

# The Impact of Attitude, Consumer Innovativeness and Interpersonal Influence on Functional Food Consumption

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## Abstract

There is a growing demand towards functional foods which give the consumers a chance to have a healthier diet without changing their current habits. Due to this appealing benefit, functional food market is rapidly growing and there is a raising interest in consumer research regarding functional foods. The main purpose of this study is to explore the impact of attitude towards the necessity of functional food, interpersonal influence and consumer innovativeness on functional food consumption. The secondary purpose is to find out whether functional food consumption varies according to demographic variables. The study covers 695 consumers living in Istanbul. The results show that people who believe functional foods are necessary, who are influenced by other people and who are innovative, are more likely to consume functional foods. It is also found that functional food consumption is higher among single and lower among educated people. Developing a new functional food is an expensive process and the companies need to have detailed knowledge on the products, consumer expectations and motives. So, it is believed that this study will contribute to explore functional food market and consumers in Turkey.

**Keywords:** functional food marketing, functional food consumption, healthy eating, consumer innovativeness, interpersonal influence

## 1. Introduction

People consume food not only to satisfy their basic biological needs but also to improve their well-being. Related research shows that it is very difficult for the consumers to change their eating habits, but it may be possible to persuade them to replace the food they already consume with healthier alternatives, which are functional foods in this case.

There are various health benefits offered by functional foods. According to the information on product labels, different types of functional foods promise to strengthen the immune system, reduce the risk of certain cancers, reduce the risk of cardiovascular disease, help maintain the correct body weight, strengthen eyesight, improve memory and improve physical condition. (Kraus, 2015)

Although functional foods have become more popular recently, consumers are not familiar enough with these products (Urala, 2005). Research in various countries show that awareness for functional foods is lower than the awareness for functional ingredients (Annunziata & Vecchio, 2011). It is assumed that product failure rates in functional food market may exceed the failure rates in the total food market (Menrad, 2003). This is due to the fact that development and marketing of functional food is complex, risky and expensive, so companies who wish to operate in this market should take into consideration various issues such as consumer demand, technical conditions and the legislation to minimize the risk involved, and they should have adequate resources to develop and introduce the right products to the market (Siro et al., 2008). Multinational food companies such as Nestle, Danone, Unilever, Kellogg, Quaker Oats with established and well-known functional food brands are good examples showing how adequate resources can lead to success. It is suggested that high prices could be another reason for the limited market success of several functional food products (Menrad, 2003). On the other hand, culture plays an important role in the acceptance of functional foods (Siegrist et al, 2015), so companies should also pay attention to cultural differences while introducing functional foods in a different market.

Developing an appealing product that will meet consumer expectations is a critical success factor in functional food

market. But companies operating in the market should also pay attention to other marketing mix elements such as price, distribution and promotion. Research shows that consumers are more willing to pay a premium for additional health benefits (Siegrist et al, 2015). In order to achieve high-volume distribution, channels like supermarkets, general retail stores or discount retailers should be used and specific information and communication campaigns should be run to overcome limited consumer knowledge and low awareness levels of functional foods and their health benefits (Menrad, 2003).

Legislation is another important issue which may sometimes restrict the companies in developing and promoting functional foods. As these products fall in the area between conventional foods and medicine, a suitable legislation is missing in most countries and these products are either treated as food or medicine which are two different product categories and subject to different regulations (Kotilainen,2006).

Functional food market is dominated by United States (35%), Europe (32%) and Japan (25%), and these three contribute 90% of total functional food sales. Among these Japan has a special position, because functional foods are being sold in this country since 1930. In 1980's, ageing population, increasing health problems and expected increases in health care costs led the government to support functional food research programs. In 1991, the term Foods for Specific Health Use (FOSHU) was created for products which may improve specific health conditions (Kotilainen, 2006). In this study, consumer behavior of a Turkish sample is analyzed in terms of functional food consumption, attitudes towards the necessity of functional food consumption, interpersonal influence and consumer innovativeness.

## 2. Literature Review

### 2.1 Functional Food

There are various definitions for functional foods. A famous quotation from Hippocrate "Let your food be your medicine, and your medicine be your food" (Jonas & Beckmann, 1998) figures out the importance of food for human health. The term functional food was first described by Roberfroid (1999) as "*Food similar in appearance to conventional food that is intended to be consumed as part of a normal diet, but has been modified to subserve physiological roles beyond the provision of simple nutrient requirements*" (Spencer, 2006). The European Commission's Concerted Action on Functional Food Science in Europe described functional foods as follows: "*a food can be regarded as 'functional' if it is satisfactorily demonstrated to affect beneficially one or more target functions in the body, beyond adequate nutritional effects, in a way that is relevant to either an improved state of health and well-being and/or reduction of risk of disease. Functional foods must remain foods and they must demonstrate their effects in amounts that can normally be expected to be consumed in the diet: they are not pills or capsules, but part of a normal food pattern*" (Margaret, 2002). Functional foods are also defined as developed and fortified food which may be consumed instead of traditional foods (O'Connor & White, 2010). According to related Turkish law, it is a type of nutritional food with one or more active ingredients and has an effect to protect, promote health and/or reduce the risk of health problems and these effects are proven scientifically and clinically (<http://www.tbmm.gov.tr/kanunlar/k5179.html>).

There are four main types of functional foods: (i) fortified products in which the content of existing nutrients are increased (ie. grain products with folic acid, fruit juices with additional vitamin C.) (ii) enriched products in which new nutrients and components that are not originally found in the product are added, (ie. orange juice with calcium, probiotics and prebiotics) (iii) altered products where existing components are replaced with beneficial components (ie. high fibre fat replacers, fat-free items) and (iv) enriched products where the nutrient composition of the raw commodity is changed (ie. eggs with Omega 3) (Spence, 2006).

When functional foods are concerned, it is important to distinguish the carrier or base product (ie: bread, dairy products, cereal products, mixtures of fruits and vegetables, meat products) from the functional ingredients (ie: vitamins and minerals, Omega-3 fatty acids and dietary fiber (Kraus, 2015). A research conducted in Italy shows that consumers regard yoghurt, cereals and juice as better carriers for functional ingredients (Annunziata & Vecchio, 2011).

#### 2.1.1 Functional Food and Consumer Behavior

Companies operating in the functional food market should examine various issues related to consumer behavior in order to develop the right product and achieve market success. One of the most important issues seems to be the acceptance of functional foods which is determined by various issues such as health concerns, consumers' familiarity with the functional food concepts and functional ingredients, nature of the base product, health effect communication etc. (Siro et al.,2008). If the consumer knows about the health benefit of a certain ingredient, he/she is more likely to accept the food fortified with that ingredient, so functional ingredients which consumers are familiar with (ie. vitamins, fiber, minerals, calcium, iron) are accepted more easily than the ingredients which they are less familiar (e.g. flavonoid, carotenoids, Omega-3 fatty acids) (Menrad, 2003).

An important motive for the consumption of functional food is the maintenance of good health condition and the extent

to which functional food contributes to this (Urala, 2005), so health claims play an important role in the adoption of these products. Consumers believe that these products provide a modern way to live healthy when compared to the conventional healthy diets given by nutrition experts (Siro et al., 2008). Another study shows that consumers with higher health motivation and more trust in the food industry are more willing to buy functional foods (Siegrist et al., 2015). Some consumers are also concerned about the taste, quality, price and convenience of functional foods (Siro et al., 2008).

It is also important for the consumers to differentiate functional foods from traditional ones with a specific logo. In Europe, there is no such sign whereas a specific logo identifying Foods for Specified Health Use (FOSHU) is used in Japan (Annunziata & Vecchio, 2011). If food companies are not allowed to emphasize the health benefits of functional foods, consumers may not understand why they should pay a premium for food products with certain ingredients (Siegrist et al., 2015).

Differences between consumer attitudes towards functional foods should also be examined to determine how to approach to consumers with different attitudes. While some consumers perceive functional foods as natural and of good quality (Krystallis et al. 2008), others find them less natural than the traditional alternatives and treat them as risky food that should be avoided (Chen, 2011). In a study, where consumers' attitudes towards functional foods are examined, consumers' willingness to use functional foods are related to seven factors; perceived reward, confidence, necessity, medicine, absence of nutritional risks, healthy diet and health effects of functional foods vs. their taste (Urala & Lähteenmäki, 2004). Research shows that consumers have high level of confidence in the functional food information from doctors and public authorities and low level of confidence to producers (Annunziata & Vecchio, 2011).

### 2.1.2 Demographic Characteristics of Functional Food Consumers

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. However, a research which examined 23 studies regarding functional food consumption gave some hints on this issue. According to this research, low-fat products, skimmed milk, fruit juice, cereals and yogurt were consumed by all age groups, whereas foods like tea, low-cholesterol and soy products were mainly consumed by adults and the elderly. On the other hand, older people seem to have more interest in food related to various health problems. It is also found that females and educated people are more interested in functional foods (Ozen et al, 2012; Urala & Lähteenmäki; Annunziata & Vecchio, 2011).

In several studies run in the USA, Taiwan and Netherlands regarding the profile of functional food consumers, it is found that consumption is higher among people with higher education and income levels in USA, Taiwan and Netherlands, higher among married people in Netherlands (De Jong et al, 2003; Chen et al, 2011; Ervin et al, 1999). Another study shows that, in developed countries, the impact of demographic variables such as gender, age and education on functional food preferences is decreasing (Ares & Gambaro, 2007).

### 2.2 Interpersonal Influence

Interpersonal influence is an important type of social impact especially for adopting new products, because driving force behind the diffusion of innovations is interpersonal influence. So innovators and early adopters are critical for new products due to their impact on late majority with their words and actions. Their power comes from reliability and social approval. Reliability arises from expertise (knowledge) and experience while social approval arises from the visibility of the adopted product (Clark & Goldsmith, 2006). A research aimed to determine consumer attitude towards functional foods on academicians in Turkey showed that the most important reference groups for this product category are friends, company representatives, experts (doctors/ dieticians), and advertisement respectively (Özdemir et al., 2009).

Participation to online communities and social networks is becoming increasingly popular and having conversation on common interests, answering each other's questions, expressing their complaints, sharing their knowledge and experiences on brands are much easier for consumers today. Marketing researchers are studying consumers' online activities to define how interpersonal influence is being exhibited in online context. Studies on electronic word of mouth, online opinion leadership, and online reference group dynamics enlighten the new forms of network-based consumer influence. This recent literature shows that although online interpersonal influence has a larger impact and it is textual; it is very similar to offline interpersonal influence. Online and offline interpersonal influence is vital especially in the information search phase of consumer buying decision process (Scaraboto et al., 2012).

One of the most important determinants of consumption behavior is the impact of people around the individual. According to the literature, social impact has three types such as informational, normative and value expressive. Informational influence refers to the provision of credible evidence of reality and it is substantial especially when consumers need information to make a decision. As the evidence of product quality or qualifications, they are

influenced from products used by people who seem reliable to them. Normative social influence relates to meeting the expectations of other individuals or groups to achieve reward or avoid punishment. Highest normative influence generally originates from main reference groups such as first degree relatives. Value expressive influence is defined by the need for psychological association with a group through acceptance of its norms, values and behaviors. The individual admires the reference group and tries to imitate it (Lord et al., 2001). In another study, normative influence consists of value expressiveness and utilitarian forms. Value expressiveness reflects the individual's desire for improving his/her own image and is defined with the need to take part in a community through resembling a reference group. Utilitarian influence refers to compliance with the expectations of others to achieve reward or avoid punishment (Bearden et al., 1990).

Consumers' susceptibility to normative influence (SNI) is defined as the identification need with others or develop one's image by the help of products and brands or the desire to conform to others' expectations about purchase decisions. Studies show that SNI may predict worries about gaining social acceptance and public appearance. Accordingly, consumers with high SNI value conspicuous benefits more than consumers with low SNI and they can be more easily persuaded to join their peers who support a boycott (Wooten & Reed, 2004).

Bearden, Netemeyer and Teel developed a 12 item consumer susceptibility to interpersonal influence scale in 1989. In this scale 8 items measure the normative influence while 4 items measure the informational influence (Bearden et al., 2011). Scale is related with independent expert ratings; behavioral indexes, and motivation measures. Generally, correlation coefficients between normative dimension and these other measures are consistently stronger when compared to informational dimension (Bearden et al., 1989). So in this study, normative influence dimension of consumer susceptibility to interpersonal influence scale is used. Consumers' susceptibility to interpersonal influence increases when individuals take an eager interest in others' real or imaginary inferences about their own behaviors and this process is named as "attributional sensitivity" (Netemeyer et al., 1992).

Interpersonal influence is being activated by one or more of the three different processes. The first process "internalization" arises when the individual accepts the influence, because influence is perceived as a cause of one's intrinsic value maximization. In other words, interpersonal influence is being internalized because it is perceived as a natural vehicle for reaching one's aims. "Identification", the second process, arises when an individual adopts an idea or a behavior derives from another person because the idea or behavior is related to a satisfactory self-identification. In this identification process, the role relationship between the individual and others is beneficial for individual's self-concept. "Compliance", the third process, arises when the individual comply with others' expectations for gaining a reward or avoiding a punishment (Burnkrant & Cousineau, 1975).

### 2.3 Consumer Innovativeness

In today's highly competitive world, life cycles are getting shorter in many industries. Most of the companies need to launch innovative products to the market in order to provide customer satisfaction and compete better in the market. In this context, innovative consumers represent an important segment in the market. As some of the new products are not adopted by the consumers, it is essential to understand the decision making patterns of innovative consumers (Hirunyawipada & Paswan, 2006).

Consumer innovativeness is defined as '*An individual's level of adopting a new idea earlier than the other people within his/her social system.*' (Rogers & Shoemaker, 1971). According to Steenkamp et al. (1999) '*it is the tendency of purchasing a new and different product/brand instead of sticking with the existing preferences and consumption patterns*'. Towards the end of 1970's, researchers started to define innovativeness as a personality trait (Vandecasteele & Geuens, 2010).

Although there are various views on consumer innovativeness, the approach separating this concept into three categories -domain-specific innovativeness, innate innovativeness, and innovative behavior- is widely accepted (Bartels & Reinders, 2011). A young woman may be more interested in fashion than cleaning products which is related to domain-specific innovativeness. This type of innovativeness is related to product category. Innate innovativeness is a personality trait and triggers new product trial. It changes depending on the individual and the culture (Merchant, et al., 2014). This type of innovativeness is believed to be influenced by (i) willingness to take action, (ii) novelty seeking, (iii) being independent from experiences of other people, (iv) desire to be authentic (Roehrich, 2004). Hirunyawipada and Paswan (2006) who defined three levels of consumer innovativeness, used the term global innovativeness instead of innate innovativeness and emphasized that it is a personality trait.

According to another view, global innovativeness has two dimensions; cognitive and sensory. Literature shows that, cognitive and sensory innovative consumers are different from each other according to ethnicity, demographic profile, information searching behavior and attitude building. Cognitive innovators are motivated to have new experiences and they like thinking, problem solving, finding the missing pieces and using their mindpower. On the contrary, sensory

innovativeness is about new experiences that will evoke senses. These experiences consist of intrinsic fantasies and imagination or external excitement and adventure activities. Some innovators are known to prefer either cognitive or sensory stimuli, whereas others are in search of both. Related research shows that cognitive innovators are more sensitive to price and they are focused more on functional characteristics of products. On the other hand, sensory innovators focus more on aesthetic characteristics and they are more interested in hedonic shopping (Eun et al., 2010).

In order to minimize the failure risk during the diffusion of new products, marketers are often advised to meet the innovative consumers' needs. This group is accepted to be the most important target group for new products. When they use new products publicly, other consumers are motivated to search for and purchase those products (Ho & Wu, 2011). These consumers are also willing to communicate by word of mouth and spend more on this product category in the future. So it is important for the companies to know these consumers better (Özoğlu & Bülbul, 2013). Innovative consumers are less sensitive to other consumers' product/brand preferences and they give less credit to their opinion so they are less influenced by advertising elements such as expert view and celebrities (Clark & Goldsmith, 2006). Research shows that, these consumers follow specific media related to their interests, use certain products more frequently and behave as a consultant or advisor by purchasing innovative products earlier than others (Hoffman & Soye, 2010).

The relation between innovativeness and product-identity gives some hints for marketers. This relation shows that innovativeness is a part of consumers' self-perception. In order to appeal innovative consumers and have them diffuse the products, companies should focus on creating an image for the new products instead of adopting a utilitarian approach (Coward et al., 2008). According to approach/avoidance theory (Carver et al., 2002), innovative products represent some potential rewards (i.e. product benefits, membership of a social group) as well as some potential risks (i.e. financial risk, being teased). Consumers take these rewards and risks into consideration while adopting a new product. If rewards are dominant they approach the product, if not they avoid from adopting the product (Gray, 1994). Innovative consumers are bolder and ready to take risks. Their involvement pushes them towards searching information about new products. Informing them on the product they are interested in, is better than trying to persuade them by using celebrities (Clark & Goldsmith, 2006).

Research shows that consumer innovativeness is also influenced by culture (Steenkamp et al., 1999; Henry, 2008). There are also views suggesting that culture dimensions such as individualism, uncertainty avoidance and masculinity have direct impact on consumer innovativeness (Steenkamp et al., 1999).

Another research on the relation between innate innovativeness and shopping styles show that cognitive and sensory innovativeness results in different shopping styles. Cognitive innovators are conscious about quality and price and they may be confused if there are too many choices. Sensory innovators are conscious about brands and fashion, they are entertainment oriented, practice impulse buying, loyal to their brands and shop habitually (Eun et al., 2010). Consumer innovativeness also has an impact on the acceptance of brand extensions. Innovative consumers are more willing to adopt distant extensions and they are more likely to choose horizontal brand extensions rather than vertical ones (Henry, 2008).

A research regarding consumer innovativeness and internet usage shows a positive correlation between online banking and innovativeness. But these two are correlated negatively in general (Lassar et al. 2005). According to Varma et al. (2000), high level of internet usage (for purposes other than shopping) is positively correlated with internet shopping. However, this relationship is moderated by domain-specific innovativeness.

### 3. Research Methodology

The main purpose of this research is to determine the impact of attitude towards necessity of functional foods, interpersonal influence and consumer innovativeness on functional food consumption. The secondary purpose is to find out whether functional food consumption varies according to demographic variables such as gender, marital status and education. Based on the literature following hypotheses are developed. The research model developed for this research is shown in Figure 1.

**H1:** Attitude towards necessity of functional foods has a positive impact on functional food consumption

**H2:** Interpersonal influence has a positive impact on functional food consumption

**H3:** Consumer innovativeness has a positive impact on functional food consumption

**H4:** Functional food consumption varies according to gender

**H5:** Functional food consumption varies according to marital status

**H6:** Functional food consumption varies according to education level

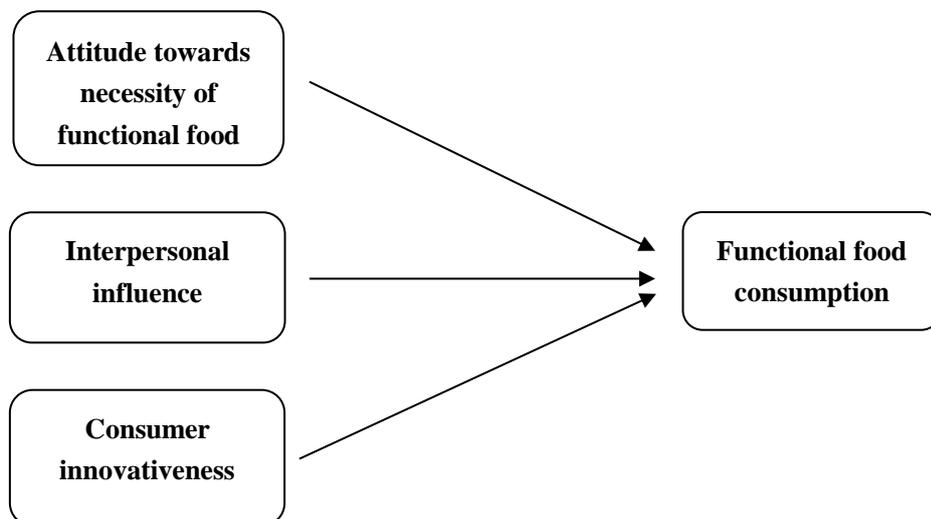


Figure 1. Research Model

In order to measure the dimensions that were included in the model, necessity dimension of Urala and Lahteenmaki’s (2007) attitude towards functional food scale, normative dimension of Bearden, Netemeyer and Teel’s (1989) interpersonal influence scale and novelty seeking dimension of Manning, Bearden and Madden’s (1995) consumer innovativeness scale were used. 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, food without gluten, diabetic products, egg with Omega 3, energy drinks and calcium added milk. 5 point Likert type scale was used in all questions. There were also questions about the demographic variables. After the translation of the measures, a back-translation was made by a professional translator to check the accuracy of the items. Convenience sampling was used, and 695 responses were collected from respondents by drop-off survey in Istanbul.

**4. Data Analysis and Findings**

In the analysis part, all variables are subjected to factor analysis and reliability analysis. Multiple regression analysis is conducted to determine the impact of independent variables (attitude towards necessity of functional food, interpersonal influence and consumer innovativeness) on the dependent variable (functional food consumption) and t-test and ANOVA is conducted to define if there is a significant difference between functional food consumption of consumers according to demographic variables

Descriptive statistics showed that 66,3% of respondents were female, 33,5% were male, 41,5% were married, 58,3% were single, 2,3% were graduated from primary school, 4,3% from secondary school, 38,1% from high school, 38,8% had graduate degree and 16,5% had postgraduate degree. These statistics indicate that the participants were above the Turkish average in terms of education.

None of the variables are grouped under factors according to the factor analysis. Cronbach’s Alpha reliability is 0,700 for attitude towards necessity of functional food, 0,862 for interpersonal influence, 0,836 for consumer innovativeness and 0,812 for functional food consumption. In order to analyze the model and hypotheses, multiple regression test was conducted. The model is statistically significant and can be used to predict functional food consumption. When R<sup>2</sup> value in Table 1 is examined, it is seen that independent variables explain %24,3 of the dependent variable and attitude towards the necessity of functional food (Beta=0,262), interpersonal influence (Beta=0.247) and consumer innovativeness (Beta=0.201) have significant impact on functional food consumption. As a result, hypothesis H1, H2 and H3 are supported.

Table 1. Result of regression analysis regarding the effect of attitude towards the necessity of functional food, interpersonal influence and consumer innovativeness on functional food consumption.

| Variable                                      | B     | SE <sub>B</sub> | Beta  | T value |
|---|-------|-----------------|-------|---------|
| Attitude towards necessity of functional food | 0,297 | 0,040           | 0,262 | 7,504*  |
| Interpersonal influence                       | 0,214 | 0,033           | 0,247 | 6,486*  |
| Consumer Innovativeness                       | 0,160 | 0.030           | 0,201 | 5,302*  |
| R <sup>2</sup> =0.24,3, * p<0.05              |       |                 |       |         |

According to the research, functional food consumption frequency is 1,90 over 5. The result of the t-tests shows that, there is not a significant difference between functional food consumption of male and female consumers so H4 hypothesis is not

supported. It is also found that single consumers' consumption level (2,00) is significantly higher than married consumers (1,78), so H5 hypothesis is supported. 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 (1,60), graduate degree (1,84), high school degree (2,05) and secondary school degree (2,47), so H6 hypothesis is supported.

## 5. Conclusion

Although functional food market is growing in Turkey, the level of consumption is still low. Results of this research shows that people who believe functional foods are necessary, who are influenced by other people and who are innovative, are more likely to consume functional foods. Given the research findings, companies in the functional food market are advised to emphasize the necessity of functional food with rational and emotional messages, define the beliefs and experiences underlying consumers' negative attitude toward functional foods and take the necessary actions to change these, use opinion leaders, bloggers, celebrities and campus representatives, design a marketing mix that will allow them to reach innovative consumers and make an effort to create a trend for consuming functional food. It is also important to establish social networks for functional food brands where consumers can get informed, know about other people's views and exchange ideas with other people in the network.

In this research, it is found that functional food consumption is higher among single people and lower among educated people. This implication from Turkish sample is different from the findings of many studies in the literature showing that highly educated people are more interested in functional food. Higher consumption levels among single people may be resulting from the need to compensate nutritional deficiency with functional food consumption and lower consumption levels among educated people may be related to the belief that functional food is unnatural.

As research on functional food is limited, findings of this research is expected to make a significant contribution to companies operating in this market and academicians interested in the area and help them have a better understanding of the motives behind functional food consumption and consumer profile.

In the future, qualitative research targeting functional food consumers will give more insight into the functional food market and consumer. It is also recommended to study the impact of different variables (such as lifestyle, culture and values) and demographics on functional food consumption.

The limitations of this study are; conducting the research only in İstanbul, using convenience sampling, low level of undereducated people within the sample and the possibility that some questions and terms may not have been fully understood due to the novelty of the subject.

## References

- Annunziata, A., & Vecchio, R. (2011). Functional Foods Development in the European Market: A Consumer Perspective. *Journal of Functional Foods*, 3(3), 223-228. <http://dx.doi.org/10.1016/j.jff.2011.03.011>
- Ares, G., & Gambaro, A. (2007). Influence of Gender, Age and Motives Underlying Food Choice on Perceived Healthiness and Willingness to Try Functional Foods, *Appetite*, 49, 148-158. <http://dx.doi.org/10.1016/j.appet.2007.01.006>
- Bartels, J., & Reinders, M. J. (2011). Consumer Innovativeness and Its Correlates: A Propositional Inventory For Future Research. *Journal of Business Research*, 64(6), 601-609. <http://dx.doi.org/10.1016/j.jbusres.2010.05.002>
- Bearden, W. O., Netemeyer, R. G., & Haws, K. L. (2011). Handbook of Marketing Scales Multi-Item Measures for Marketing and Consumer Behavior Research, *Sage Publications*, Third Edition.
- Bearden, W. O., Netemeyer, R. G., & Teel, J. E. (1989). Measurement of Consumer Susceptibility to Interpersonal Influence. *Journal of Consumer Research*, 473-481. <http://dx.doi.org/10.1086/209186>
- Bearden, W. O., Netemeyer, R. G., & Teel, J. E., (1990). Further Validation of the Consumer Susceptibility to Interpersonal Influence Scale, *Advances in Consumer Research*, 17, 770-776.
- Burnkrant, R. E., & Cousineau, A. (1975). Informational and Normative Social Influence in Buyer Behavior, *Journal of Consumer Research*, 2, 206-215. <http://dx.doi.org/10.1086/208633>
- Carver, C. S., Sutton, S. K., & Scheier, M. F. (2002). Action, Emotion and Personality: Emerging Conceptual Integration. *Personality and Social Psychology Bulletin*, 26, 741-751. <http://dx.doi.org/10.1177/0146167200268008>
- Chen, M. F. (2011). The Joint Moderating Effect of Health Consciousness and Healthy Lifestyle on Consumers' Willingness to Use Functional Foods in Taiwan, *Appetite*, 57, 253-262. <http://dx.doi.org/10.1016/j.appet.2011.05.305>

- Clark, R. A., & Goldsmith, R. E. (2006). Interpersonal Influence and Consumer Innovativeness, *International Journal of Consumer Studies*, 30(1), 34–43. <http://dx.doi.org/10.1111/j.1470-6431.2005.00435.x>
- Cowart, K. O., Fox, G. L., & Wilson, A. E. (2008). A Structural Look at Consumer Innovativeness and Self - Congruence in New Product Purchases. *Psychology & Marketing*, 25(12), 1111-1130. <http://dx.doi.org/10.1002/mar.20256>
- Eun, P. J., Yu, J., & Xin, Z. J. (2010). Consumer Innovativeness and Shopping Styles. *Journal of Consumer Marketing*, 27(5), 437-446. <http://dx.doi.org/10.1108/07363761011063330>
- Gray, J. A. (1994). Personality Dimensions and Emotion Systems. In P. Ekman & R. J. Davidson (Eds.), *The Nature of Emotion: Fundamental Questions* (pp. 329–331). New York: Oxford University Press.
- Henry, X. Y. (2008). Consumer Innovativeness and Consumer Acceptance of Brand Extensions. *Journal of Product & Brand Management*, 17(4), 235-243. <http://dx.doi.org/10.1108/10610420810887581>
- Hirunyawipada, T., & Paswan, A. K. (2006). Consumer Innovativeness and Perceived Risk: Implications for High Technology Product Adoption. *Journal of Consumer Marketing*, 23(4), 182-198. <http://dx.doi.org/10.1108/07363760610674310>
- Ho, C. H., & Wu, W. (2011). Role of Innovativeness of Consumer in Relationship Between Perceived Attributes of New Products and Intention to Adopt, *International Journal of Electronic Business Management*, 9(3), 258-266.
- Hoffmann, S., & Soyoz, K. (2010). A Cognitive Model to Predict Domain-Specific Consumer Innovativeness. *Journal of Business Research*, 63(7), 778-785. <http://dx.doi.org/10.1016/j.jbusres.2009.06.007>
- Jonas, M. S., & Beckmann, S. C. (1998). Functional Foods: Consumer Perceptions in Denmark and England.
- Jong, N., Ocke, M. C. Branderhorst, H. A. C., & Friele, R. (2003). Demographic and Lifestyle Characteristics of Functional Food Consumers and Dietary Supplement Users, *British Journal of Nutrition*, 89, 273–281. <http://dx.doi.org/10.1079/BJN2002772>
- Kotilainen, L. (2006). Health Enhancing Foods: Opportunities for Strengthening the Sector in Developing Countries. *International Bank for Reconstruction and Development: The World Bank*.
- Kraus, A. (2015). Development of Functional Food with the Participation of the Consumer. Motivators for Consumption of Functional Products. *International Journal of Consumer Studies*, 39(1), 2-11. <http://dx.doi.org/10.1111/ijcs.12144>
- Krystallis, A., Maglaras, G., & Mamalis, S. (2008). Motivations and Cognitive Structures of Consumers in Their Purchasing of Functional Foods, *Food Quality and Preference*, 19, 525–538. <http://dx.doi.org/10.1016/j.foodqual.2007.12.005>
- Lassar, W. M., Manolis, C., & Lassar, S. S. (2005). The Relationship Between Consumer Innovativeness, Personal Characteristics, and Online Banking Adoption. *International Journal of Bank Marketing*, 23(2), 176-199. <http://dx.doi.org/10.1108/02652320510584403>
- Lord, K. R., Lee, M. S., & Choong, P. (2001). Differences in Normative and Informational Social Influence, *Advances in Consumer Research*, 28, 280-285.
- Manning, K. C., Bearden, W. O., & Madden, T. J. (1995). Consumer Innovativeness and the Adoption Process. *Journal of Consumer Psychology*, 4(4), 329-345. [http://dx.doi.org/10.1207/s15327663jcp0404\\_02](http://dx.doi.org/10.1207/s15327663jcp0404_02)
- Margaret, A. (2002). Concepts of Functional Foods. Belgium: *ILSI Europe Monograph Series*
- Menrad, K. (2003). Market and Marketing of Functional Food in Europe. *Journal of Food Engineering*, 56(2), 181-188. [http://dx.doi.org/10.1016/S0260-8774\(02\)00247-9](http://dx.doi.org/10.1016/S0260-8774(02)00247-9)
- Merchant, A., Rose, G., & Rose, M. (2014). The Impact of Time Orientation on Consumer Innovativeness in the United States and India, *Journal of Marketing Theory and Practice*, 22(3), 325–337. <http://dx.doi.org/10.2753/MTP1069-6679220307>
- Netemeyer, R. G., Bearden, W. O., & Teel, J. E. (1992). Consumer Susceptibility to Interpersonal Influence and Attributional Sensitivity, *Psychology & Marketing*, 9(5), 379-394. <http://dx.doi.org/10.1002/mar.4220090504>
- O'Connor, E. L., & White, K. M. (2010). Willingness to Trial Functional Foods and Vitamin Supplements: The Role of Attitudes, Subjective Norms, and Dread of Risks, *Food Quality and Preference*, 21, 75–81. <http://dx.doi.org/10.1016/j.foodqual.2009.08.004>
- Özdemir, P. Ö., Fettahlıoğlu, S., & Topoyan, M. (2009). Fonksiyonel Gıda Ürünlerine Yönelik Tüketici Tutumlarını Belirleme Üzerine Bir Araştırma, *Ege Akademik Bakış*, 9(4), 1079-1099.

- Ozen, A. E., Pons, A., & Tur, J. A. (2012). Worldwide Consumption of Functional Foods: A Systematic Review. *Nutrition Reviews*, 70(8), 472-481. <http://dx.doi.org/10.1111/j.1753-4887.2012.00492.x>
- Özoğlu, B., & Bülbül, H. (2013). Gdlenmiř Tketicisi Yenilikilięi ve Algılanan Risk leklerinin Geerlilik ve Gvenilirlik alıřması, *Uluslararası Alanya İřletme Fakltesi Dergisi*, 5(3), 131-139.
- Roehrich, G. (2004). Consumer Innovativeness: Concepts and Measurements. *Journal of Business Research*, 57(6), 671-677. [http://dx.doi.org/10.1016/S0148-2963\(02\)00311-9](http://dx.doi.org/10.1016/S0148-2963(02)00311-9)
- Rogers, E. M., & Shoemaker, F. F. (1971). *Communication of Innovations*, The Free Press.
- Scaraboto, D., Rossi, C. A. V., & Costa, D. (2012). How Consumers Persuade Each Other: Rhetorical Strategies of Interpersonal Influence in Online Communities, *Brazilian Administration Review*, 9(3), 246-267. <http://dx.doi.org/10.1590/S1807-76922012000300002>
- Siegrist, M., Shi, J., Giusto, A., & Hartmann, C. (2015). Worlds Apart. Consumer Acceptance of Functional Foods and Beverages in Germany and China. *Appetite*, 92, 87-93. <http://dx.doi.org/10.1016/j.appet.2015.05.017>
- Siro, I., Kapolna, E., Kapolna, B., & Lugasi, A. (2008). Functional Food. Product Development, Marketing and Consumer Acceptance—A Review. *Appetite*, 51(3), 456-467. <http://dx.doi.org/10.1016/j.appet.2008.05.060>
- Spence, J. T. (2006). Challenges Related to the Composition of Functional Foods. *Journal of Food Composition and Analysis*, 19, S4-S6. <http://dx.doi.org/10.1016/j.jfca.2005.11.007>
- Steenkamp, J. B. E., Hofstede, F. T., & Wedel, M. (1999). A Cross-National Investigation Into the Individual and National Cultural Antecedents of Consumer Innovativeness. *The Journal of Marketing*, 55-69. <http://dx.doi.org/10.2307/1251945>
- Urala, N. (2005). Functional Foods in Finland. Consumers: Views, Attitudes and Willingness to Use. *Academic Dissertation. VTT Publication*, 581.
- Urala, N., & Lhteenmki, L. (2004). Attitudes Behind Consumers' Willingness to use Functional Foods. *Food Quality and Preference*, 15(7), 793-803. <http://dx.doi.org/10.1016/j.foodqual.2004.02.008>
- Urala, N., & Lhteenmki, L. (2007). Consumers' Changing Attitudes Towards Functional Foods. *Food Quality and Preference*, 18(1), 1-12. <http://dx.doi.org/10.1016/j.foodqual.2005.06.007>
- Vandecasteele, B., & Geuens, M. (2010). Motivated Consumer Innovativeness: Concept, Measurement, and Validation. *International Journal of Research in Marketing*, 27(4), 308-318. <http://dx.doi.org/10.1016/j.ijresmar.2010.08.004>
- Varma, C. A., Sprott, D. E., Silverman, S. N., & Stem, Jr, D. E. (2000). Adoption of Internet Shopping: the Role of Consumer Innovativeness. *Industrial Management & Data Systems*, 100(7), 294-300. <http://dx.doi.org/10.1108/02635570010304806>
- Wooten, D. B., & Reed II, A. (2004). Playing It Safe: Susceptibility to Normative Influence and Protective Self - Presentation, *Journal of Consumer Research*, 31(3), 551-556. <http://www.tbmm.gov.tr/kanunlar/k5179.html> (Eriřim tarihi: 16.01.2016)

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