



**TRANSLATION AND VALIDATION OF THE FOOD
NEOPHOBIA (FNS) TO THE FARSI (PERSIAN
LANGUAGE)**

BY
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**A special project submitted to the school of Biotechnology Assumption
University in part of fulfillment of the requirement for the degree of master of
Science in Biotechnology
2019**

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Am

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Assumption University

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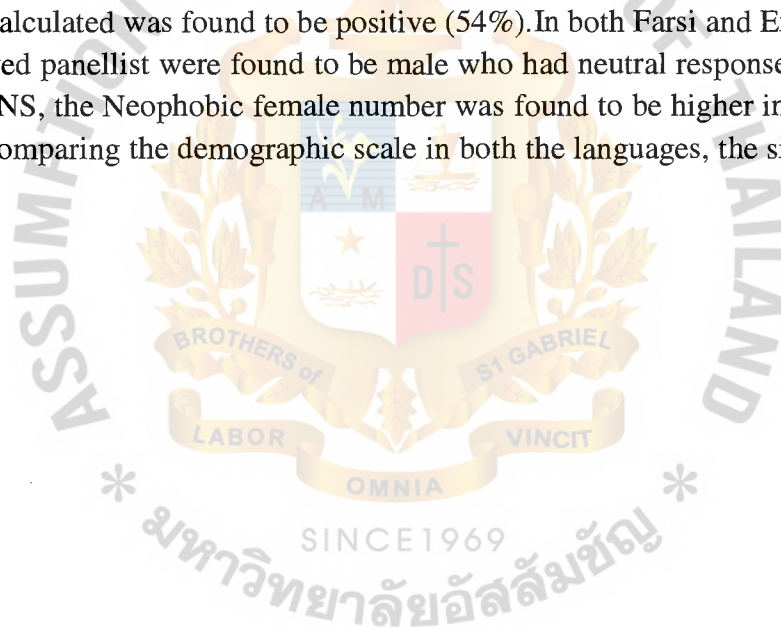




Mr.Ramin Shafii

ABSTRACT

The Food Neophobia Scale (FNS), originally developed in English, has been widely used in different studies to assess the individual's willingness to try new foods, the FNS in English designed by three English teachers then was translated into Farsi language by three other English/Farsi teachers. After that, both the English and Farsi language FNS versions were administered to 100 panellist on the Food Neophobia Scale (FNS) along with Health and taste attitude scale with both English and Farsi versions. The FNS total score ranged from 10-70 and the respondents were classified as food neophilic (≤ 16.4), neutral (16.5-38.5) and food neophobic (≥ 38.6). In addition to that, the consumer behaviour was studied. The t-test, chi-square test and Cronbach alpha test were carried out to have the clear picture on data analysis in both languages. In English version, regarding the health and taste attributes, the highest response calculated was found to be neutral (49%) whereas in Farsi, the Health and taste attributes, the highest response calculated was found to be positive (54%). In both Farsi and English version, the most of the involved panellist were found to be male who had neutral response except in case of FNS. In term of FNS, the Neophobic female number was found to be higher in both English and Farsi version. In comparing the demographic scale in both the languages, the similarities in scale can be found.



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Introduction

Food Neophobia, It is come from behavior or fear of unfamiliar foods. Specially common among kids or young children but concept food Neophobia in adult is phenomenon of human behavior that protect and avoid body and organisms from ingesting various pathogen and toxins. (Marreiros . Ness, 2009)

In addition, food Neophobia would be related to sour, bitter or some tastes in human's bad reminiscence that would be avoid to eat again. Many factors can be have effect to creation and start-up food Neophobia, genetic is a factor and can be appearance in children's behavioral but Neophobia mostly come from some environment factors such as; culture food practices and lifestyle, Although education has a big effect in food Neophobia and fearing to try not healthy food, but roughly environments have the most effect.(Eide - 2013)

Food Neophobia is appraisement by the food Neophobia scale (FNS) firstly, prepare a chart in 10 items steadily from dislike to like in English version then, translation to Farsi by three native Persian speaker.

Translations of the FNS have been reported in the literature in many different countries and cultures. Validation studies needed to be performed to assess the properties of the translated FNS before the scale could be considered an appropriate instrument for food neophobia measurement. Whatever, in all these translations, some words or questions were changed or even deleted to make the scale comprehensive and then applicable to the other cultural contexts.

It is necessary a process of translation and validation followed by a cultural adaptation of a Farsi version for the FNS, which will enable the use of the scale with Iranian people.

AIM AND OBJECTIVE

Aim

Validation food Neophobia scale (FNS) to the Farsi language and comparing with English language.

Objective

- Study the consumer behavior, attitude and opinion related with new/innovation food product.
- Translate and validation Farsi food Neophobia scale version with English version.



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LITERATURE REVIEW

1- Consumer

In around the world in any market, there are two major consumer trends: one is growing demand for modernity such as functional foods, convenience foods, health foods such as low-calorie and low-sodium foods, and other one is a growing demand for natural foods such as organic foods, natural foods, local products and typical foods. There are many factors for changing consumer opinion or acceptance and also consumer attitude of new technologies will determine its success or failure in the marketplace. Then, evaluating the acceptance of new technologies rather than risk a negative reaction from the public is sensible.(Tseng, Chu, 2013)

2- Social Psychology and consumer

It is a part of psychology that studies individual as they interact with other. As people live with other people the most important learning come from other and also come from the social their live, it's a part of human nature to be social.

- **Conformity:** conformity is yielding to group pressure to act as everyone else does, even when no direct request has been made.
- **Social roles & social norms:** when people work together in group, the efforts of each individual need to be coordinated with those to avoid chaos.
- **Attitudes:** people often learn from other people and our attitudes are often reflects in our behavior towards other. Social psychologists define attitudes as evaluations that predispose us to act and feel in certain ways.

Three components in attitude: 1) **Beliefs**, means that door to door salespeople are generally dishonest. 2) **Feeling**, means strong dislike for door to door salespeople. 3)

Dispositions to behavior, means reading to be rude to them when they come to door.

Attitude is learned from first experience for example the kid who is eaten some food with not great taste, sometimes can carry negative attitude towards from rest of live.(Tseng, Chu, 2013)

3- Perception and acceptance

There is five basic major for perception such as: sight-hearing-smell-touch and taste. And also time of eating and mood also have effect to accepting product.

1-Sight

Vision or visual perception is used to expound the environment which to make all experience in the memories. Eyes have a complex function consisting of a transparent lens that focus on the light.

2- Hearing

Ear can be figure sound with waves and vibration by organs inside the ear. Ear composed to three parts, outer ear can be transfer sound to the inner ear by small bones in middle ear then the inner ear contain with a viscous fluid to create the tone then small hair nerve fiber to transfer vibration and tones to the brain by send signals. The brain can be read the codes as well.

3-Smell

Inside the nose is lined with mucous membranes that have smell receptors connected to the olfactory nerve.

4-Touch

The hair of skin has some nervous that can be transmit sense to the brain, so human has more ability to detect the environment.

5-Taste

Tongue can be detect five different main tastes and also over 10,000 taste buds will be covered on surface of tongue, those are buds has sensor nerve and send signal to the brain for detecting.

Each of five factor has a role in human and change of one of that or strong or weak in each can be change mood of human for accepting product.

4- Consumer Behavior

Food is one the most important and basic need of human. Nowadays, food comes in lots variety, food select and choices are the most highlight of all purchase decisions made by consumers.

Because of variety influences of wide range of science and social, try to understand food consumer behavior is a bit difficult and challenging.

In some researches that have been conducted during the last two decades, there is no singular commonly accepted model for explaining consumer behavior and food evaluation or in simply language, Each consumer has different behavior for choice the food or liking food.

There are so many things have effect on consumer behavior such as; culture, income, social class, lifestyle, age and etc.(Marreiros . Ness, 2009)

The most effective of consumer behavior is environment that influence the environment directly, either by aiding or harming the environment and is further termed as pro-environment and non-environment behavior.

Pro-environment is behavior has some level of benefit to the environment compared to the alternative behavior and non-environment is reason has less harmful to the environment.(Tseng, Chu, 2013)

5- Type of consumer in term of food product

A consumer product is a product bought by final consumers for personal consumption. But not every consumer product is the same. Marketers usually classify consumer products into these 4 types of consumer products such as:

1.Convenience products

The convenience products are bought most regularly by consumer and they use normally in daily food basket and also customers normally buy frequently, immediately and without great comparison or buying effort.

2.Shopping products

In this type, normally consumer compares on attributes such as quality, price and style in the process of selecting and purchasing.

3.Speciality products

In this type consumer looking on some special product and unique product or maybe some special brand for which a significant group of consumers is willing to make a special purchase effort.

4. Unsought products

Unsought products are those consumer products that a consumer either does not know about or knows about but does not consider buying under normal conditions. (Claessens, 2017)

(Table 1) Type of consumer product, (Maximilian 2017)

Marketing consideration	Convenience	Shopping	Speciality	Unsought
Customer buying behaviour	Frequent purchase, little effort (planning, comparison), low customer involvement	Less frequent purchase, much effort (planning and comparison of brands on price, quality, style etc.)	Strong brand preference and loyalty, special purchase effort, little comparison of brands, low price sensitivity	Little product awareness and knowledge or little interest
Price Distribution	Widespread distribution, convenient locations	Selective distribution, fewer outlets	Exclusive distribution in only one or a few outlets	Varies
Promotion				

6- Innovation food/product

The concept of food innovation and foodtech is very wild field, Innovation product on food biotechnology is a major of science that deals with the production processes that make food. Food innovation involves the design and development of new food products, the improvement or combination of existing food products, research into food trends and food management. (Winger. Wall, 2006)

In different times always consumer's demands change depend on environment and area they live. Those changes range from basic considerations such as improving food safety, shelf life, and reducing wastage, to demands for increasingly sophisticated foods having special characteristics in terms of nutritional value, palatability, and convenience.(Pinho. Guiné .2016)

7- Psychological of fear/accept and liking of consumer

Food select and food choice in our daily basket are completely depends on a number of factors influencing human psyche in different way, some products chosen by costumer but rejected by other.

In costumer psyche for accepting and liking in new foods, many factors have effect. Generally all factors can be put in to three classes

- 1) Product-related factors: physicochemical properties, nutrient contents and functionality as well.
- 2) Consumer-related factors: metabolism(hungry-thirsty), psychological factors such as(motives-attitudes)
- 3) Environmental factors: cultural factors, social factors and economic factors(Pliner. Hobden,1992)

8- Food Neophobia scale

Food neophobia is a reaction in humans that protect individuals from the risk of being poisoned by consuming potentially harmful foods. Factor effect in food neophobia is wide range and among of that is individual the level of Food neophobia for each individual is affected by cultural, gender, age, education, social, economics, and urbanization. There are three types of food neophobia, neophilic, neutral, and neophobic consumers.(Capiola ,2012) Neophilic consumers mostly join to accept unfamiliar foods but in other side In contrast, neophobic

consumers have interested to reject unfamiliar foods. Primarily developed in English by Pliner and Hobden for the purpose of measuring food behaviors. This is a self-administed 10-item questions in which high mean score, obtained by summing the individual item scores measured on a Likert scale, represent less willingness to try new food, lower means score indicated more willingness to try novel foods.(table 2)

(Table 2)Food Neophobia Scale (FNS)

	Liker scale
1. I am constantly sampling new and different foods.	
2. I don't trust new foods.	
3. If I don't know what is in a food, I won't try it.	
4. I like foods from different countries.	
5. Ethnic food looks too weird to eat.	
6. At dinner parties, I will try a new food.	
7. I am afraid to eat things I have never had before.	
8. I am very particular about the foods I will eat.	
9. I will eat almost anything.	
10. I like to try new ethnic restaurant.	

9- Food Neophobia and family eating habits

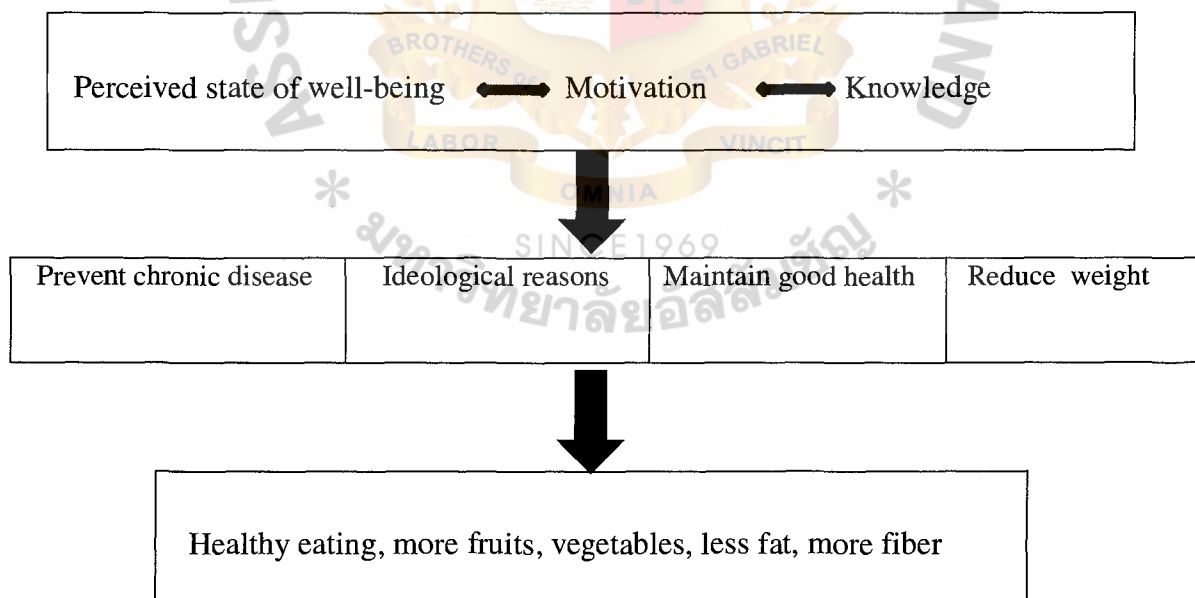
In Arhus university since 2015, have done with a project about related family habits and food neophobia. The students based on their association between food neophobia and levels of subjective well-begin, in general food domain and their perception pf their family's eating habits. They selected 372 students. The questioners included the food neophobia scale(FSN), Satisfaction with life scale(SWLS), Satisfaction with food related live(SWFL), health related quality life index(HRQOL) And family eating habit questionnaire (FEHQ). The result suggest

that both neophobia and non-neophobia students have positive levels of satisfaction with life and food related life, and that satisfaction among neophobia students are related to family eating patterns, especially cohesiveness in family eating.(Capiola ,2012)

10- Health and Taste Attitude scale

Food choice is a complex process which involves many different factors. The many attempts made to illustrate the factors influencing this process have resulted in many qualitative food choice models. The health and taste attitude scale or HTAC is developed in 1999. This HTAC is important of health and taste feature of food selection process. There are many item scales, ranking from strongly disagree to strongly agree which more separated into three Health which is “General health interest, Light product interest and Natural product interest” and three Tastes “Craving for sweet foods, Using food as a reward and Pleasure”. The definition of HTAC is a low health attitude indicates that the participant does not care about the healthy qualities of food and a high health attitude indicates that the participant cares a lot about the healthiness of their food.(Roininen. 2001)

Figure 1 : factors effective healthy eating



(Katariina Roininen.2001)

11- Food Involvement scale

Food involvement scale or (FIS) is a general and standard scale to measure and develop of the characteristic of food involvement, based on activities relating to food acquisition, preparation, cooking, eating and disposal.(Harry N. Boone, Jr.2012) or in the other language, Food involvement is related to the amount of effort invested in meal preparation. For example, the use of convenience foods or purchase of fast foods requires little effort compared to cooking from scratch. Higher levels of food involvement appear to be associated with healthier dietary behaviors. The concept of involvement founded to influence brand loyalty, product information search processing, ultimately, diffusion of innovations, and responses to advertising communications produce choice description.(Bell,2003) while lower food involvement is associated with higher convenience orientation.

12- Statistic analyze and Likert scale

Likert scale is a psychological measurement device that is used to gauge attitudes, values, and opinions. It functions by having a person complete a questionnaire that requires them to indicate the extent to which they agree or disagree with a series of statements. The format of a typical five-level Likert item, for example, could be:

1. Strongly disagree 2.Disagree 3.Neither agree nor disagree
4.Agree 5.Strongly agree

Each person's answer can be analyze individual and specific or have it summed with other related items to create a score for a group of statements. Each person's answer are normally treated as ordinal data because although the response levels do have relative position, we cannot presume that participants understanding the difference between adjacent levels to be equal.(Harry N. Boone, Jr.2012)

The reproducibility between the measurements of two scale will be analyze by the intraclass correlation coefficient(ICC). Intraclass correlation coefficient is an inferential statistic that can be used when quantitative measurements are made on units that are organized into groups, It describes how strongly units in the same group resemble each other. Best statistic analyze

software is Predictive analuze software (pasw) for translation in FNS not only cause of easy work but also is wild rang of date.(Johns ,2010)

MATERIALS AND METHOD

In this research for translation and validation of the food neophobia to the Farsi language will performing by three English/Farsi teachers fluent in both languages. Firstly design all questions and tables in English language then translate to Farsi language by three teachers, This process called translation, concept of back translate and aimed of this is verify to congruence of the translation.

For analyzing the equivalence of the translate version to the original scale a group of 100 persons between 18 to 60 years old male and female fluency in both English/Farsi language selected for answer the scale with a week gap interval between them.

100 persons will be divide to 10 groups of 10 persons then each group divided to 2 groups, the first group which is in Iranian in Iran (group A) and second which is Iranian in Thailand(group B) selected. In first week will be hand out English version scale to the group A by email or hard paper and at the same to the group B Farsi version by same way as group A then after a week gap change the process to other language version as well(group A receive Farsi version and group B English version).

The original and translate FSN consisted of 10 items that measure using 7-point liker scale(1=strongly disagree, 2=moderately disagree, 3= slightly disagree, 4= neither agree, 5= slightly agree, 6=moderately agree, 7=strong agree)

The questions designed into 4 tables. Table 1(in appendix) is FSN 10 food psychographic questions, Table 2 in 50 questions about 'food involvement – general health interest - light food interest - natural food interest -craving for sweets - rewarding and source of pleasure, Table 3 in 11 questions about food related behavior and Table 4 is demographic information questions in 8 items.

Data analysis

The reproducibility between two scales will assess by intraclass correlation coefficient (ICC). In statistic ICC is an inferential statistic that can be used when quantitative measurements are made on units that are organized into groups. It describes how strongly units in the same group resemble each other. Statistic analyze will be perform using the SAS software version 9.4 with crosstab Excel.



RESULT & DISCUSSION

PART 1-ENGLISH LANGUAGE SURVEY EXPLANATION:

Table 1: The percentage obtained via calculation for Food Related Behavioural questionnaires:

S.N.	QUESTIONS	PERCENTAGE (%)
Q1	How many meals do you eat a day?	
	1-2 meals	54
	3-4 meals	37
	5-6 meals	9
	more than 7 Meals	0
Q2	At what time do you usually eat?	
	Morning	25
	11am-3 pm	54
	Afternoon & evening	17
	Evening& night	4
Q3	Do you watch out for healthy nutrition?	
	Never	5
	Rarely	25
	Occasionally	29
	Usually	41
Q4	Are you mindful of your sensation of starving? *	
	Never	7
	Rarely	29
	Occasionally	32
	Usually	32
Q5	Do you feel eat/go out for eat when you feel stressed, unhappy or angry?	
	Never	9
	Rarely	27
	Occasionally	41
	Usually	22
	no response	1
Q6	Where do you usually buy food?	
	Market	39

	Big supermarket	49
	Small shop	5
	Central centre	7
Q7	What type of food do you usually prefer to buy?	
	frozen food	2
	pre cooked	9
	fresh food	88
	canned food	1
Q8	Which is first important for you when you buy food?	
	proteins	22
	vegetables	51
	dairy	27
	snacks	0
Q9	How much responsibility do you have for food shopping?	
	None	6
	just little	32
	about half	40
	most of all	22
Q10	How many serving do you think a person should eat each day for good health?	
	0	1
	1-2	55
	3-4	41
	5-6	3
Q11	How many cup of drinks except water do you take each day?	
	0	2
	1-2	51
	3-4	35
	More than 5	12

Table 1 represented the percentage data calculated for food related behavioural questionnaire for English language. The table indicates the highest to lowest accepted behaviour of the participants. Starting from question 1 to question 11, there are maximum percentage of people who takes 1-2 meals a day and usually afternoon & evening time period as most of the participants are school going around 37 % aging from 12-17, the most preferable time might be when they get free. There are highest percentage of people i.e. 41 % who usually watch out for healthy nutrition as customers or people seldom care about what's in their food or might be they

have less time to read and understand the nutritional value or unaware of the terms. Participants occasionally and usually feel the sensation of starving. Most people prefer to go out occasionally when they get stressed and angry. Most people want to sit alone and in this participation, most are teenagers who rarely shares their emotion at this time period.

Similarly, there are more percentage of people who prefer to buy their food at big super market as big super market are convenient and affordable. They can find a number of stuffs at one place. The people who have participated seems to have knowledge about the fresh food and its importance thus about 88 % of people go for fresh foods. Mostly find the vegetables as their most important items while buying foods. While talking about the responsibilities for food shopping they answered as they take charge of only half responsibilities as the maximum percentage of participants are from 12-17 years of age. At that age, mostly elders or parents of guardians do shopping. The servings that a person should eat each day for good health was found to be 1-2 which is the highest answered. However, they give least preferences to drink consumption per day. They just take 1-2 cup of drink except water per day. This can be due to the fact that they prefer water the most among the drinks.

Table 2: Demographic representation in the percentage obtained via calculation:

S.N.	DEMOGRAPHIC FACTORS	PERCENTAGE (%)
C1	AGE	
	Under 12	17
	12-17	37
	18-24	22
	25-34	8
	35-44	10
	45-54	4
	56-64	2
	65-74	0
	75 or older	0
	No response	0
C2	Gender	
	Male	51

	Female	47
	No response	2
C3	education	
	student	8
	High school	13
	Bachelor	59
	Higher education	19
	no response	1
C4	Religion	
	Islam	67
	Christianity	5
	Buddhism	1
	Folk religion	19
	No response	8
C5	Occupation	
	Student	19
	employed	35
	self employed	19
	unemployed	9
	retired	18
	No response	0
C6	Household	
	single	41
	Married	59
	Divorce	0
	No response	0
C7	income	
	Less than \$10,000	76
	\$10,000 to \$19,999	16
	\$20,000 to \$29,999	5
	\$30,000 to \$39,999	1
	\$40,000 to \$49,999	0
	Above \$50,000	2
	No response	1
C8	Country resident	
	Iran	61
	Thailand	39

The given table 2 indicated the percentage presentation of demographic questionnaire in English language which clearly showed the highest and the lowest percentage involvement in different factors. Where regarding age factor, 12-17 years old percentage was found to be highest i.e. 37 % as at this age people are most curious and active towards new things and they have the concept of the surveys which can enhance the products. The male was found to be highest i.e. 51 % as female gender can be seen as shy in nature and participated less. In term of percentage, the highest education involvement was found to be of bachelor. This can be due to the second highest percentage of age was in between 18-24 years old and also it might be possible that some people from above 24 are doing bachelor with gaps. More percentage of Islamic people are found as the most country resident are of Iran, which is an Islamic nation. The average occupation was found to be employed. Although, teenager's participation was high, we can predict that these young age people are doing some part time jobs which make them eligible for income generating population. That's why the average income was found to be below \$10,000 i.e. 76 %. Likewise, in case of household composition, although the teenager's participation can be seen high, the average household composition was found to be married. This can be due to the some teenagers and age above 18 years being married which gave high percentage altogether.

Table 3: The calculated data of demographic factors like education, gender and Food Neophobia scale (FNS) in terms of Neophilic, neutral and Neophobic terms in English Language:

ENGLISH LANGUAGE			
EDUCATION	Neophilic	Neutral	Neophobic
Student	0	3	5
High School	0	2	11
Bachelor	2	31	25
Higher Education	0	9	10
GENDER	Neophilic	Neutral	Neophobic
Male	1	26	24
Female	1	19	27
FOR FNS	NEGATIVE	NEUTRAL	POSITIVE
Total Participants	50	24	26
Percentage (%)	50	24	26

Table 3 indicated the calculated data of demographic factors like education, gender and Food Neophobia scale (FNS) in terms of Neophilic, neutral and Neophobic terms in English Language.

Neophiliac is defined as a person who has the tendency to like anything new whereas the **Neophobic** is just opposite to the neophiliac; Neophobic is a person having an extreme or irrational dislike of anything new or unfamiliar. **Neutral** indicates a person who neither like nor dislike trying new things.

Education: Going through educational, gender and Food neophilic scale factors, the data obtained give us idea that in term of education, the result in English language illustrated student level are neophobic in high number, there are high number of high school neophobic ,high number of neophobic in high level education(they all do not like new change- they want their own food or old habits as they might be comfortable with it or they like their old habits or food more, or they might fear to try new things or they believe new thing will replace or destroy old thing.

Whereas in bachelor level student most of the people are neutral as they are readily fine with changes. They are okay with the new changes. They are not that much mature enough to evaluate the food content or are unable to understand what's the change can bring either positive or negative thus they prefer to stay neutral, and there are only 2 neophilic bachelor level student who are neophilic. They dare to try and accept the new changes as it might bring change in them too and they can go with new flow.

Gender: talking about the gender, male are found to be neutral i.e. neither like nor dislike trying new things however female was found to be neophobic i.e. they having an extreme or irrational dislike of anything new or unfamiliar. This can be due to male are less emotional and fascinate new changes and can easily accept the new changes in food pattern, choices or habits but women are more sensitive and emotional to their own food. They are more sentimental towards food. They also believe that by changing their regular used to food their health can have some effects with new replacement.

For FNS: For food neophilic scale, the most participants were found to be negative towards. They do not like the new food or changes in their food pattern. They are very sensitive to their regular food choices and are not comfortable regarding changes.

PART 2-FARSI LANGUAGE SURVEY EXPLANATION:

Table 4: Food Related Behavioural questions and the percentage obtained via calculation:

S.N.	QUESTIONS	PERCENTAGE (%)
1	How many meals do you eat a day?	
	1-2 meals	56
	3-4 meals	33
	5-6 meals	10
	more than 7 Meals	1
2	At what time do you usually eat?	
	Morning	24
	11am-3 pm	54
	Afternoon & even	17
	Evening& night	5
3	Do you watch out for healthy nutrition?	
	Never	6
	Rarely	25
	Occasionally	28
	Usually	41
4	Are you mindful of your sensation of starving?	
	Never	6
	Rarely	29
	Occasionally	35
	Usually	30
5	Do you feel eat/go out for eat when you feel stressed, unhappy or angry?	
	Never	8
	Rarely	32
	Occasionally	33
	Usually	26
	no response	1
6	Where do you usually buy food?	
	Market	38
	Big supermarket	48

	Small shop	7
	Central centre	7
7	What type of food do you usually prefer to buy?	
	frozen food	2
	pre cooked	11
	fresh food	85
	canned food	2
8	Which is the first important for you when you buy food?	
	proteins	24
	vegetables	49
	dairy	27
	snacks	0
9	How much responsibility do you have for food shopping?	
	None	2
	just little	32
	about half	43
	most of all	23
10	How many serving do you think a person should eat each day for good health?	
	0	2
	1-2	56
	3-4	39
	5-6	3
11	How many cup of drinks except water do you take each day?	
	0	2
	1-2	48
	3-4	36
	More than 5	14

Table 4 represented the percentage data calculated for food related behavioural questionnaire for Farsi language. The table indicates the highest to lowest accepted behaviour of the participants. Starting from question 1 to question 11, there are maximum percentage of people who takes 1-2 meals a day and usually afternoon & evening time period as most of the participants are school going around 38 % aging from 12-17, the most preferable time might be when they get free. There are highest percentage of people i.e.

41 % who usually watch out for healthy nutrition as customers or people care about what's in their food or might be they have time to read and understand the nutritional value or aware of the

terms. Participants occasionally feel the sensation of starving. Most people prefer to go out occasionally when they get stressed and angry. Most people want to sit alone and in this participation, most are teenagers who rarely shares their emotion at this time period.

Similarly, there are more percentage of people who prefer to buy their food at big super market as big super market are convenient and affordable. They can find a number of stuffs at one place. The people who have participated seems to have knowledge about the fresh food and its importance thus about 85 % of people go for fresh foods. Mostly find the vegetables as their most important items while buying foods. While talking about the responsibilities for food shopping they answered as they take charge of only half responsibilities as the maximum percentage of participants are from 12-17 years of age. At that age, mostly elders or parents of guardians do shopping. The servings that a person should eat each day for good health was found to be 1-2 which is the highest answered. However, they give least preferences to drink consumption per day. They just take 1-2 cup of drink except water per day. This can be due to the fact that they prefer water the most among the drinks.

Table 5: Demographic representation in the percentage obtained via calculation:

S.N.	DEMOGRAPHIC FACTORS	PERCENTAGE (%)
1	AGE	
	Under 12	16
	12-17	38
	18-24	21
	25-34	8
	35-44	9
	45-54	4
	56-64	2
	65-74	0
	75 or older	0
	No response	2
2	Gender	
	Male	51
	Female	46
	No response	3
3	education	
	student	8
	High school	13

	Bachelor	55
	Higher education	22
	no response	2
4	Religion	
	Islam	68
	Christianity	6
	Buddhism	0
	Folk religion	17
	No response	1
5	Occupation	
	Student	19
	employed	35
	self employed	17
	unemployed	11
	retired	17
	No response	1
6	Household	
	single	41
	Married	55
	Divorce	0
	No response	4
7	income	
	Less than \$10,000	74
	\$10,000 to \$19,999	16
	\$20,000 to \$29,999	4
	\$30,000 to \$39,999	1
	\$40,000 to \$49,999	0
	Above \$50,000	2
	No response	3
8	Country resident	
	Iran	61
	Thailand	39

The given table 5 indicated the percentage presentation of demographic questionnaire in Farsi language which clearly showed the highest and the lowest percentage involvement in different factors. Where regarding age factor, 12-17 years old percentage was found to be highest i.e. 38 % as at this age people are most curious and active towards new things and they have the concept of the surveys which can enhance the products. The male was found to be highest i.e. 51 % as

female gender can be seen as shy in nature and participated less. In term of percentage, the highest education involvement was found to be of bachelor i.e. 55 %. This can be due to the second highest percentage of age was in between 18-24 years old and also it might be possible that some people from above 24 are doing bachelor with gaps. More percentage of Islamic people are found as the most country resident are of Iran, which is an Islamic nation. The average occupation was found to be employed. Although, teenager's participation was high, we can predict that these young age people are doing some part time jobs which make them eligible for income generating population. That's why the average income was found to be below \$10,000 i.e. 74 %. Likewise, in case of household composition, although the teenager's participation can be seen high, the average household composition was found to be married. This can be due to the some teenagers and age above 18 years being married which gave high percentage altogether.

Table 6: The calculated data of demographic factors like education, gender and Food Neophobia scale (FNS) in terms of Neophilic, neutral and Neophobic terms in Farsi Language:

FARSI			
EDUCATION	Neophilic	Neutral	Neophobic
Student	0	3	5
High School	0	2	11
Bachelor	2	31	25
Higher Education	0	9	10
GENDER	Neophilic	Neutral	Neophobic
Male	1	26	24
Female	1	19	27
FOR FNS	NEGATIVE	NEUTRAL	POSITIVE
Total Participants	50	24	26
Percentage (%)	50	24	26

Table 6 indicated the calculated data of demographic factors like education, gender and Food Neophobia scale (FNS) in terms of Neophilic, neutral and Neophobic terms in Farsi Language.

Neophilic is defined as a person who has the tendency to like anything new whereas the **Neophobic** is just opposite to the neophilic; Neophobic is a person having an extreme or irrational dislike of anything new or unfamiliar. **Neutral** indicates a person who neither like nor dislike trying new things.

Education: Going through educational, gender and Food neophilic scale factors, the data obtained give us idea that in term of education, according to the result for Farsi language student level are neophobic in high number, there are high number of high school neophobic, high number of neophobic in high level education(they all do not like new change- they want their own food or old habits as they might be comfortable with it or they like their old habits or food more, or they might fear to try new things or they believe new thing will replace or destroy old thing.

Whereas in bachelor level student most of the people are neutral as they are readily fine with changes. They are okay with the new changes. They are not that much mature enough to evaluate the food content or are unable to understand what's the change can bring either positive or negative thus they prefer to stay neutral, and there are only 2 neophilic bachelor level student who are neophilic. They dare to try and accept the new changes as it might bring change in them too and they can go with new flow.

Gender: talking about the gender, male are found to be neutral i.e. neither like nor dislike trying new things however female was found to be neophobic i.e. they having an extreme or irrational dislike of anything new or unfamiliar. This can be due to male are less emotional and fascinate new changes and can easily accept the new changes in food pattern, choices or habits but women are more sensitive and emotional to their own food. They are more sentimental towards food. They also believe that by changing their regular used to food their health can have some effects with new replacement.

For FNS: For food neophilic scale, the most participants were found to be negative towards. They do not like the new food or changes in their food pattern. They are very sensitive to their regular food choices and are not comfortable regarding changes.

Table 7: Representation of the comparison between English and Farsi language liking score of Health and Taste Attribute Scale in term of percentage

ENGLISH LANGUAGE	PERCENTAGE (%)			FARSI LANGUAGE	PERCENTAGE (%)		
	NEGATIVE	NEUTRAL	POSITIVE		NEGATIVE	NEUTRAL	POSITIVE
GH	19	18	62	GH	16	13	70
LH	3	31	65	LH	8	31	60
NH	24	36	39	NH	15	24	60
CS	20	32	47	CS	22	35	42
PL	17	51	31	PL	28	36	35
RE	1	35	63	RE	2	34	63
HEALTH	13	24	62	HEALTH	2	34	63
TASTE	4	53	42	TASTE	12	51	36

NOTE:

GH: GENERAL HEALTH

LH: LIGHT FOOD

NH: NUTRITION FOOD

CS: CRAVING OF SWEET

PL: PLEASURE FOOD*

RE: REWARDING FOOD

Table 7 showed the data which represents the comparison between English and Farsi language liking score of Health and Taste Attribute Scale in term of percentage. Talking about in case of both English and Farsi language, in terms of general health (GH), Light Food (LH), Nutrition Food (NH), Craving of Sweet (CS), Rewarding Food (RE), Health and taste attributes, it can be seen that all the response are positive. Whereas, in case of Pleasure food (PL), the response was to be highest of Neutral response in both English and Farsi language study. This means that the people like to be healthy and like to eat light foods. They also have positive craving towards craving of sweet. And like the food as reward. They accept food as reward. They want to be healthy yet enjoy the sweets and reward food. It is a human nature that one want to eat

everything without any limitation yet want to be healthy. But it is scientifically proven that balance diet and exercise are the main cause for the healthy lifestyle. In case of Pleasure food (PL), most people neither like or dislike the pleasure food or like any food as pleasure. They take food as a survival meal, treat and nutritional aspects in general. Some people believe that some foods give them satisfaction or sensation of being full whereas some people take food as basic value to survive.

CHI-SQUARE TEST EXPLANATION:

Table 8: Data representation of the gender comparison among Neophilic, neutral and neophobic characteristics in English and Farsi language regarding Health and Taste attributes Scale.

ATTRIBUTES SCALES	ENGLISH LANGUAGE				FARSI LANGUAGE			
	GENDER	Neophilic	Neutral	Neophobic	GENDER	Neophilic	Neutral	Neophobic
FNS								
	Male	1	26	24	Male	1	26	24
	Female	1	19	27	Female	1	18	27
GH								
	Male	0	16	35	Male	0	12	38
	Female	0	17	29	Female	0	13	33
LH								
	Male	0	42	8	Male	0	45	6
	Female	0	38	8	Female	0	39	5
NH								
	Male	0	50	1	Male	0	49	2
	Female	0	46	1	Female	0	41	3
HEALTH								
	GENDER	negative	Neutral	positive	GENDER	Negative	Neutral	positive

	Male	0	0	50	Male	0	0	50
	Female	0	0	45	Female	0	0	45
CS	GENDER	negative	Neutral	positive	GENDER	Negative	Neutral	positive
	Male	0	40	9	Male	0	40	11
	Female	2	32	11	Female	2	29	15
PL	GENDER	negative	Neutral	positive	GENDER	Negative	Neutral	positive
	Male	0	46	5	Male	0	40	13
	Female	2	39	7	Female	2	32	13
RE	GENDER	negative	Neutral	positive	GENDER	Negative	Neutral	positive
	Male	0	41	10	Male	0	42	10
	Female	0	36	10	Female	0	36	10
TASTE	GENDER	negative	Neutral	positive	GENDER	Negative	Neutral	positive
	Male	0	0	51	Male	0	0	51
	Female	0	0	46	Female	0	0	46
HTAS	GENDER	negative	Neutral	positive	GENDER	Negative	Neutral	positive
	Male	0	0	51	Male	0	0	51
	Female	0	0	46	Female	0	0	46

NOTES:

FNS: FOOD NEOPHOBIA SCALE

GH: GENERAL HEALTH

LH: LIGHT FOOD

NH: NUTRITION FOOD

CS: CRAVING OF SWEET

PL: PLEASURE FOOD

RE: REWARDING FOOD

HTAS: HEALTH & TASTE ATTRIBUTE SCALE

Table 8 above indicated the data representation of the gender comparison among Neophilic, neutral and neophobic characteristics in English and Farsi language regarding Health and Taste attributes Scale. Before performing the chi-square tests for English language and Farsi language data, for different attributes like Food neophilic scale (FNS), general health (GH), Light Food (LH), Nutrition Food (NH), Craving of Sweet (CS), Rewarding Food (RE), Health and taste attributes, the gender data for neophilic, neutral and neophobic for FNS and Negative (dislike), neutral, and positive (liking) for rest of the attributes are calculated and SAS testes were run looking for p value for further analysis.

Neophilic is defined as a person who has the tendency to like anything new whereas the Neophobic is just opposite to the neophilic; Neophobic is a person having an extreme or irrational dislike of anything new or unfamiliar. Neutral indicates a person who neither like nor dislike trying new things.

For both English and Farsi language, the results obtained were found to be same as shown in table 8.

In FNS, male are found to be neutral i.e. neither like nor dislike trying new things however female was found to be neophobic i.e. they having an extreme or irrational dislike of anything new or unfamiliar. This can be due to male are less emotional and fascinates new changes and can easily accept the new changes in food pattern, choices or habits but women are more sensitive and emotional to their own food. They are more sentimental towards food. They also believe that by changing their regular used to food their health can have some effects with new replacement.

In general health both male and female were found to be positive towards the health and have some awareness. Due to the highest impact of media as well, people are aware of health. Along with this, people are dying sooner than normal age and among the survival population, most are suffering from diseases like diabetics, high blood sugar level, high blood pressure so people aware to take care of their health and eat healthy food. Whereas in term of LH, NH, CS, PL, and RE people have neutral reaction like they both male and female neither like or dislike the light food, nutritional food, sweet cravings, pleasure food and rewarding food respectively. Most people due to busy schedule prefer fast foods or take away packs and they believe on super foods, supplements and fast nutritional providing medicines which is actually a myth. Scientifically, it is proven that natural source rather than chemical source in foods industry are safer and powerful which may people are unaware of. Whereas people wants to be healthy having tasty foods maintaining their healthy life which only can be possible with natural foods and balance diet. This applies for both gender in both language pattern.

CHI-SQUARE TEST:

The chi-square test was done taking the calculated data for male and female Neophiliac, neutral and neophobic data for gender i.e. male and female separately for English and Farsi language and the p-value was looked upon for furthermore relationship between male and female. The “**p-value**” technically can be defined as the probability. It can be defined as the probability of something that is happening.

It calculates the t-statistic and its **p-value** for the null hypothesis under the assumption that the sample comes from an approximately normal distribution. If the **p-value** associated with the test is small (usually set at $p < 0.05$), there is evidence that the **mean** is different from the hypothesized **value**.

Table 9: The calculated p-value for the different attributes for chi-square test for English language and Farsi language:

	p-VALUE FOR CHI-SQUARE TEST	
ATTRIBUTES	ENGLISH LANGUAGE	FARSI LANGUAGE
FNS	0.57	0.5
GH	0.56	0.63
LH	0.85	0.95
NH	0.41	0.52
CS	0.23	0.12
PL	0.24	0.28
RE	0.79	0.75

NOTES:

FNS: FOOD NEOPHOBIA SCALE

GH: GENERAL HEALTH

LH: LIGHT FOOD

NH: NUTRITION FOOD

CS: CRAVING OF SWEET

PL: PLEASURE FOOD

RE: REWARDING FOOD

HTAS: HEALTH & TASTE ATTRIBUTE SCALE

For English Language chi-square test:

1. For FNS, as the $p = 0.57$, i.e. $p > 0.05$, there is no significant difference between male and female FNS.
2. For GH, as $p = 0.56$ i.e. $p > 0.05$, there is no significant difference between male and female general health.
3. For LH as $p = 0.85$ i.e. $p > 0.05$, there is no significant difference between male and female light food.
4. For NH, as $p = 0.41$ i.e. $p < 0.05$, there is significant difference between male and female Nutrient food.
5. For CS, as $p = 0.23$ i.e. $p < 0.05$, there is no significant difference between male and female craving for sweet.
6. For PL, as $p = 0.24$ i.e. $p < 0.05$, there is significant difference between male and female pleasure food.
7. For RE, as $p = 0.79 > 0.05$, there is no significant difference between male and female reward food.

For Farsi Language chi-square:

1. For FNS, as $p = 0.5$ i.e. $p > 0.05$, there is no significant difference between male and female food neophobia scale.
2. For GH, as $p = 0.63$ i.e. $p > 0.05$, there is no significant difference between male and female general health.
3. For LH as $p = 0.95$ i.e. $p > 0.05$, there is no significant difference between male and female light food.
4. For NH, as $p = 0.52$ i.e. $p > 0.05$, there is no significant difference between male and female nutrient health.
5. For CS, as $p = 0.12$ i.e. $p < 0.05$, there is significant difference between male and female craving for food.

6. For PL, as $p=0.28$ i.e. $p < 0.05$, there is significant difference between male and female.
7. For RE, as $p=0.75$ i.e. $p > 0.05$, there is no significant difference between male and female.

There is no significant difference between male and female in both English and Farsi language means that there is no relationship between male and female in terms of different above mentioned attributes like likings for general health (GH), Light Food (LH), Nutrition Food (NH). Both male and female do not show any relationship between each other in term of these factors. Regarding Craving of Sweet (CS), Rewarding Food (RE) and Pleasure Food (PF), both male and female showed significant difference.

FNS: gender-related differences in variables of importance for food intake between male and female are different, many researches have been illustrated that women are more disgust sensitive than men because food rejection and aversions are more common in women. This rejection might come from predominantly sensory attributes or the prevalence of gastrointestinal illness which is very common in women, type of aversive food due to associated illness.(Nordin ,2004)

GH: Different studies illustrated that food neophobia is an important predictor of people's willingness to try variety of foods, general health is one of the biggest major which have effect on healthy eating. In generally, health problem impact on health-care cost is a factor might be have effect on males more than females so it is effected on male consumer's behaviour for choosing and selecting foods.(Salomón,2016)

LH & NH: A healthy diet consists of a variety and balanced diet and the result shows, nowadays male is care more than female to have a nice shape in compare with last decade which was opposite. Male is not only looking on light foods which is out of any oil and spices that make the food delicious also they are looking on nutrition foods more than females because the light foods or some food whit high nutrition ingredient is not really delicious and male is less sensitive than female.(Salomón,2016)(Kathleen. Keller,2019)

CS, RE & PF: Cravings are associated with subsequent eating and weight-related outcomes, being able to control food cravings is a determinant of success at adhering to an energy-restricted diet regimen. Reward is linked to adiposity and pleasure is related with physical inactivity. Females mostly have more craving of sweet than males but in this study males have got higher number which stand on neutral also in food as a pleasure and rewards as well it might be because of income situation and place of living also the age. In generally, female in age of 12-18 likes to eat something sweet or use it as a rewarding.(Demattè,2014)(Dovey.Staples, 2008)

T-TEST EXPLANATION:

T-test calculates the t-statistic and its p-value for the null hypothesis under the assumption that the sample comes from an approximately normal distribution. If the p-value associated with the t-test is small (usually set at $p < 0.05$), there is evidence that the mean is different from the hypothesized value.

Table 10: The p-value obtained after t-test calculation for both English and Farsi language

ATTRIBUTES	p-value for T-TEST
FNS	0
GH	0.031
LH	0.031
NH	0.087
HEALTH	0.0015
CS	0.73
PL	0.399
RE	0.925
TASTE	0.8432

NOTES:

FNS: FOOD NEOPHOBIA SCALE

GH: GENERAL HEALTH

LH: LIGHT FOOD

NH: NUTRITION FOOD

CS: CRAVING OF SWEET

PL: PLEASURE FOOD

RE: REWARDING FOOD

In the t-test, the SAS program was run comparing between different aspect of English and Farsi Languages' aspects of Health and Taste attribute Scales.

- 1) For FNS, as $p=0$ i.e. $p > 0.05$, there is no significant difference between English FNS and Farsi FNS.

- 2) For GH, as $p=0.031$ i.e. $p < 0.05$, there is significant difference between English GH and Farsi GH.
- 3) For LH as $p= 0.031$ i.e. $p < 0.05$, there is significant difference between English LH and Farsi LH.
- 4) For NH, as $p= 0.087$ i.e. $p < 0.05$, there is significant difference between English NH and Farsi NH.
- 5) For CS, as $p= 0.73$ i.e. $p > 0.05$, there is no significant difference between English CS and Farsi CS.
- 6) For PL, as $p= 0.399$ i.e. $p > 0.05$, there is no significant difference between English PL and Farsi PL.
- 7) For RE, as $p=0.95$ i.e. $p > 0.05$, there is no significant difference between English RE and Farsi RE.
- 8) For Health, as $p= 0.0015$, i.e. $p < 0.05$, there is significant difference between English Health attributes and Farsi health attributes.
- 9) For Taste, as $p= 0.84$ i.e. $p > 0.05$, there is no significant difference between English taste and Farsi taste.

There is no significant difference English language and Farsi language attributes means that there is no relationship between male and female in terms of different above mentioned attributes like likings for general health (GH), Light Food (LH), Nutrition Food (NH), Craving of Sweet (CS), Rewarding Food (RE) and Pleasure Food (PF). Both male and female do not show any relationship between each other. Whereas, there is significant difference between means that there is relationship between both languages attributes.

CRONBACH COEFFICIENT ALPHA SAS EXPLANATION:

Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. A "high" value for alpha does not imply that the measure is unidimensional. If, in addition to measuring internal consistency, you wish to provide evidence that the scale in question is unidimensional, additional analyses can be performed. Exploratory factor analysis is one method of checking

dimensionality. Technically speaking, Cronbach's alpha is not a statistical test – it is a coefficient of reliability (or consistency).

Figure 2: Cronbach coefficient alpha value given by Nunnally and Bernstein (1994):

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Note: Cronbach coefficient alpha value given by Nunnally and Bernstein (1994) is 0.70

Table 11: Cronbach coefficient alpha value of English and Farsi language obtained from the Cronbach alpha SAS.

ATTRIBUTES	CRONBACH ALPHA VALUE
FNS	1
GH	0.97
LH	0.78
NH	0.7
HEALTH	0.9
CS	0.9
PL	0.81
RE	0.76
TASTE	0.96

NOTE:

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PL: PLEASURE FOOD

RE: REWARDING FOOD

HTAS: HEALTH & TASTE ATTRIBUTE SCALE

For Cronbach alpha, the SAS program was run comparing between English and Farsi language health and taste attribute scales.

1. For FNS, the Cronbach alpha value= 1 i.e. $\alpha \geq 0.9$, thus there is excellent internal consistency between English FNS and Farsi FNS.
2. For GH, the Cronbach alpha value= 0.97 i.e. $\alpha \geq 0.9$, thus there is excellent internal consistency between English GH and Farsi GH.
3. For LH, the Cronbach alpha value= 0.78 i.e. $\alpha \geq 0.8$, thus there is good internal consistency between English LH and Farsi LH.
4. For NH, the Cronbach alpha value= 0.7 i.e. $\alpha \geq 0.7$, thus there is acceptable internal consistency between English NH and Farsi NH.
5. For Health, the Cronbach alpha value= 0.9 i.e. $\alpha \geq 0.9$, thus there is excellent internal consistency between English Health and Farsi Health.
6. For CS, the Cronbach alpha value= 0.9 i.e. $\alpha \geq 0.8$, thus there is good internal consistency between English CS and Farsi CS.
7. For PL, the Cronbach alpha value= 0.81 i.e. $\alpha \geq 0.7$, thus there is acceptable internal consistency between English PL and Farsi PL.
8. For RE, the Cronbach alpha value= 0.76 i.e. $\alpha \geq 0.6$, thus there is questionable internal consistency between English RE and Farsi RE.

9. For Taste, the Cronbach alpha value= 0.96 i.e. $\alpha \geq 0.9$, thus there is excellent internal consistency between English Taste and Farsi Taste.

Cronbach's alpha is a convenient test used to estimate the reliability, or internal consistency, of a composite score. Cronbach's alpha gives us a simple way to measure whether or not a score is reliable. It is used under the assumption that you have multiple items measuring the same underlying construct. Theoretically, Cronbach's alpha results should give a number from 0 to 1, but one can get negative numbers as well. A negative number indicates that something is wrong with the data—perhaps one forgot to reverse score some items. The general rule of thumb is that a Cronbach's alpha of 0.70 and above is good, 0.80 and above is better, and 0.90 and above is best.

Cronbach's alpha does come with some limitations: scores that have a low number of items associated with them tend to have lower reliability, and sample size can also influence results for better or worse.



CONCLUSIONS

Consumer behaviour can be defined as the investigation or the study of how individual or group of customers or particular targeted group of customers or organizations select, buy, use, and dispose ideas, goods, and services to satisfy their needs and wants. It is very important aspect as by understanding what causes the consumers to buy particular goods and services, they will be able to determine—which products are needed in the marketplace, which are obsolete, and how best to present the goods to the consumers.

In the study was done on around 100 panellist on the Food Neophobia Scale (FNS) along with Health and taste attitude scale with both English and Farsi versions. The consumer behaviour was studied as well. The FNS scale, consumer behaviour and demographic study was done and the data was input accordingly. The data was then calculated and the results were obtained which was then interpreted both in English and Farsi version and both are compared. The percentage for each questions, the percentage for Neophilic, neutral and positive consumers even in terms of gender and the percentage for FNS scale, general health (GH), Light food (LH), Nutrition food (NH), craving food (CS), pleasure food (PL), reward food (RE), health attributes, taste attributes and health and taste attribute scales (HTAS) in terms of negative, neutral and positive scale including the gender (Male and female) were determined.

The similarities and differences between both languages can be figured out with the obtained data. For clear and detailed information, t-test, chi-square tests and Cronbach alpha test were carried out.

For both English and Farsi language questionnaire, the percentage data calculated for food related behavioural was put in data and the data was calculated. The results indicated the highest to lowest accepted behaviour of the participants. Starting from question 1 to question 11, there are maximum percentage of people who takes 1-2 meals a day and usually afternoon & evening time period as most of the participants are school going aging from 12-17, the most preferable time might be when they get free. There are highest percentage of people i.e. 41 % who usually watch out for healthy nutrition as customers or people seldom care about what's in their food or might be they have less time to read and understand the nutritional value or unaware of the terms. Participants occasionally and usually feel the sensation of starving. Most people prefer to go out occasionally when they get stressed and angry. Most people want to sit alone and in this participation, most are teenagers who rarely shares their emotion at this time period.

For both English and Farsi language, the calculated data of mean and standard deviation (S.D) was obtained from the demographic related questionnaire from questions related to different

demographic factors like age, gender, education level, religion, occupation, household, income and resident. The mean showed that the average age is 12-17 years old and most of them are found to be male in terms of gender. This can be due to mostly the people from Iran are in high number rather than live in Thailand, the most Iranian male are encouraged or attracted to participation. The male gender is found to be curious about new researches or studies whereas female being shy in nature participated less. As the Iranian people are high in participation, there are Islamic involvement at high average count. On average, the high school graduate participation can be seen. As 12-17 years old involvement can be seen this automatically suggest that there are high number of high school people on average. The average occupation was found to be employed. Although, teenager's participation was high, we can predict that these young age people are doing some part time jobs which make them eligible for income generating population. That's why the average income was found to be below \$10,000. But, in case of household composition, as the teenager's participation can be seen high, the average household composition was found to be single.

Similarly, there are more percentage of people who prefer to buy their food at big super market as big super market are convenient and affordable. They can find a number of stuffs at one place. The people who have participated seems to have knowledge about the fresh food and its importance thus about 88 % of people go for fresh foods. Mostly find the vegetables as their most important items while buying foods. While talking about the responsibilities for food shopping they answered as they take charge of only half responsibilities as the maximum percentage of participants are from 12-17 years of age. At that age, mostly elders or parents of guardians do shopping. The servings that a person should eat each day for good health was found to be 1-2 which is the highest answered. However, they give least preferences to drink consumption per day. They just take 1-2 cup of drink except water per day. This can be due to the fact that they prefer water the most among the drinks.

Likewise, the calculated mean and standard deviation for Food related behaviour questionnaire for English and Farsi language was determined. Mathematically, the mean is the average of a set of numbers. To find the mean of a data set, add up all of the numbers in the set, and then divide that total by the number of numbers in the set. When we get a big set of data there are all sorts of ways to mathematically describe the data. And the standard deviation (S.D) is a statistic that measures the dispersion of a dataset relative to its mean and is calculated as the square root of the variance. It is calculated as the square root of variance by determining the variation between each data point relative to the mean. If the data points are further from the mean, there is a higher deviation within the data set; thus, the more spread out the data, the higher the standard deviation.

In average most people prefer 1-2 meals a day at 11 am to 3 pm timing as most people prefer lunch and dinner the most skipping breakfast. From the mean value, occasionally people watch for nutritional value due to busy schedules. On average, people rarely feel the sensation of starving as many people's life are busy both in school and office. Due to busy and tight schedule

they do not get time to think about their starving. As most of the participants are teenagers (age 12-17) as mentioned above, during anger or stress they rarely go out as teenagers rarely shares their feelings. They mostly prefer staying alone when they are upset. On average, people buy food on market as they can find the cheaper foods and easy going too and mostly due to busy life schedule and less time, people prefer pre-cooked food. Likewise, they prefer vegetables and choose shopping as little responsibility as mostly participants are 12-17 years and no or less income people. They took 1-2 serving of fruits or vegetables per day on average for good health as people mainly have concept of having fruits as the best and high source of nutrition for better health. On average, they take 1-2 cup of drinks except water each day. This can be due to they prefer water as drink and which is cheaper or even free rather than coffee and tea.

Moreover, the percentage presentation of demographic questionnaire in English and Farsi language clearly showed the highest and the lowest percentage involvement in different factors. Where regarding age factor, 12-17 years old percentage was found to be highest as at this age people are most curious and active towards new things and they have the concept of the surveys which can enhance the products. The male was found to be highest as female gender can be seen as shy in nature and participated less. In term of percentage, the highest education involvement was found to be of bachelor. This can be due to the second highest percentage of age was in between 18-24 years old and also it might be possible that some people from above 24 are doing bachelor with gaps. More percentage of Islamic people are found as the most country resident are of Iran, which is an Islamic nation. The average occupation was found to be employed. Although, teenager's participation was high, we can predict that these young age people are doing some part time jobs which make them eligible for income generating population. That's why the average income was found to be below \$10,000. Likewise, in case of household composition, although the teenager's participation can be seen high, the average household composition was found to be married. This can be due to the some teenagers and age above 18 years being married which gave high percentage altogether.

In addition to that, the data for demographic factors like education, gender and Food Neophobia scale (FNS) in terms of Neophilic, neutral and Neophobic terms in English Language and Farsi Language was calculated.

Neophilic is defined as a person who has the tendency to like anything new whereas the **Neophobic** is just opposite to the neophilic; Neophobic is a person having an extreme or irrational dislike of anything new or unfamiliar. **Neutral** indicates a person who neither like nor dislike trying new things.

Education: Going through educational, gender and Food neophilic scale factors, the data obtained give us idea that in term of education, students and are found to dislike trying new

things. They were found to be Neophobic in nature. Every person has different perspectives for liking new things. Most people fear to try new things as they might stick with their own favourite foods and they do not want to change it or they might fear not liking the new changes. Whereas high school and bachelor people were found to be neutral to liking of new foods. That means they neither like nor dislike trying new things. As these age people are independent for their choice and are okay with new changes or no new changes, their feedback showed the neutral results.

Gender: talking about the gender, male are found to be neutral i.e. neither like nor dislike trying new things however female was found to be neophobic i.e. they having an extreme or irrational dislike of anything new or unfamiliar. This can be due to male are less emotional and fascinates new changes and can easily accept the new changes in food pattern, choices or habits but women are more sensitive and emotional to their own food. They are more sentimental towards food. They also believe that by changing their regular used to food their health can have some effects with new replacement.

For FNS: For food neophilic scale, the most participants were found to be negative towards. They do not like the new food or changes in their food pattern. They are very sensitive to their regular food choices and are not comfortable regarding changes.

The chi-square test was done taking the calculated data for male and female Neophiliac, neutral and neophobic data for gender i.e. male and female separately for English and Farsi language and the p-value was looked upon for furthermore relationship between male and female. The “**p-value**” technically can be defined as the probability. It can be defined as the probability of something that is happening.

It calculates the t-statistic and its **p-value** for the null hypothesis under the assumption that the sample comes from an approximately normal distribution. If the **p-value** associated with the test is small (usually set at $p < 0.05$), there is evidence that the **mean** is different from the hypothesized **value**.

For English Language chi-square test:

8. For FNS, as the $p = 0.57$, i.e. $p > 0.05$, there is no significant difference between male and female FNS.
9. For GH, as $p = 0.56$ i.e. $p > 0.05$, there is no significant difference between male and female general health.
10. For LH as $p = 0.85$ i.e. $p > 0.05$, there is no significant difference between male and female light food.

11. For NH, as $p = 0.41$ i.e. $p < 0.05$, there is significant difference between male and female Nutrient food.
12. For CS, as $p = 0.23$ i.e. $p < 0.05$, there is no significant difference between male and female craving for sweet.
13. For PL, as $p = 0.24$ i.e. $p < 0.05$, there is significant difference between male and female pleasure food.
14. For RE, as $p = 0.79 > 0.05$, there is no significant difference between male and female reward food.

For Farsi Language chi-square:

8. For FNS, as $p = 0.5$ i.e. $p > 0.05$, there is no significant difference between male and female food neophobia scale.
9. For GH, as $p = 0.63$ i.e. $p > 0.05$, there is no significant difference between male and female general health.
10. For LH as $p = 0.95$ i.e. $p > 0.05$, there is no significant difference between male and female light food.
11. For NH, as $p = 0.52$ i.e. $p > 0.05$, there is no significant difference between male and female nutrient health.
12. For CS, as $p = 0.12$ i.e. $p < 0.05$, there is significant difference between male and female craving for food.
13. For PL, as $p = 0.28$ i.e. $p < 0.05$, there is significant difference between male and female.
14. For RE, as $p = 0.75$ i.e. $p > 0.05$, there is no significant difference between male and female rewarding food.

There is no significant difference between male and female in both English and Farsi language means that there is no relationship between male and female in terms of different above mentioned attributes like likings for general health (GH), Light Food (LH), Nutrition Food (NH), Craving of Sweet (CS) but there was significant difference between male and female in Farsi language in terms of Rewarding Food (RE) and Pleasure Food (PF).

T-test calculates the t-statistic and its p-value for the null hypothesis under the assumption that the sample comes from an approximately normal distribution. If the p-value associated with the t-test is small (usually set at $p < 0.05$), there is evidence that the mean is different from the hypothesized value. In the t-test, the SAS program was run comparing between different aspect of English and Farsi Languages' aspects of Health and Taste attribute Scales.

- 1) For FNS, as $p=0$ i.e. $p > 0.05$, there is no significant difference between English FNS and Farsi FNS.
- 2) For GH, as $p=0.031$ i.e. $p < 0.05$, there is significant difference between English GH and Farsi GH.
- 3) For LH as $p= 0.031$ i.e. $p < 0.05$, there is significant difference between English LH and Farsi LH.
- 4) For NH, as $p= 0.087$ i.e. $p < 0.05$, there is significant difference between English NH and Farsi NH.
- 5) For CS, as $p= 0.73$ i.e. $p > 0.05$, there is no significant difference between English CS and Farsi CS.
- 6) For PL, as $p= 0.399$ i.e. $p > 0.05$, there is no significant difference between English PL and Farsi PL.
- 7) For RE, as $p=0.95$ i.e. $p > 0.05$, there is no significant difference between English RE and Farsi RE.
- 8) For Health, as $p= 0.0015$, i.e. $p < 0.05$, there is significant difference between English Health attributes and Farsi health attributes.
- 9) For Taste, as $p= 0.84$ i.e. $p > 0.05$, there is no significant difference between English taste and Farsi taste.

There is no significant difference English language and Farsi language attributes means that there is no relationship between male and female in terms of different above mentioned attributes like likings for general health (GH), Light Food (LH), Nutrition Food (NH), Craving of Sweet (CS), Rewarding Food (RE) and Pleasure Food (PF). Both male and female do not show any relationship between each other. Whereas, there is significant difference between means that there is relationship between both languages attributes.

For Cronbach alpha, the SASS program was run comparing between English and Farsi language health and taste attribute scales.

1. For FNS, the Cronbach alpha value= 1 i.e. $\alpha \geq 0.9$, thus there is excellent internal consistency between English FNS and Farsi FNS.
2. For GH, the Cronbach alpha value= 0.97 i.e. $\alpha \geq 0.9$, thus there is excellent internal consistency between English GH and Farsi GH.
3. For LH, the Cronbach alpha value= 0.78 i.e. $\alpha \geq 0.8$, thus there is good internal consistency between English LH and Farsi LH.
4. For NH, the Cronbach alpha value= 0.7 i.e. $\alpha \geq 0.7$, thus there is acceptable internal consistency between English NH and Farsi NH.
5. For Health, the Cronbach alpha value= 0.9 i.e. $\alpha \geq 0.9$, thus there is excellent internal consistency between English Health and Farsi Health.
6. For CS, the Cronbach alpha value= 0.9 i.e. $\alpha \geq 0.8$, thus there is good internal consistency between English CS and Farsi CS.
7. For PL, the Cronbach alpha value= 0.81 i.e. $\alpha \geq 0.7$, thus there is acceptable internal consistency between English PL and Farsi PL.
8. For RE, the Cronbach alpha value= 0.76 i.e. $\alpha \geq 0.6$, thus there is questionable internal consistency between English RE and Farsi RE.
9. For Taste, the Cronbach alpha value= 0.96 i.e. $\alpha \geq 0.9$, thus there is excellent internal consistency between English Taste and Farsi Taste.

Cronbach's alpha is a convenient test used to estimate the reliability, or internal consistency, of a composite score. Cronbach's alpha gives us a simple way to measure whether or not a score is reliable. It is used under the assumption that you have multiple items measuring the same underlying construct. Theoretically, Cronbach's alpha results should give a number from 0 to 1, but one can get negative numbers as well. A negative number indicates that something is wrong with the data—perhaps one forgot to reverse score some items. The general rule of thumb is that a Cronbach's alpha of 0.70 and above is good, 0.80 and above is better, and 0.90 and above is best.

Cronbach's alpha does come with some limitations: scores that have a low number of items associated with them tend to have lower reliability, and sample size can also influence results for better or worse.

Furthermore, many demographic factors influences the nature of consumers behaviour such as age, gender, education level, occupation, income, places, status and relating the products: product design, price, promotion, packaging, positioning and distribution. These study helps to

investigate and predict the certain product that can be launched or improved in market. The other factors includes:

- ✓ Personal factors such as age, gender, education and income level.
- ✓ Psychological factors such as buying motives, perception of the product and attitudes towards the product.
- ✓ Situational factors such as physical surroundings at the time of purchase, social surroundings and time factor.
- ✓ Social factors such as social status, reference groups and family

English version showed that there are more number of Neutral high school people and bachelor people. More neophobic female were involved but in total male outnumbered. Around age of 12-17 has high percentage of participation. More Islamic and Iranian people are involved. The more percentage of employed people are found in this study. As more number of high school people were involved, the married people are there. Less than \$10,000 income have the highest percentage involvement.

Farsi version showed that there are more number of Neutral high school people and bachelor people. More neophobic female were involved but in total male outnumbered. Around age of 12-17 has high percentage of participation. More Islamic and Iranian people are involved. The more percentage of employed people are found in this study. As more number of high school people were involved, the married people are there. Less than \$10,000 income have the highest percentage involvement.

Comparing both demographic scale in English and Farsi version, more similarities were found rather than dissimilarities.

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Appendix

(Table1)Food Neophobia Scale (FNS)

	Disagree strongly	Disagree moderately	Disagree slightly	Neither agree nor disagree	Agree slightly	Agree moderately	Agree strongly
I am constantly sampling new and different foods.							
I don't trust new foods.							
If I don't know what a food is, I won't try it.							
I like foods from different cultures.							
Ethnic food looks too weird to eat.							
At dinner parties, I will try new foods.							
I am afraid to eat things I never had before.							
I am very particular about the food I eat.							
I will eat almost everything.							
I like to try new ethnic restaurants.							

(Table 2): Health and Taste Attitude scale(ENG Version)

	Disagree strongly	Disagree moderately	Disagree slightly	Neither agree nor disagree	Agree slightly	Agree moderately	Agree strongly
I don't think much about food each day.							
Cooking or barbequing is not much fun.							
Talking about what I ate or am going to eat is something I like to do.							
Compared with other daily decisions, my food choices are not very important.							
When I travel, one of the things I anticipate most is eating the food there.							
I do most or all of the clean up after eating.							
I enjoy cooking for others and myself.							
When I eat out, I don't think or talk much about how the food tastes.							
I do not like to mix or chop food.							
I do most or all my own food shopping.							
I do not wash dishes or clean the table.							
I care whether or not a table is nicely set.							
I am very particular about the healthiness of food.							
I always follow a healthy and balanced diet.							
It is important to me that my diet is low in fat.							
It is important to me that my daily diet contains a lot of vitamin and mineral.							
I eat what I like and I do not worry about							

the healthiness of food.							
I do not avoid any foods, even if they may raise my cholesterol.							
The healthiness of food has little impact on my food choices.							
The healthiness of snacks makes no difference to me.							
In my opinion, the use of light products does not improve one's problem.							
I do not think that light products are healthier than conventional products.							
I believe that eating light products keep one's cholesterol level under control.							
In my opinion light products don't help to drop cholesterol levels.							
I believe that eating light products keeps one's body in good shape.							
In my opinion by eating light products one can eat more without getting too much calories.							
I do not care about additives in my daily diet.							
In my opinion, organically grown foods are no better for my health than those grown conventionally.							
In my opinion, artificially flavored foods are not harmful to my health.							
I try to eat foods that do not contain additives.							
I would like to eat only organically grown vegetables.							
I do not eat processed foods, because I do not know what they contain.							
In my opinion it is strange that some people have cravings for chocolate.							
In my opinion it is strange that some people have cravings for sweet.							
In my opinion it is strange that some people have cravings for ice cream.							
I often have cravings for sweets.							
I often have cravings for chocolate.							
I often have cravings for ice cream.							
I reward myself by buying something really tasty.							
I indulge myself by buying something really delicious.							
When I am feeling down I want to treat myself with something really delicious.							
I avoid rewarding myself with food.							
In my opinion, comforting oneself by eating is self-deception.							
I try to avoid eating delicious foods when I							

am feeling down.							
I do not believe that food should always be a source of pleasure.							
The appearance of food makes no difference for me.							
It is important to me to eat delicious foods on weekdays as well as the weekend.							
When I eat, I concentrate on enjoying the taste of food.							
I finish my meal even when I do not like the taste of food.							
An essential part of my weekend is eating delicious food.							

(Table 3): (ENG Version)

1) How many meals do you eat a day? (consider every fruits, every yoghurt or glass of milk as a single snack)

- ☐ 1-2 meals a day
- ☐ 3-4 meals a day
- ☐ 5-6 meals a day
- ☐ More 7 meals a day

2) At what time do you usually eat?

- ☐ Mostly morning
- ☐ 11 am to 3 pm
- ☐ Afternoon and evening
- ☐ Evening and night

3) Do you watch out for healthy nutrition?

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Usually

4) Are you mindful of your sensation of starving?

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Usually

5) Do you feel eat or go out for eat when you feel stressed, unhappy or angry?

- ☐ Never
- ☐ Rarely
- ☐ Occasionally
- ☐ Usually

- 6) Where do you usually buy food?
- ☐ On market
 - ☐ In big supermarkets
 - ☐ In small shop
 - ☐ In central center
- 7) What type of food do you usually prefer to buy?
- ☐ Frozen food
 - ☐ Pre – cooked food
 - ☐ Fresh food
 - ☐ Canned food
- 8) Which is first important for you when you buy food?
- ☐ Proteins
 - ☐ Vegetables
 - ☐ Dairy products
 - ☐ Snacks
- 9) How much responsibility do you have for food shopping?
- ☐ None
 - ☐ Just little
 - ☐ About half
 - ☐ Most or all
- 10) How many serving of fruits/vegetables do you think a person should eat each day for good health?
- ☐ 0
 - ☐ 1-2
 - ☐ 3-4
 - ☐ 5-6
- 11) How many cup of drinks(milk/beverage/cofe/tea...) except water do you take each day?
- ☐ 0
 - ☐ 1-2
 - ☐ 3-4
 - ☐ More than 5

(Table 4): Demographic Information (ENG version)

AGE	<input type="checkbox"/> Under 12 years old <input type="checkbox"/> 18-24 years old <input type="checkbox"/> 35-44 years old <input type="checkbox"/> 55-64 years old <input type="checkbox"/> 75 years or older	<input type="checkbox"/> 12-17 years old <input type="checkbox"/> 25-34 years old <input type="checkbox"/> 45-54 years old <input type="checkbox"/> 65-74 years old
GENDER	<input type="checkbox"/> Male	<input type="checkbox"/> Female
EDUCATION LEVEL	<input type="checkbox"/> Student <input type="checkbox"/> Bachelor's Degree	<input type="checkbox"/> High school graduate <input type="checkbox"/> Higher Education
RELIGION	<input type="checkbox"/> Islam <input type="checkbox"/> Buddhism	<input type="checkbox"/> Christianity <input type="checkbox"/> Folk religion
OCCUPATION	<input type="checkbox"/> Student <input type="checkbox"/> self-employed <input type="checkbox"/> retired	<input type="checkbox"/> employed <input type="checkbox"/> unemployed
Household Composition	<input type="checkbox"/> Single <input type="checkbox"/> Divorced	<input type="checkbox"/> Married
INCOME	<input type="checkbox"/> Less than \$10,000 <input type="checkbox"/> \$20,000 to \$29,999 <input type="checkbox"/> \$40,000 to \$49,999	<input type="checkbox"/> \$10,000 to \$19,999 <input type="checkbox"/> \$30,000 to \$39,999 <input type="checkbox"/> Above \$50,000
Currently resident	<input type="checkbox"/> Iran <input type="checkbox"/> Thailand	

دستور کار: لطفاً با دقت سوالات را بخوانید و بهترین گزینه را X انتخاب کنید با توجه به دیدگاهتان

کاملاً موافقم	متوسط موافقم	کمی موافقم	نه موافقم و نه مخالف	کمی مخالف	متوسط مخالف	شدیداً مخالف	
							من دائماً غذاهای جدید و متفاوت امتحان می کنم
							من به غذاهای جدید اعتماد ندارم
							اگر من ندانم که این چه غذایی است، من آن را امتحان نمی کنم
							غذاهای دیگر ملیتها را دوست دارم
							غذاهای دیگر ملیتها به نظر می رسد خیلی عجیب و غریب است برای خوردن
							در مهمانی های شبانه، غذاهای جدید را امتحان خواهم کرد
							من می ترسم غذاهایی را که قبلاً ندیده ام بخورم
							من خیلی درباره غذاهایی که میخورم دقیق هستم
							من تقریباً همه چیز را می خورم
							من دوست دارم رستوران های ملل مختلف را امتحان کنم

دستور کار: لطفاً با دقت سوالات را بخوانید و بهترین گزینه را X انتخاب کنید با توجه به دیدگاهتان

کاملاً موافقم	متوسط موافقم	کمی موافقم	نه موافقم و نه مخالف	کمی مخالف	متوسط مخالف	شدیداً مخالف	
							من روزانه زیاد درباره غذا فکر نمی کنم
							پخت و پز یا باریکیو خیلی سرگرم کننده نیست
							صحبت کردن در مورد آنچه که خوردم یا میخوام بخورم چیزی است که من دوست دارم انجام دهم
							در مقایسه با دیگر تصمیمات روزانه، انتخاب غذا خیلی مهم نیستند
							وقتی سفر می کنم، یکی از مواردی که بیشتر پیش بینی می کنم در سفر غذا خوردن در سفر است
							من بعد از خوردن غذا معمولاً دستهایم را تمیز میکنم
							من لذت میبرم از آشپزی کردن برای دیگران و خودم
							وقتی غذا می خورم، درباره مزه غذا زیاد فکر نمی کنم یا صحبت نمی کنم
							من دوست ندارم غذا را مخلوط کرده یا ریزش کنم
							من همیشه یا معمولاً مواد غذایی را خودم خرید می کنم
							من ظرفها یا میز را تمیز نمیکنم
							من به زیبایی میز و تزئین اهمیت می دهم
							من درباره سلامت غذا بسیار حساس هستم
							من همیشه یک رژیم سالم و متعادل را دنبال می کنم
							برای من مهم است که رژیم غذایی من کم چربی باشد
							برای من مهم است که رژیم روزانه من حاوی مقدار زیادی ویتامین و مواد معدنی باشد
							من غذایی را میخورم که دوست دارم و من در مورد ارزش مواد

							غذایی زیاد نگران نیستم
							من از هیچ غذایی اجتناب نمیکنم، حتی اگر کلسترول من را افزایش دهند
							سلامت غذا تاثیر کمی بر انتخاب غذای من دارد
							سلامت تنقلات برای من تفاوت چندانی ندارد
							به نظر من، استفاده از غذاهای سبک، هیچ مشکلی را بهبود نمی بخشد
							من فکر نمی کنم که غذاهای سبک سالم تر از غذاهای مرسوم باشند
							من معتقدم که خوردن غذاهای سبک، کلسترول را کنترل می کند
							به نظر من غذاهای سبک به کاهش کلسترول کمک نمی کند
							من معتقدم که خوردن غذاهای سبک بدن را در شکل خوب نگه می دارد
							به نظر من، با خوردن غذاهای سبک، می توانید بیشتر خورد و با کمترین کالری
							من به مواد افزودنی در رژیم غذایی روزانه توجه نمی کنم
							به نظر من، غذاهای ارگانیک برای سلامت بدن بهتر از غذاهای معمولی نیست
کاملاً موافق	متوسط موافق	کمی موافق	نه موافق و نه مخالف	کمی مخالف	متوسط مخالف	شدیداً مخالف	
							به نظر من، مواد غذایی با طعم مصنوعی برای سلامتی من مضر نیست
							من سعی می کنم غذاهای حاوی مواد افزودنی را نخورم
							من فقط دوست دارم سبزیجات ارگانیک بخورم
							من غذاهای فرآوری شده را نمی خورم، زیرا نمی دانم آنها چه هستند
							به نظر من، عجیب است که برخی از مردم برای شکلات اشتیاق دارند
							به نظر من، عجیب است که برخی از مردم میل به شیرینی دارند
							به نظر من، عجیب است که برخی از مردم میل به بستنی دارند
							من اغلب میل شدید به شیرینی دارم
							من اغلب میل شدید به شکلات دارم
							من اغلب میل شدید به بستنی دارم
							من به خودم جایزه میدهم با خرید چیزی واقعا خوشمزه
							من خودم را غافلگیر میکنم با خرید چیزی بسیار خوشمزه
							وقتی احساس بی حوصلگی می کنم، با خوردن چیزی بسیار خوشمزه خودم را سر حال می کنم
							من موافق تشویق خودم با غذا نیستم
							به نظر من، به آرامش رسیدن با خوردن غذا فریب دادن خود است
							من سعی می کنم وقتی احساس خستگی می کنم از خوردن غذاهای خوشمزه اجتناب کنم
							من اعتقاد ندارم که غذا همیشه باید یک منبع لذت بخش باشد
							ظاهر غذا برای من تفاوت ندارد
							برای من مهم است غذاهای خوشمزه را در روزهای هفته و همچنین آخر هفته بخورم
							وقتی که غذا می خورم، به طعم غذا دقت می کنم
							من غذا می خورم حتی زمانی که طعم غذا را دوست نداشته باشم
							بخش مهمی از آخر هفته من خوردن غذای خوشمزه است

دستور کار: لطفاً با دقت سوالات را بخوانید و بهترین گزینه را X انتخاب کنید با توجه به دیدگاهتان

1) چند وعده غذایی در روز دارید؟ (با در نظر گرفتن هر نوع میوه، هر نوع ماست یا لیوان شیر)

☐ 1-2 وعده غذا در روز

☐ 3-4 وعده غذا در روز

☐ 5-6 وعده غذا در روز

☐ بیشتر 7 وعده غذایی در روز

2) در چه زمانی شما معمولاً می خورید؟

☐ اغلب صبح

☐ تا 3 بعد از ظهر 11

☐ بعد از ظهر و شب

☐ شب

3) آیا شما به دنبال تغذیه سالم هستید؟

☐ هرگز

☐ به ندرت

☐ گاه و بیگاه

☐ معمولاً

4) آیا شما مواظب احساس گرسنگی خود هستید؟

☐ هرگز

☐ به ندرت

☐ گاه و بیگاه

☐ معمولاً

5) آیا میل به خوردن یا بیرون رفتن برای خوردن دارید وقتی که استرس یا ناراحتی دارید؟

☐ هرگز

☐ به ندرت

☐ گاه و بیگاه

☐ معمولاً

6) شما معمولاً غذا را از کجا خریداری می کنید؟



☐ در بازار

☐ در سوپر مارکت های بزرگ

☐ در فروشگاه کوچک

☐ در مرکز خرید

7) کدام نوع غذا را معمولاً ترجیح می دهید خرید کنید؟

☐ غذای منجمد

☐ غذای پخته شده

☐ مواد غذایی تازه

☐ غذای کنسرو شده

8) کدام یک برای شما مهم است هنگام خرید غذا؟

☐ پروتئین ها

☐ سبزیجات

☐ محصولات لبنی

☐ اسنک ها

9) چقدر مسئولیتی برای خرید مواد غذایی دارید؟

☐ هیچی

☐ فقط کمی

☐ حدود نیمی

☐ زیاد

10) شما فکر می کنید که چه تعداد وعده غذایی (میوه ها / سبزیجات) باید هر روز خورد تا بدن سالم داشت؟

☐ 0

☐ 1-2

☐ 3-4

☐ 5-6

11) چند فنجان نوشیدنی (شیر / نوشیدنی / قهوه / چای ...) به جز آب هر روز مصرف میکنید؟

☐ 0

☐ 1-2



3-4 ☐

بیش از 5 ☐

<input type="checkbox"/> 18-24 <input type="checkbox"/> 35-44 <input type="checkbox"/> 55-64	<input type="checkbox"/> 25-34 <input type="checkbox"/> 45-54 <input type="checkbox"/> 65-74	سن
<input type="checkbox"/> 75		جنسیت
<input type="checkbox"/> زن <input type="checkbox"/> مرد		سطح تحصیلات
<input type="checkbox"/> فارغ التحصیل دبیرستان <input type="checkbox"/> تحصیلات عالی <input type="checkbox"/> دانش آموز <input type="checkbox"/> لیسانس		دین
<input type="checkbox"/> مسیحیت <input type="checkbox"/> دیگر <input type="checkbox"/> اسلام <input type="checkbox"/> بودیسم		اشتغال
<input type="checkbox"/> دانشجو <input type="checkbox"/> کارمند <input type="checkbox"/> کارفرما <input type="checkbox"/> بیکار <input type="checkbox"/> بازنشسته		وضعیت تاهل
<input type="checkbox"/> متاهل <input type="checkbox"/> مجرد <input type="checkbox"/> جدا شده		درآمد در هر ماه
<input type="checkbox"/> \$ کمتر از 10,000 <input type="checkbox"/> تا 19,999 دلار <input type="checkbox"/> \$ 20,000 تا 29,999 <input type="checkbox"/> تا 39,999 \$ 30,000 <input type="checkbox"/> دلار به 49,999 40,000 <input type="checkbox"/> دلار بیش از 50,000		ساکن
<input type="checkbox"/> ایران <input type="checkbox"/> OMNIA <input type="checkbox"/> تایلند		

