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THE CONSUMERS' FUNCTIONAL FOOD TREND: MARKET ORIENTATION, MARKET OPPORTUNITIES

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Abstract

Functional foods have become the corner stone of food innovation in the past few years. Functional foods presumably enable the consumer to lead a healthier life without changing eating habits. In this paper, it is aimed to analyse the approaches of different consumers, living in the city of Istanbul, towards a variety of functional foods, the socio – economic status of the families and their approaches to functional foods. Applying a face to face survey to 611 people living in Istanbul, their attitudes to functional foods were examined. Data obtained from those 611 questionnaires were analysed through the SPSS statistical packet program. Besides, multiple regression analysis is conducted to determine the impact of independent variables (motivators to consumers' healthy lifestyle, barriers to consumers' healthy lifestyle, attitude towards willingness to consume functional foods has a positive impact on functional food consumption, willingness to consume functional foods) on the dependent variable (functional food consumption). T-test and ANOVA is conducted to define if there is a significant difference between functional food consumption of consumers according to demographic variables.

According to the results of the research, 73, 2 % of the consumers noted that they have had functional foods at least once before. Although the enhanced health benefits attracted consumers' attention, concerns on the artificial ingredients and effectiveness of the health benefits have formed negative attitudes towards functional products. Thus, understanding factors that influence consumers' perceptions and acceptances of functional food is essential for food industry in their new product development strategies making.

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Keywords: Functional foods, principal component analysis, consumer behaviour, nutritional habits.

1. Introduction

Functional foods have existed on the Turkish food market since 1990 and the number of functional food products is increasing. However, the interests in and attitudes to functional food among consumers is crucial if these foods are to be consumed and thereby exert their potential health benefits. Consumers with a general health interest have a positive attitude to functional food and perceive the foods as necessary, rewarding to consume and health promoting. Changing lifestyles has lead to changes on health effects that consumer has expected from the foods and nutrition. Along with that, in recent years people have started to give more importance on health issue and have turned towards natural products and functional foods rather than the products that have medical effects such as drugs and along with that, importance of the functional foods has been increased. One of the most importance reasons that functional food products has been started to much more preferred by the consumers is that they help people to turn towards healthier products without changing their nutritional habits (Larsen & Grunert, 2003). People have turned towards new quests with the fast increase of chronic diseases based on nutrition such as cardiovascular diseases, cancer and obesity. Today the close relation between nutrition models and health has been put forth with various scientific data. The object of these studies is to provide a healthy life as well as increasing length of the life. The researches concerning to functional foods was started in Japan on 1980s within this understanding and has fast expanded to all word. Herath, Cranfield and Henson (2008) founded that there are significant differences concerning to consumption of these foods between consumers of functional foods. It was concluded in the study that the consumers who are open to functional food consumption are elder and whose education and income levels are lower compared to more conservative consumer group.

Frewer, Scholderer and Lambert (2003) concluded in their research concerning to acceptability of the functional foods by the consumers that the consumers will accept the functional foods faster when they understand the health risks relevant to the foods. In their studies concerning to evaluation of consumer opinions regarding to whether health claims of the products are beneficial or not, Urala, Arvola and Lähteenmäki (2003) determined that female consumers find the health claims of the products more useful compared to male consumers, reliable health claims are more advantageous compared to the suspicious ones and functional food users find health claims more useful for the products compared to the ones who do not use these foods. Bhaskaran & Hardley (2002) determined effects of these opinions and information on functional food purchase while evaluating opinions and information of the consumers concerning to diet-health relation and nutrition.

The functional foods accepted as foods of today and tomorrow (special nutrition purposeful foods) are completely obtained from natural foods and added to the foods that we consume at daily nutrition. Famous philosopher Hippocrates (B.C. 400) emphasized importance of the foods in terms of health by saying that '*Let* food *be thy medicine and medicine be thy* food.' Within this direction, functional foods take its place in the market as the food of today and tomorrow (Pelvan, 2009, p.26).

Functional foods presumably enable the consumer to lead a healthier life without changing eating habits. It is difficult to find general patterns for functional food consumption according to demographic variables, because the samples are different in each study and consumers' demographic profile vary depending on the type of functional food and the benefit offered (Urala & Lahteenmaki, 2007). Siegrist, Stampfli & Kastenholz (2008) studied to determine the factors that affect functional food purchase. One of

the results that were concluded as a result of examination of the data gained from 249 Helvetian individuals was that the consumers more tend to purchase the functional foods that have physiological health claims compared to the ones that have psychological health claims. Some consumers are also concerned about the taste, quality, price and convenience of functional foods (Siro, Kapolna, Kapolna, & Lugasi, 2008). Different characteristics of the Turkish consumers were associated with consumption of different functional food products (Bekoglu, Ergen, & Inci, 2016). A significantly larger proportion of the females had consumed probiotic milk products and fibre-rich bread than males. While one of two main objectives of the study that was carried out by Krystallis, Maglaras, & Mamalis (2008) in Greece was to define the functional foods preferred by educated consumers, the second one was to determine the specifications of these foods as that most affect functional food purchase decisions of two different age groups such as young and middle-aged. Verbeke (2006) focused on that how much Belgian functional food consumers volunteer to what extent they compromise on taste of the foods for the sake of their health. Urula & Lähteenmäki (2004) aimed to put forth the reasons that turn the consumers towards functional foods. In this study, the specifications that push the consumers consuming these foods were defined under seven titles. These factors were; positive responses that consumers will gain by using functional foods, confidences of the consumers on functional foods, beliefs of the consumers concerning to necessity of functional foods, as a part of healthy dietary and positive effects of the functional foods on health. By setting forth from the tabu concerning to that consumers will accept up and coming products.

The purpose of this study is to suggest effective marketing strategies for functional food in Turkey. In this research aimed to understand the market of functional food and approaches of different consumers for functional food. Therefore, trend analysis will show actual consumer behaviour and propensity to consume functional food in Turkey. This research specifically focuses on clarifying major suppliers for functional food and proposing powerful marketing strategies. This study will provide marketing practitioners and academia with better understanding of analysing the functional food trend. What Turkish consumers think about functional foods? Consumers 'acceptance of the concept of functional food and better understanding of its determinants are as key success factors for market orientation, development, and successfully negotiating market opportunities for food sectors.

2. Problem Statement

Based on marketing, nutrition literature will be explored to explain different factors, which affect cross-cultural food-related consumer behaviour and their consumption of functional food in Turkey.

In order to be able to answer the problem statement the following sub-questions are formulated:

1. Why consumer interested in Functional Food?
2. What kind of Functional Food is preferred to consumer?
3. What is the relationship between respondents representative of a certain lifestyle segment and their consumption of functional food?
4. What is the approaches of different consumers towards a variety of functional foods, the socio–economic status of the families and their approaches to functional foods?

5. How is the trends and evolution of consumer attitudes and awareness to help enhance understanding of consumer behaviors related to functional foods.

3. Research Questions

Question one is the main research because its findings will bring us a step closer to gaining additional knowledge about the Turkish consumer's perspective concerning functional food and their position on adopting these products. Also, the findings from this question are considered to be quite significant for marketers' current marketing activities. For example, by knowing and understanding the Turkish consumers' current attitudes the marketers can evaluate whether or not they like where consumers' attitudes are and whether or not they would like to attempt to change the attitudes.

The collected data was analyzed by principal component analysis (PCA), descriptive statistical analysis which consumers' attitudes on functional foods. The hypothesis that were developed within direction of the objectives stated at previous stages of the study.

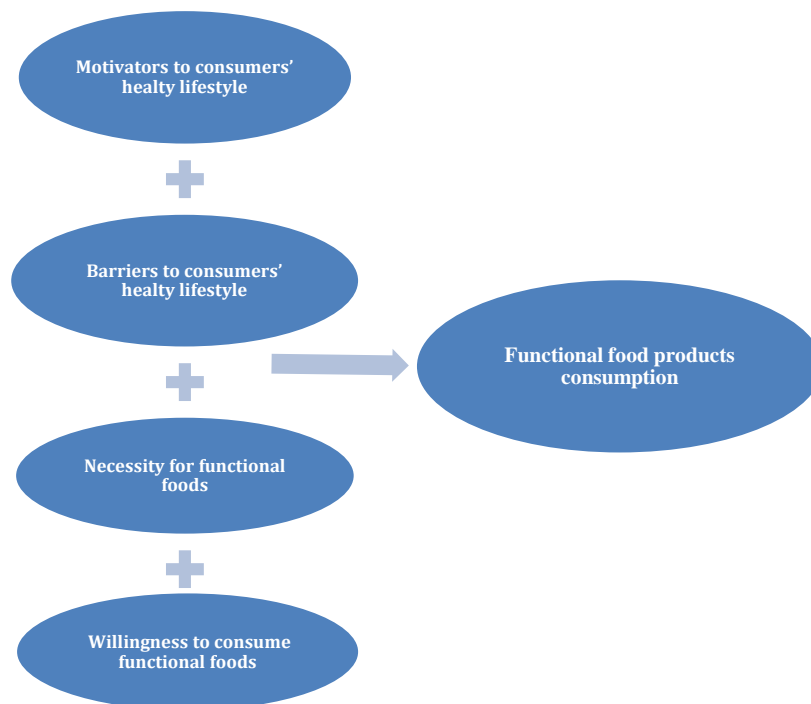The research model developed for this paper is shown in Figure 1.

Figure 01. Research Model

H$_1$: Attitude towards necessity of functional foods has a positive impact on functional food consumption

H$_2$: Motivators to consumers' healty lifestyle has a positive impact on functional food consumption

H$_3$: Attitude towards willingness to consume functional foods has a positive impact on functional food consumption

H$_4$: Barriers to consumers' healty lifestyle has a negative impact on functional food consumption

4. Purpose of the Study

The purpose of the study to analyze the approaches of different consumers, living in the city of Istanbul, towards a variety of functional foods, their approaches to functional foods. Besides cconsumers 'acceptance of the concept of functional food and better understanding of its determinants are as key success factors for market orientation, development, and successfully negotiating market opportunities for food sectors.

5. Research Methods

5.1. Sample and Data Collection

Within this direction, it was decided to detect whether there is a significant difference as relevant to viewpoints to the judgements stated at the survey form in terms of demographic specifications of the consumers or not and to determine the factors that affect attitudes and approaches to the functional foods.

On order to measure the dimensions that were included in the model, necessity dimension of Urala & Lahteenmaki's (2007) attitude towards functional food scale, normative dimension of Bearden, Netemeyer & Teel's (1989), barriers to consumers' healthy lifestyle scale and innovation seeking dimension of Manning, Bearden & Madden's (1995) consumers' attitudes to innovation scale were used. Consumer acceptance of variety of functional foods as part of the daily nutrition is widely recognized as a key variable to the success of these products (Lähteenmäki, Lyly, & Urala, 2007). Nevertheless, little research attention has been paid to the factors that influence consumers' acceptance of functional foods (Bech-Larsen & Scholderer, 2007).

To measure functional food consumption, most common types of functional food are chosen according to the related literature, expert opinion and market data. These are probiotic yoghurt, vitamin added fruit juice, nutritional cereals, diabetic products, energy drinks and calcium added milk etc. A Likert type scale (5 Likert type scale) was used to evaluate each of the questions. There were also questions about the demographic variables. Convenience sampling was used and applying a face to face survey to 611 people living in Istanbul, their attitudes to functional foods were examined.

The questions in the questionnaire were partly based on results from interviews with consumers (Buying behaviour was measured by asking consumers how often they buy functional foods (ranging from "every day" to "never"), the number of different types of functional foods they buy, and the number of brands of functional food they purchase.

5.2. Analyses

Applying a face to face survey to 611 people living in Istanbul, their attitudes to functional foods were examined. A Likert type scale was used to evaluate each of the questions. Data obtained from those 611 questionnaires were analysed through the SPSS statistical packet program. Besides, *multiple regression analysis* is conducted to determine the impact of independent variables (motivators to consumers' healty lifestyle, barriers to consumers' healty lifestyle, attitude towards willingness to consume functional foods has a positive impact on functional food consumption, willingness to consume functional foods) on the dependent variable (functional food consumption). *T-test and ANOVA* is conducted to define if there is a significant difference between functional food consumption of consumers according to demographic variables.

6. Findings

The demographic criteries such as age, martial statuses and education and income levels of the people in the study that was carried out devoted to analysis of approaches to functional food products in Istanbul city are given at Table 1 in detail.

Table 01. The Basic demographic characteristics

_____	N	%	Variable	N	%
Gender			**Family food spending**		
Male	234	38,3	<750	87	14,2
Female	377	61,7	751-1000	193	31,6
Age			1001-1500	149	24,4
16-25	142	23,2	1501-2000	97	15,9
26-35	211	34,6	2000>	85	13,9
36-45	127	20,8			
46-55	80	13,1			
55>	51	8,3			
Education					
Primary school	88	14,4			
Secondary School	49	8,0			
High school	141	23,1			
University	333	54,5			
Family income					
less than 2000 TL	184	30,1			
2001-3000TL	207	33,9			
3001-5000	145	23,7			
more than 5000TL	75	12,3			

38,3% of the consumers who participated to the research was male and 61,7% of the consumers were female(Table 1). When monthly income levels of the individuals who participated to the study is examined, it is seen that 30,1% has a monthly income less than 2000 TL, 33,9% has monthly income between 2001 and 3000TL, 23,7% has monthly income between 3001 and 5000 TL, 12,3% 2,5% has a monthly income higher than 5000 TL. When education levels are examined, it is seen that 14,4% is primary school graduate, 8% is secondary school graduate, 23,1% is high school graduate and 54,5% has undergone university and upper education. As university and upper educated individuals has the highest ratio, it is accepted as an indicator that the samples are distributed homogenously.

In the research, 4 different scale was used concerning to functional food consumption and viewpoints and reliability analysis results that was applied to relevant scales were given below. The Cronbach's Alpha values for each factors exceeds 0,70, which indicates the reliability of scales used in that survey(Table 2). It was concluded that reliability levels of the scales formed by taking these values into consideration were enough.

Table 02. Cronbach's Alpha Values

Motivators to consumers' healty lifestyle	Barriers to consumers' healty lifestyle	Attitude towards necessity of functional food products	Willingness to consume functional foods
0,852	0,909	0,929	0,955

The Factor Analysis Concerning to Perception Scales Devoted to Functional Foods

Apart from abovementioned scales, a perception scale was additionally formed devoted to object of the study and factor analysis regarding to the relevant scale was applied. At the first stage, KMO test was applied with the aim of determining conformity of the data set to the factor analysis and test result was detected as 87,7%. As the relevant value was >0.50, it may be said that data set is suitable for the factor analysis. Also when Berlett test significance value is examined, it is seen that it is significant. This means that there are high correlations between the variables and in other words, data set is suitable for factor analysis.

Table 03. Rotation Matrix

		Factor			
		1	2	3	4
Motivators to consumers' healty lifestyle	Functional foods prevent obesity and diabetes.	0,769			
	Functional foods decrease cancer risk.	0,746			
	Functional foods decrease stress and tiredness.	0,737			
	Regular use of functional foods improves life quality.	0,682			
	Functional foods are low calorie.	0,671			
	Functional foods increase physical and mental performance.	0,648			
	Usage of functional food decreases health (treatment) expenses.	0,627			
	Functional foods have weight loser specifications.	0,580			
Barriers to consumers' healty lifestyle	When functional foods are consumed too much, they may dangerous to health.		0,823		
	Functional foods may lead to various infections at the patients whose immune system is poor.		0,802		
	Healthy people do not need to use functional foods.		0,626		
	Functional foods are expensive.		0,594		
Necessity for functional foods	Healthy people do need to use functional foods.			0,785	
	Functional food is a food where a new ingredient.			0,748	
	The information given concerning to health effects of the functional foods are real.			0,705	
	Functional foods are foods that have a potentially positive effect on health			0,698	
Willingness to consume functional foods	Herbal tea helps digestion				0,875
	Probioteic yoğurts				0,856
	Organic bread				0,830
	Snack bar with added fibre				0,808
	Mineral water				0,797
	Bread enriched with vitamins and minerals				0,785

There are 4 factors of which latent value is higher than 1 in the Table 3. First factor explains 25% of the total variance, first and second factors explains 39,76% of the total variance, first three factors together explains 54,8% of the total variance and all factors together explains 62,75% of the total variance. Finally the rotation matrix formed for rotation stage and assignment of the articles to the factors are formed as stated below.

Table 04. Getting Information about Functional Foods and General Information

	Yes		No	
Judgments	**n**	**%**	**n**	**%**
Do you have information about functional foods?	242	39,6	369	60,4
Do you want to get information about functional foods?	517	84,6	94	15,4
Do you come across with functional foods?	458	75,0	153	25,0
Have you ever purchased a functional food?	426	69,7	185	30,3
Do you think that functional foods are dangerous?	205	33,6	406	66,4

When asked to rate specific sources of information that impact their decision to try a food or food component, Turkish continue to rate health professionals as the most influential (%82). Dieticians (%75) and health associations (%73) are also very influential. The food label is significantly more influential and internet articles were rated for the first time as having an impact at %55.
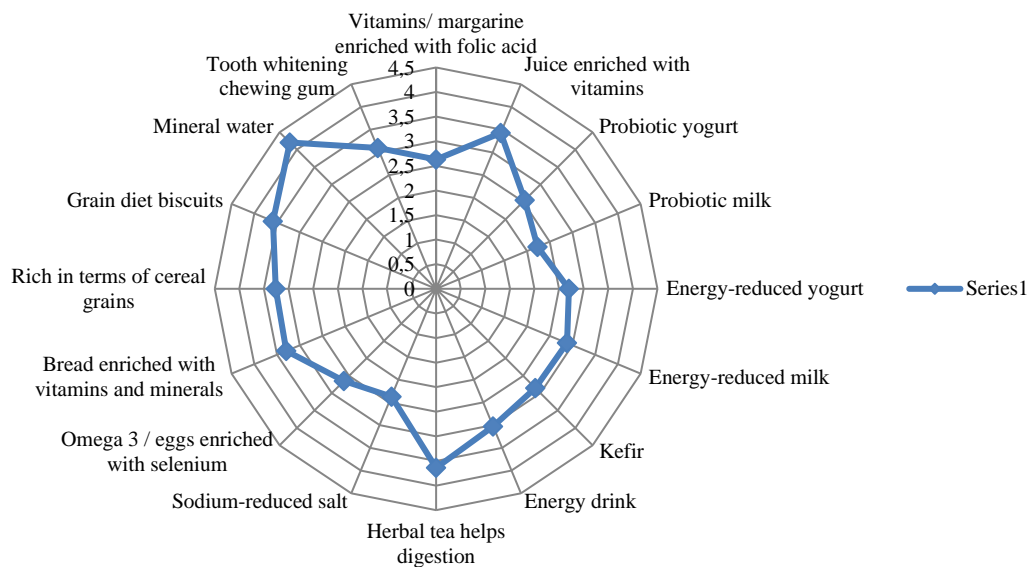

Figure 02. Functional Foods Using Frequency ($\overline{X}$ mean)

It is seen that the functional product that consumers have the highest usage frequency is ''Mineral Water'' ($\overline{X}: 4, 21$). It is put forth that the products that have the lowest usage frequency are "Low sodium salt'' ($\overline{X}: 2, 37$). and ''Probiotic milk'' ($\overline{X}: 2, 23$) (Figure 2).
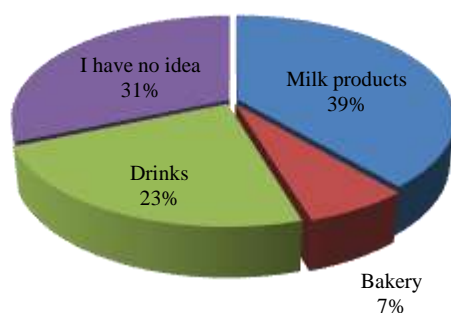
Figure 03. Widely Used in Functional Food Groups

Also as seen in Figure 3; while 39,0% of the participants stated that functional foods are more widely used in the milk products, 7% responded that as bakery products and 23,0% responded that as drinks. Also 73,2% of the consumers responded to the question regarding to that whether they consumer functional foods or not as ''yes'' and 10% responded to that question as ''no''.

Table 05. Opinions towards Functional Foods for Health Factors that may lead to Preferences

Judgments	Does not matter		Not matter		No idea		Important		very important		Mean
	n	%	n	%	n	%	n	%	n	%	σ
It helps digestion	19	3,1	33	5,4	60	9,8	293	48,0	206	33,7	4,03
Cholesterol regulation	17	2,8	25	4,1	73	11,9	290	47,5	206	33,7	4,05
Healthy bone tissue creation/reduce the risk of osteoporosis	16	2,6	18	2,9	70	11,5	275	45,0	232	38,0	4,12
Strengthen the immune system	12	2,0	21	3,4	66	10,8	258	42,2	254	41,6	4,18
Reducing the risk of cancer	14	2,3	16	2,6	73	11,9	241	39,4	267	43,7	4,19
To help children's development and growth	12	2.0	26	4,3	67	11,0	259	42,4	247	40,4	4,15
Helping to weaken	53	8,7	63	10,3	89	14,6	235	38,5	171	28,0	3,66
Heart health protection	13	2,1	17	2.8	74	12.1	250	40,9	257	42,1	4,18

As a result of the independent sampling, all significance values calculated regarding to motivators to consumers' healty lifestyle, barriers to consumers' healty lifestyle, attitude towards necessity of functional food products, willingness to consume functional foods was calculated as p> 0,05 (Table 6). In this case, it was concluded that there is no significant difference between married and bachelor consumers in terms of motivators to consumers' healty lifestyle of the functional foods, attitude towards necessity of functional food products, barriers to consumers' healty lifestyle levels (α= 0,05). Besides that, there is a significance difference between married and bachelor consumers in terms of the viewpoints devoted to consumers' willingness to consume functional foods (α= 0,05). When averages are examined, it is seen that married consumers have a more positive opinion concerning to effect of functional foods on health compared to the consumers whose martial statuses are bachelor.

Table 06. Consumers' viewpoints to functional foods varies according to marital status (t-test)

	Marital status	n	Mean	Std. Deviation	t	P
Motivators to consumers' healty lifestyle	Married	350	1,457	0,670	1,141	0,254
	Bachelor	261	1,394	0,668		
Attitude towards necessity of functional food products	Married	350	1,854	0,944	-0,989	0,323
	Bachelor	261	1,931	0,954		
Barriers to consumers' healty lifestyle	Married	350	1,237	0,564	0,539	0,591
	Bachelor	261	1,226	0,487		
Willingness to consume functional foods	Married	350	3,508	1,181	3,163	0,002
	Bachelor	261	3,195	1,248		

The result of the t-tests shows that, there is not a significant difference between functional food consumption of gender consumers. It is also found that bachelor consumers' consumption level (2,10) is significantly higher than married consumers (1,80). ANOVA test conducted to see whether functional food consumption varies according to education level shows that there is a significant difference between functional food consumption of consumers holding a postgraduate degree (1,70), graduate degree (1,85), high school degree (2,00) and secondary school degree (2,50).

Table 07. Consumers' viewpoints to functional foods varies according to gender (t-test)

	Gender	N	Mean	Std. Deviation	t	p
Motivators to consumers' healty lifestyle	Male	234	1,354	0,640	-2,243	0,025
	Female	377	1,477	0,684		
Barriers to consumers' healty lifestyle	Male	234	1,910	0,924	,476	0,635
	Female	377	1,672	0,964		
Attitude towards necessity of functional food products	Male	234	3,162	1,296	-3,328	0,001
	Female	377	3,506	1,151		
Willingness to consume functional foods	Male	234	3,315	0,450	-1,509	0,002
	Female	377	3,875	0,493		

Last of all independent sampling t, there is no significant difference in terms of barriers to consumers' healty lifestyle between female and male consumers ($\alpha= 0,05$). But there is a significant difference in terms of motivators to consumers' healty lifestyle of the functional foods, attitude towards necessity of functional food products and willingness to consume functional foods between female and male consumers ($\alpha= 0,05$).

When averages are examined, it is seen that female consumers have more positive opinions in terms of attitude towards necessity of functional food products compared to male consumers and willingness to consume functional foods are higher.

Table 08. Consumers' viewpoints to functional foods according to educational level (ANOVA test)

	Education	n	Mean	Std. Deviation	F	p
Motivators to consumers' healty lifestyle	Primary school	88	1,431	0,583	1,621	0,183
	Secondary School	49	1,591	0,674		
	High school	141	1,475	0,779		
	University	333	1,387	0,637		
Barriers to consumers' healty lifestyle	Primary school	88	1,772	0,955	2,907	0,034
	Secondary School	49	1,755	0,854		
	High school	141	1,907	1,027		
	University	333	1,927	0,925		
Attitude towards necessity of functional food products	Primary school	88	3,625	1,147	2,471	0,061
	Secondary School	49	3,510	1,243		
	High school	141	3,432	1,166		
	University	333	3,264	1,247		
Willingness to consume functional foods	Primary school	88	3,426	0,517	1,200	0,009
	Secondary School	49	3,382	0,521		
	High school	141	3,307	0,515		
	University	333	3,346	0,442		

As a result of ANOVA test, no significance difference was detected in terms of motivators to consumers' healty lifestyle of the functional foods, viewpoints regarding to attitude towards necessity of functional food products, barriers to consumers' healty lifestyle and consumers' willingness to consume functional foods between the consumers who have different education levels (α= 0,05)(Table 8).

Table 09. Result of Regression Analysis

Variable	B	SE$_B$	Beta	T value
Constant	21,635	9,530		2,167
Attitude towards necessity of functional food products	0,386	0,042	0,462	7,602*
Motivators to consumers' healty lifestyle	0,242	0,034	0,247	6,384*
Willingness to consume functional foods	0,160	0.032	0,206	5,404*
Barriers to consumers' healty lifestyle	-0,145	0,022	-0,201	4,907*
R² =0.46,4, p<0.05*				

The results indicated that the model was a significant predictor of functional food products consumption, F (2,26) = 9,34, p = ,001).

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$

- Where Y represents the functional food products consumption
- X1 (Attitude towards necessity of functional food products)
- X2 (Motivators to consumers' healty lifestyle)

- X3 (Willingness to consume functional foods)
- X4(Barriers to consumers' healty lifestyle)

In this case, it can be said:

Functional food products consumption = β_0 + β_1*(Attitude towards necessity of functional food products)* + β_2*(Motivators to consumers' healty lifestyle)*+ β_3 *(Willingness to consume functional foods)*+ β_4*(Barriers to consumers' healty lifestyle)*

None of the variables are grouped under factors according to the factor analysis. Cronbach's Alpha reliability is (0,892) for motivators to consumers' healty lifestyle, (0,809) for barriers to consumers' healty lifestyle, (0,929) for attitude towards necessity of functional food products and (0,955) for willingness to consume functional foods.

In order to analyse the model and hypotheses, multiple regression test was carried on. The model is statistically significant and can be used to predict functional food consumption. When R^2 value in Table 9 is examined, it is seen that independent variables explain %46,4 of the dependent variable and attitude towards the necessity of functional food (Beta=0,386), motivators to consumers' healty lifestyle influence (Beta=0,242), willingness to consume functional foods (Beta=0,160) and barriers to consumers' healthy lifestyle (Beta=-0,145) have significant impact on functional food consumption. As a result, hypothesis H_1, H_2, H_3 and H_4 are supported.

7. Conclusion

As a conclusion; consumer acceptance of the concept of functional food and better understanding of its determinants are widely recognized by the literature as key success factors for market orientation, development, and successfully negotiating market opportunities. In this research findings reveal that respondents are confused due to the ambiguity of what functional food products are, and that consumers perceive products that are intrinsically healthy (such as yogurt, bread, and juice) as preferable and credible carriers of functional food. By factor analysis It been identified the existence of latent factors that summarize consumer attitudes toward functional food.

Because of the results and conclusions reached, there are five management implications in companies dedicated to the production and distribution of functional foods, the first of a generic nature and four more ones that are specific. Firstly, marketing departments should consider these results when marketing campaigns if they want to influence the consumer's attitude towards functional foods and, therefore, the will to consume them.

In this study is seen that the product that the consumers have the highest usage frequency is ''Mineral water''. It is put forth that the products that have the lowest usage frequency are ''Low sodium salt'' and ''Probiotic milk''. 50,7% of the consumers think that functional foods have a positive effect on health, physical performance or mental status of the individual as well as their nutritional value. Again majority of the participants think that relevant foods decrease disease risk, provide wellness on one or more functions of the body, display activity on reaching a healthier life and they are vitamin or calcium reinforced foods.

It is seen that female consumers have a more positive opinion regarding to effects of functional foods on health compared to male consumers and usage frequency of the functional foods are higher. In

recent years, the consumers search for health improver specifications at the foods as an addition to nutrition values of the foods that they consume due to increased cardiovascular diseases, increased obesity along with the fast food consumption and decrease of health standards in vegetable and animal production in Turkey. Therefore, demand of the consumers to functional foods and natural products also increases. Current producers in the functional food market need to diversify the functional foods within direction of determination of the consumer expectations. As well as that, introduction of the functional foods through advertisement channels in the market is required with the aim of giving information to the consumers who do not have information about functional foods. The majority of Turkish believes in the concept of functional foods and their interest in learning more about foods and their relationships with specific health benefits remains strong.

Turkish people are increasingly aware of specific health benefits associated with various functional foods. Accordingly, consumers are most aware of food/health benefit associations related to their greatest health concerns of weight maintenance, and cancer, as well as those that have been well-established and promoted over time, such as calcium for bone health.

References

Bearden, W. O., Netemeyer, R. G., & Teel, J. E. (1989). Measurement of consumer susceptibility to interpersonal influence, *Journal of Consumer Research, 15*, (4), p. 473–481,

Bech-Larsen, T. & Shoulderer, J. (2007). Functional foods in Europe: Consumer research, market experiences and regulatory aspects. *Trends in Food Science and Technology, 18*, (4), p. 231-234,

Bekoglu, F.B., Ergen, A., & Inci, B. (2016). The Impact of attitude, consumer innovativeness and interpersonal influence on functional food consumption, *International Business Research;. 9*(4).

Bhaskaran, S. & Hardley, F. (2002). Buyer beliefs, attitudes and behaviour foods with therapeutic claims. *Journal of Consumer* Marketing, 19, p.591-606

Frewer, L., Scholderer, J., & Lambert, N. (2003). Consumer acceptance of functional foods: issues for the future", *British Food Journal, 105* (10), p.714-731,

Herath, D., Cranfield, J., & Henson, S. (2008). Who consumes functional foods and nutraceuticals in Canada? Results of cluster analysis of the 2006 survey of Canadians' demand for food products supporting health and wellness, Appetite. Sep;51(2): p.256-65. Doi: 10.1016/j.appet.2008.02.018. Epub. 2008 Feb 29.

Krystallis, A., Maglaras, G., & Mamalis, S. (2008). Motivations and cognitive structures of consumers in their purchasing of functional foods. *Food Qual Preference, 19*, p.525–538.

Lähteenmäki, L., Lyly, M., & Urala, N. (2007). In: Frewer L., van Trijp H., editors. Understanding consumers of food products. Cambridge: Woodhead Publication, p.412-27

Larsen, T.B., & Grunert, K.G. (2003). The Perceived healthiness of functional foods: A conjoint study of Danish, Finnish and American consumers' perception of functional foods, *Appetite 40*(1), p.9-14

Manning, K.C., Bearden, W.O. & Madden, T. J. (1995). Consumer innovativeness and the adoption process, Journal of Consumer Psychology, Volume 4, Issue 4, 1995, Pages 329-345

Pelvan, E., (2009). Günümüz ve geleceğin gıdaları fonksiyonel gıdalar, p.26-29.

Siegrist, M., Stampfli, N., & Kastenholz, H. (2008). Consumers' willingness to buy functional foods. The influence of carrier, benefit and trust, *Appetite,*51(3), p.526-9.

Siro, I., Kapolna, E., Kapolna, B., & Lugasi, A. (2008). Functional food. Product development, marketing and consumer acceptance—a review. *Appetite, 51*(3), p.456-467.

Urala, N., Arvola, A., & Lähteenmäki, L. (2003). Strength of health-related claims and their perceived advantage, International journal of food science & technology 38 (7), p.815-826

Urala, N., & Lähteenmäki, L. (2007). Consumers' changing attitudes towards functional foods. *Food Quality and Preference, 18*(1), p.1-12.

Urula, N., & Lähteenmäki, L. (2004). Attitudes behind consumers' willingness to use functional foods. *Food Quality and Preferences 15*, p.793-803

Verbeke, W. (2006). Functional foods: Consumer willingness to compromise on taste for health? Food Quality and Preference, 17, p.126–131.