140.

Strickland, P. (2013). “Examining the Impact of Four Key Cultural Dimensions on Ethnic Restaurants in Victoria in Australia”. *Asia Pacific Journal of Tourism Research*, Vol. 18, No. 5, pp. 483-500.

Sukalakamala P., Boyce J. B. (2007). “Customer perceptions for expectations and acceptance of an authentic dining experience in Thai restaurants”. *Journal of Foodservice*, Vol. 18, No. 2, pp. 69-75.

Thongyim, P., Mahasuweerachai, P., Leong, J. (2011). “Segmenting the ethnic restaurant market: a test of the moderating effect of restaurant type on attributes/satisfaction relationship”. Available at: https://scholarworks.umass.edu/cgi/viewcontent.cgi?referer=https://www.google.hr/&httpsredir=1&article=1118&context=gradconf_hospitality (accessed: November 12, 2018)

Tomić, M., Deronja, K., Tudor Kalit, M., Mesić, Ž. (2018). “Consumers’ attitudes towards ethnic food”. *Journal of Central European Agriculture*, Vol. 19, No. 2, pp. 349-367.

Tuorila, H., Meiselman, H. L., Bell, R., Cardello, A., Johnson, W. (1994). “Role of sensory and cognitive information in the enhancement of certainty and linking for novel and familiar foods”. *Appetite*, Vol. 23, No. 3, pp. 231-246.

Verbeke, W., Lopez, G. P., 2005. „Ethnic food attitudes and behaviour among Belgians and Hispanics living in Belgium”. *British Food Journal*, Vol. 107, No. 11, pp. 823-840.

Dr. sc. Marina Tomić Maksan

Postdoktorandica
Sveučilište u Zagrebu
Agronomski fakultet
Zavod za marketing u poljoprivredi
E-mail: matomic@agr.hr

Kristina Deronja, mag. ing. agr.

Studentica diplomskog studija
Sveučilište u Zagrebu
Agronomski fakultet
Diplomski studij Agrobiznis i ruralni razvitak
E-mail: kristinaderonja0208@gmail.com

Dr. sc. Milna Tudor Kalit

Docentica
Sveučilište u Zagrebu
Agronomski fakultet
Zavod za mljekarstvo
E-mail: mtudor@agr.hr

Dr. sc. Željka Mesić

Docentica
Sveučilište u Zagrebu
Agronomski fakultet
Zavod za marketing u poljoprivredi
E-mail: zmesic@agr.hr

**PREHRAMBENA NEOFBIJA KAO DETERMINANTA
PONAŠANJA POTROŠAČA U KONZUMACIJI
ETNIČKE HRANE****Sažetak**

Budući da se konzumacija etničke hrane pokazala kao brzo rastući prehrambeni trend, ovim se istraživanjem ispituje utjecaj prehrambene neofobije na ponašanje potrošača u konzumaciji etničke hrane. Također, cilj je bio utvrditi motive potrošača za posjet etničkom restoranu, važnost pojedinih obilježja etničke hrane u restoranima i njihove stavove prema etničkoj hrani. Istraživanje je provedeno korištenjem mrežnom anketom na uzorku 230 potrošača u Hrvatskoj. Provedene statističke analize uključuju jednovarijatnu, faktorsku i dvovarijatnu analizu (SPSS, verzija 21). Na temelju razine prehrambene neofobije identificirane su dvije grupe potrošača: prehrambeni neofili i prehrambeni neofobi. Potrošači koji su prehrambeni neofili više su motivirani za posjet restoranima koji nude etničku hranu radi kušanja novih okusa i upoznavanja novih kultura. Također, oni imaju pozitivnije stavove prema etničkoj hrani u usporedbi s potrošačima koji su prehrambeni neofobi. Ispitanici s većom razinom prehrambene neofobije smatraju

podrijetlo važnijim obilježjem etničke hrane u usporedbi s onima koji imaju manju razinu prehrambene neofobije. Kako prehrambena neofobija ima utjecaj na preferencije potrošača prema etničkoj hrani u restoranima, vrlo je važna za sektor restorana koji u ponudi imaju etničku hranu i marketare etničke hrane.

Ključne riječi: prehrambena neofobija, etnička hrana, restorani, potrošači.

JEL klasifikacija: D10, D12, Q11.

