



## A STUDY TO DETERMINE THE MEDIATING EFFECT OF NOVELTY SEEKING IN THE EFFECT OF CONSUMERS' PERSONAL VALUES ON ATTITUDES TOWARDS FUNCTIONAL FOODS

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### Abstract

*In the studies carried out in the field of consumer behavior from past to present, the process that directs individuals to purchase has been discussed in various aspects. One of the most important factors for researchers in these studies is the attitudes that lead consumers to purchasing behavior. Attitudes are one of the most important consumer decisions that can affect the purchasing decision positively or negatively. There are many factors that can affect consumers' attitudes towards a particular product or service. One of the factors shaping consumer attitudes is personal values, which are seen as a part of consumers' lifestyle. Although the concept of personal value is included in the theories in the field of social psychology, it has become one of the concepts that are discussed more frequently in studies on consumer behavior. In this study, it was aimed to determine the role of novelty seeking behaviors in the attitudes of consumers' personal values towards functional foods. In the research process, mixed research method, in which quantitative and qualitative methods are carried out together, was utilized. Within the scope of the research, the data collected from 470 people using the online survey method and snowball sampling were analyzed with the structural equation model. According to the results of the analysis, it has been determined that the novelty seeking behaviors have a full mediating effect on the personal values of openness to changes and conservation values of consumers' attitudes towards functional foods. In the light of the data obtained within the scope of the research, some inferences were made to the marketing managers and suggestions were presented to the researchers for future studies. It is expected that the findings obtained because of the research will contribute to the literature in terms of revealing the effects of personal values and innovation seeking behavior on consumers' attitudes towards innovative products.*

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## TÜKETİCİLERİN KİŞİSEL DEĞERLERİNİN FONKSİYONEL GIDALARA YÖNELİK TUTUMLARINA ETKİSİNDE YENİLİK ARAYIŞININ ARACILIK ETKİSİNİ BELİRLEMeye YÖNELİK BİR ARASTIRMA

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### Öz

Geçmişten günümüze tüketici davranışları alanında yürütülen çalışmalarda bireyleri satın almaya yönlendiren süreç çeşitli yönleriyle ele alınmıştır. Bu çalışmalarda araştırmacıların en çok önem verdiği faktörlerden biri de tüketicileri satın alma davranışına yönelten tutumlardır. Tutumlar, satın alma kararını olumlu veya olumsuz etkileyebilecek en önemli tüketici kararlarından biridir. Tüketicilerin belirli bir ürün veya hizmete yönelik tutumlarını etkileyebilecek pek çok faktör bulunmaktadır. Tüketici tutumlarının şekillendiren faktörlerden biri de tüketicilerin yaşam tarzının bir parçası olarak görülen kişisel değerlerdir. Kişisel değer kavramı her ne kadar sosyal psikoloji alanındaki teoriler kapsamında yer alsa da tüketici davranışlarıyla ilgili çalışmalarda gün geçtikçe daha sık ele alınan kavramlardan biri haline gelmiştir. Bu çalışmada tüketicilerin kişisel değerlerinin fonksiyonel gıdalara yönelik tutumlarında yenilik arama davranışlarının rolünü belirlemek amaçlanmıştır. Araştırma sürecinde nicel ve nitel yöntemlerin birlikte yürütüldüğü karma araştırma yöntemi tercih edilmiştir. Araştırma kapsamında 470 kişiden online anket yöntemiyle ve kartopu örnekleme kullanılarak toplanan veriler yapısal eşitlik modeli ile analiz edilmiştir. Analiz sonuçlarına göre tüketicilerin değişikliklere açıklık kişisel değerleri ile geleneksel değerlerinin fonksiyonel gıdalara yönelik tutumlarında yenilik arama davranışlarının tam aracılık etkisi olduğu tespit edilmiştir. Araştırma kapsamında elde edilen veriler ışığında pazarlama yöneticilerine birtakım çıkarımlarda bulunulmuş ve gelecekte yapılacak çalışmalar için araştırmacılarda öneriler sunulmuştur. Araştırma sonucu elde edilen bulguların kişisel değerlerin ve yenilik arama davranışının, tüketicilerin yenilikçi ürünlere yönelik tutumlarına etkisini ortaya koyması açısından literatüre katkı sağlaması beklenmektedir.

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## 1. INTRODUCTION

Personal values play an important role in the selection and justification of many behaviors that are seen as ordinary in daily life. Individuals may have more than one value, or these values may be related to each other. Although personal values are measured with different theoretical structures developed in the field of social psychology, these theoretical measurements are also used in the field of consumer behavior due to their functions such as being applicable to different cultures and being a good tool to predict various behaviors of people (Grunert & Juhl, 1995). By their very definition, personal values are the beliefs that individuals adopt to achieve their desired goals in their lives (Schwartz, 2003). Personal values are abstract beliefs of individuals about what is important to them in their lives (Steenhaut & Kenhove, 2006). Personal values affect human behavior in different ways (Wang et.al., 2008; Schwartz, 2011a). Moreover, this interaction also differs at the intercultural level (Knafo et.al., 2011). Levy (1990) and Guttman (1982) stated that personal values are the determinants of an individual's attitude, behavior, or purpose specific to a particular situation. It is an undeniable fact that the cultural structure of the society in which the individual lives plays an important role in this interaction. (Triandis, 1989; Neupane et.al., 2019).

Personal values are also effective on consumer behavior (Chrysohoidis & Krystallis, 2005; Vermeir & Verbeke, 2006; Roccas & Savig, 2010; Li & Cai, 2012; de Barcellos et.al., 2014; Ladhari & Tchegnna, 2017; Islam & Chandrasekaran, 2019). It is known that personal values are effective in many points such as consumers' brand preferences, product choices and purchasing decision processes (Burgess, 1992b; Engel et.al., 1995). Personal values are also effective on consumers' innovative tendencies (Burgess, 1992a; Smith & Schwartz, 1997). Steenkamp et al. (1999) emphasized that personal values and personal tendencies are two important factors that determine consumer innovativeness and suggested that studies should be conducted on different cultures in this area.

Consumer innovation seeking is one of the topics covered in majority of research on innovation. Consumer novelty seeking, which is generally expressed as the behavior of seeking new stimuli or new experiences, is also seen as the experience of trying new products or using new brands (Wang et.al., 2000). Many studies have been conducted examining the relationships between personal characteristics and consumer innovativeness. Researchers have identified a positive relationship with consumers' innovative tendencies and arousal levels, their desire to be independent, their personal values of being open to innovations and changes, positive with their extrovert personality structure, and a negative relationship with their personal values such as conservation (Foxall, 1988; Steenkamp & Baumgartner, 1992; Venkatraman & Price, 1990). In addition, according to the researchers, openness to change and conservation values are seen as two contradictory personality values that conflict with each other and predict that these values and attitudes towards innovation are researchable (Hartman et.al., 2006).

Consumers' lifestyles and personal values also affect their food consumption habits (Reid et.al., 2001). One of the factors affecting many food consumption habits such as organic food, healthy food, fresh food, fast-food products, protein-rich diet, plant food, vegan diet, ketogenic diet, vegetarian diet is personal values. Therefore, as Schiffman et al. (2003) suggested, do the personal values that affect consumers' attitudes towards a particular need also affect their attitudes towards functional food consumption? The main research question of this study was formulated in this perspective. As a matter of fact, Shephard (1990) grouped the factors affecting consumers' choice of food products into three groups. The first of these is the factors related to

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the physical and chemical structure of the product, the second is the factors related to the demographic, psychological and psychosociological characteristics of the consumer, and the third is the environmental factors including the social and economic factors. Since personal values are also included in the demographic, psychological and psychosociological structure of the consumer, determining which personal values affect attitudes towards products is also an effort to illuminate the consumer purchasing decision process (Kitsawad, 2012). While consumers prefer to buy certain food products to realize and internalize the personal values they care about, they do not prefer others. From this perspective, knowing the personal values and tendencies of the consumers and grouping the consumers accordingly will provide an advantage for the company, especially for the managers who are able to carry out the strategic marketing activities of low-interest food products.

Functional foods as an innovative product have become increasingly popular in developing country markets, especially in the last 20 years. Functional foods are a type of food that can be included in the daily nutrition programs of individuals and can provide some physiological contributions that are beneficial to health, beyond providing simple nutritional requirements (Roberfroid, 2000). Functional foods, which had a market size of approximately 178 million dollars in 2019, are expected to reach a market size of approximately 268 million dollars in 2027 (Allied Market Research, 2021). For this reason, determining the current consumer profile, determining consumption habits, and identifying different variables that have an effect on functional food consumption are gaining importance for businesses that aim to grow in the functional food market. In this field, the marketing information to be obtained through marketing research has a key role.

Research on consumer innovativeness is important not only for the validity of marketing theories, but also for the success and effectiveness of the strategic decision practices of the actors in the market. In today's modern market conditions, where competition is based on the effectiveness of marketing information, companies strive to predict consumer behavior and thus gain competitive advantage so that consumer-oriented marketing strategies can be carried out effectively. For this reason, understanding the market from a consumer point of view and developing consumer needs-oriented approaches have become the basic conditions for today's businesses with a modern marketing approach to survive in the long term and gain a profit advantage. For this reason, the present research is an original research study aiming to reveal the role of consumers' novelty seeking in the effect of behavioral and choice differences resulting from differences in personal values on attitudes towards functional foods as an innovative product group. Although the factors affecting traditional food consumption and the factors affecting functional food consumption as an innovative product are like each other, it is clear that there are two different structures due to many reasons such as production process, consumption purpose and preference, product content.

This study consists of three parts in terms of structure. In the first chapter, the conceptual framework for consumer innovativeness, the concept of consumer innovation seeking was discussed in the context of the theory of diffusion and adoption of innovations, which was first put forward by Rogers (1983); subjects such as the concept of personal value and the measurement of personal values, which have an impact on innovation, are mentioned. Since consumer innovativeness was examined with an attitude scale over a specific product category in the study, in the first part of the research, up-to-date information on the concept of functional food and the functional food market was given, and various findings in the literature on what

factors determine consumers' attitudes towards functional foods were included. In the second part of the study, field research was conducted to reveal the role of novelty seeking behaviors in the effect of consumers' personal values on their attitudes towards functional foods. In the field research, a mixed research method, in which qualitative and quantitative research methods are carried out together, was adopted. In the third part of the study, the research findings obtained as a result of the field research were discussed together with the results of previous studies. With the findings obtained as a result of the study, some inferences were made to the managers for current marketing practices by making suggestions for future studies. It is expected that this study will contribute to the literature in terms of revealing the role of consumer innovation seeking in the effect of personal values on consumer attitudes towards innovative products.

## **2. LITERATURE REVIEW**

Consumers are often motivated to consume different products in their daily lives with the feeling of satiety or the need to be unique from consuming the same products (Van Trijp & Steenkamp, 1992). This action, which can be expressed as a search for innovation, can manifest itself as discovering new ways of using products, traveling to new destinations, participating in new activities, trying different brands and purchasing new products (Pearson, 1970). While Van Trijp and Steenkamp (1991) associate consumers' search for novelty with their desire for new stimuli, Manning et al. (1995) associate the desire to seek new product information with motivation and behaviors seeking novelty. This approach shows that consumers' novelty seeking is a behavior associated with the early stages of the diffusion of innovation theory proposed by Rogers (1983).

The diffusion of innovations is the interaction by the members of any social system through different channels and creating change within the relevant social system (Rogers, 2010). In the theory of diffusion of innovations, individuals according to their tendency to adapt to innovations; classified as innovators, early adopters, early majority, late majority, and laggards (Rogers, 1983). Research on consumer innovation includes early adopters known to have personal values associated with openness to change; it shows that it is of key importance in terms of introducing products that are described as new in the market to other consumers and transferring their consumption experiences (Manning et.al., 1995; Wright & Bennets, 2006; Rogers, 2010). The diffusion process of innovations is associated with decision making, individual innovativeness levels, and the innovativeness degree of adoption. According to Frambach (1993), among the factors that determine the diffusion of innovations are the characteristics of the adopters, the characteristics of the information and consumer information process, the characteristic structure of the innovations and the competitive environment, as well as the adoption process of any innovation. Interpreting the adoption of innovation as a process, Rogers (1983) states that this process, when considered both in terms of consumers and companies, includes developing an attitude about innovation from the moment the decision maker first encounters information about innovation and making a positive or negative decision as a result of the use of the innovation encountered.

While there is any new product or idea in the approach to the diffusion of innovations, in the adaptation approach to innovations, the idea of consumers adopting innovations and accepting innovation as a part of their life is dominant (Jansson, 2011). Studies investigating the diffusion processes of innovations mostly deal with concepts such as time, social system, communication

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channels and innovation, and often associate diffusion theory with communication process elements (Mahajan et al., 1990). Factors such as the adoption of innovations, addressing the needs of individuals, having a trial phase by individuals, having a flexible structure, providing advantages, compatibility with the existing system, degree of complexity, observability and ease of use are effective (Rogers, 2010; Im & Workman, 2004; Wright & Bennets, 2006; Szymanski et al., 2007). While consumers' tendency to adopt innovations is related to their personality traits and personal values (Im et al., 2003), cultural values also affect the spread of innovations (Dobre et al., 2009). Although it has been emphasized in previous studies that consumers' novelty seeking behavior is associated with their behavior of adopting innovations, and the importance of innovation-seeking individuals is emphasized in previous studies due to their early adopters of innovations and their ability to affect other groups of consumers, it has been determined that there are relatively few innovative product-based studies for these individuals in terms of predicting consumer behavior. Does the novelty seeking behavior influence the attitudes of the personal values that affect the consumer purchasing decision towards innovative products? Which personal values are effective in consumers' novelty seeking behavior? Moreover, while it is known that only innovative individuals have positive perspectives on innovative products, what are the attitudes of individuals with conservation personality values towards innovative products? These questions form the basis of the present research.

In the studies conducted from the past to the present, the subject of what personal values can be has been a subject that is frequently researched by researchers. Personal values are defined (Rokeach, 1973; Schwartz, 1992) as cognitive representations that individuals desire and motivate individuals to perform behaviors towards their needs or goals (Rohan, 2000). Grunert and Juhl (1995) emphasized that personal values are cognitive patterns by which individuals direct their behavior. For this reason, researchers see personal values as an abstract and social type of cognition that helps to understand the relationship between the person and the world and interpret it as one of the most important factors that shape individuals' behaviors (Schwartz, 2012). Olver and Moradian (2003) emphasized that personal values are internal characteristics of individuals but are strongly influenced by the environment and therefore are learned adaptations.

The theory put forward by Shalom H. Schwartz regarding the measurement of personal values has guided much research in the scientific world. Although the value system developed by Kahle (1983) failed in cross-cultural comparison, the Schwartz Value System (SVS) Scale demonstrated its success in this regard (Grunert & Juhl, 1995, Schwartz, 2003; Lee et al., 2011). According to Schwartz and Bilsky (1987, 1990), personal values are a set of concepts or beliefs that guide individuals' selection or evaluation of various behaviors or events, are related to beliefs, situations, and behaviors, and have a relative order of importance. According to Schwartz and Bardi (2001), there is a priority relationship between personal values determined by various motivations. The organization of values in order of priority in the Schwartz Values System, which was created by the development of the Rokeach (1973) value system, reveals the value system. According to the researchers, human needs are grouped under three dimensions: biological, social interaction and social institutional needs. At the beginning, eleven personal value areas were determined as power, success, hedonism, stimulation, self-direction, benevolence, tradition, conformity, universality, security and religiosity, but in later studies, it was seen that the value of religiosity did not fully differentiate, and the number of value areas was determined as ten (Schwartz, 1992). Ten personal values and a total of 56 motivations make up the Schwartz Values System (Schwartz, 1994).

While self-direction and stimulation values are associated with individuals' innovative tendencies, motivation to seek change and openness to change, security, conformity and tradition values emerge as a result of conservation values such as obedience, preservation of order and harmony, and avoidance of the threat of uncertainty (Schwartz, 1992; Steenhaut & Kenhove, 2006; Wang et.al., 2008; Schwartz, 2011b). Psychological and social conflicts can be seen between individuals with values of openness to changes consisting of self-direction and stimulation values and individuals with conservation values consisting of security, conformity, and tradition values (Schwartz, 2003). Individuals with tradition values are associated with agreeableness personality structure, individuals with self-direction personal value with openness personality structure, individuals with stimulation value with extroversion personality structure, and individuals with conformity value with conscientiousness personality structure (Roccas et.al., 2002; Olver & Mooradian, 2003).

When individuals with conservation values are considered in the context of consumers, it is seen that they have negative relations with innovative tendencies. According to individuals with Conservation values, buying new products, seeking to buy new products, or developing an attitude towards it is also risking the current situation or threatening the status quo by going beyond traditional behavior patterns. For these individuals, buying an innovative product or developing an attitude towards it is a negative approach. For individuals who have values openness to innovation and change, new products also mean innovation, search for innovation, seizing opportunity from change and change (Feather, 1995; Steenkamp et.al., 1999).

Consumers' personal values are also effective on their food consumption habits and attitudes towards various food products (Honkanen & Verplanken, 2004; Honkanen & Verplanken, 2006; Saher et al., 2006; Botonaki & Mattas, 2010; Thogersen & Zhou, 2012; Lee et.al., 2014; Thomson et.al., 2017). One of the products associated with the novelty seeking behavior of consumers is functional foods (Larue et.al., 2004; Cranfield et.al., 2011). Functional foods, which are more frequently encountered as an innovative product group on the market shelves since the beginning of the 2000s, are defined as foods rich in various vitamins and minerals that benefit the human body and aiming to increase body resistance (Diplock et.al., 1999). Functional foods are seen as an alternative for individuals who want to eat healthy but are reluctant to change their eating habits (Brunso et.al., 1996).

The term functional food, which was used for the first time in Japan towards the middle of the 90's, has created awareness for consumption among the consumers in the United States and Europe over time, and has started to be consumed in many countries of the world since the beginning of the 2000s (Bech-larsen & Gruner, 2003, Del Giudice et.a., 2009; Martirosyan & Singh, 2015). Functional foods differ from traditional foods in many ways (Urala & Lahteenmaki, 2004). While traditionally considered healthy foods contribute to the health of individuals in their daily diets, functional foods with well-defined components are foods that can directly contribute to the human body physiologically in a single product (Lahteenmaki, 2003; Doyon & Labrecque, 2008). Functional foods are products that emphasize the innovation aspect of the product and give confidence to consumers without causing any change in the quality of the products (Poulsen, 1999). Since functional foods contain more vitamins and minerals than traditional foods and require additional processing to add this ingredient to the product, some of them often require modern technologies and different strategies in their production (Frewer et.al., 2003; Mark-Herbert, 2004). The fact that some functional foods are processed more than

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traditional foods causes them to be perceived as less natural by consumers and the prejudiced approach of individuals who prefer naturalness towards such foods.

The acceptance rate of functional foods and the attitude towards functional foods vary among societies with different cultural structures (Larbecque et.al., 2006; Del Giudice et.al., 2009; Neupane et.al., 2019). Undoubtedly, the biggest factor causing this is the different ways of evaluating foods in terms of health and the perception of functional foods as healthier in some societies compared to traditional foods (Bech-Larsen & Grunert, 2003). When we look at the findings obtained in previous studies on consumers' consumption of functional food, it is observed that there are differences in attitudes towards functional foods among individuals from different countries and different cultures. For example, it has been observed that Finnish consumers have a more positive approach to functional food consumption, and it has been observed that the daily consumption of these consumers consists of natural or beneficial products in terms of health (Urala et.al., 2003). Similarly, when comparing their attitudes towards functional foods, Finnish consumers were found to have a more positive outlook than consumers in Denmark and the United States. (Bech-Larsen & Grunert, 2003).

Since some functional foods are products that require in-depth marketing research, high technology investment and superior engineering at the production stage, businesses should define the consumer profile in the target market well before production (Urala ve Lahteenmaki, 2007). Saher et al. (2004) defined individuals who prefer functional foods more frequently in their shopping compared to traditional foods as innovative and disciplined, but less gentle individuals. Functional food consumption of individuals is affected by many factors such as taste, quality, price-value perception, easy accessibility to the product and its contribution to health (Bhaskaran & Hardley, 2002; Labrecque et.al., 2006; Falguera et.al., 2012; Thornsbury & Martinez, 2012). In addition, the lifestyle and nutritional habits of individuals are also known as variables that affect functional food consumption (Laure et.al., 2004; Chen, 2011). According to Shepherd (1990), consumers' food purchases, individual attitudes and environmental factors are affected by many variables. Attitudes are accepted as one of the most important factors explaining the purchasing behavior of consumers for food products (Eagly & Chaiken, 1993; Tuorila et.al., 1997). Among these attitudes, the naturalness of the products, the state of being healthy, and the consumer perspectives towards being an innovative product are among the most important factors affecting the purchasing decision (Urala & Lahteenmaki, 2003; Frewer et.al., 2003).

To minimize possible errors in functional food production processes, which are very costly, functional food manufacturers should correctly evaluate the factors affecting the purchasing decision processes of consumers, follow the factors affecting the wishes and needs of consumers, the changes in these factors, and current technological opportunities in the market (Urala & Lahteenmaki, 2007). Attitudes of individuals provide important information to functional food manufacturers about how functional foods are perceived in the market, how the product is held in the market, or whether they are adapted, accepted, or rejected by consumers.

Many researchers have reached various findings on users who frequently consume functional foods. According to De Jong et al. (2003), it is not possible to evaluate individuals consuming functional food in a single category. There are significant differences between individuals consuming different functional foods. Functional food consumption of individuals is affected by demographic factors such as gender, age, and education. (Bhaskaran & Hardley, 2002; Bower et.al., 2003.; Cox et.al., 2004; De Jong et.al., 2003; Urala & Lahteenmaki, 2004; Verbeke, 2006). Frewer et al. (2003) stated that consumers' perceived risk factor is effective in



purchasing functional food. Confidence in functional foods and the direct effects of these foods on human health also play an important role in whether individuals prefer these foods. Verbeke (2006) stated that the effects of functional foods on human health are the most important factors that directly affect the preferences for these foods.

The most frequently used scale by various researchers in the literature to measure consumers' attitudes towards functional foods is the scale developed by Urala and Lahteenmaki (2004). In the study in which the researchers measured the willingness of Finnish consumers to consume functional food, they determined 7 factors consisting of 42 statements. However, researchers developed the study in 2007 to develop this scale, which they used in their study, to obtain its shorter form and to determine whether there is a difference in Finnish consumers' attitudes towards Functional foods. Urala and Lahteenmaki (2007) provided the evaluation of the similarities of different types of products or the products with low frequency of use in the attitude scale towards functional foods they revised.

### **3. METHODOLOGY**

#### **3.1.Reserch Model, Hypotesis and Procedures**

The aim of this research is to reveal the mediating role of novelty seeking in the effect of consumers' personal values on their attitudes towards functional foods. For this purpose, the research has explanatory qualities. In the current study of this nature, the mixed research method was preferred due to the necessity of using quantitative and qualitative research methods together (Creswell, 2003). In the first stage, in line with the determined method, first, a detailed literature review was made, and the variables that determine the attitudes of consumers towards functional foods and the variables and cases affected by personal values were determined. At the same time, the variables that affect the consumers' novelty seeking and the variables that these behaviors affect are also revealed in detail at the first stage. In the second stage, measurement tools developed by Urala and Lahteenmaki (2007) were used to determine consumers' awareness of certain functional foods, their willingness to consume in the future and their usage habits. At this stage, while determining the functional foods that the participants will evaluate; a phenomenological research design, one of the qualitative research methods, was determined to approach the subject from a consumer perspective (Bryman, 2004), to determine what functional foods mean to the consumer, and to reveal their perspectives on functional foods in depth (Rose et.al., 1995:1125). Phenomenological research design designed to reveal individuals' perceptions of a particular concept or phenomenon, their experiences, and their perspectives on the concept; it is a research method used to determine what the concept or phenomenon means, how it is perceived and how it is experienced by consumers, by focusing on facts that consumers are aware of but do not have in-depth knowledge of in their daily lives (Giorgi, 1997). From this point of view, it has been decided that the most appropriate method to determine the awareness and willingness of consumers for some functional foods that they are likely to encounter in their daily lives will be obtained with a phenomenological research design. The level of awareness of consumers and their willingness to purchase in the future of 11 functional foods determined by this method were examined. The questionnaire form, which was created with the contribution of qualitative methods, was evaluated in the pilot study and its final form was decided. In the last stage, where the quantitative research method was used, the test was carried out by applying statistical analyzes in accordance with the conceptual research model determined in Figure 1.

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According to the conceptual research model determined as a result of the literature review, the two personal values most associated with the innovative tendencies of consumers are openness to innovation and conservation personal values. The values of openness to change affect the innovative tendencies of consumers positively, while the values of conservation affect them negatively. In this direction, hypotheses H1 and H2 were formed:

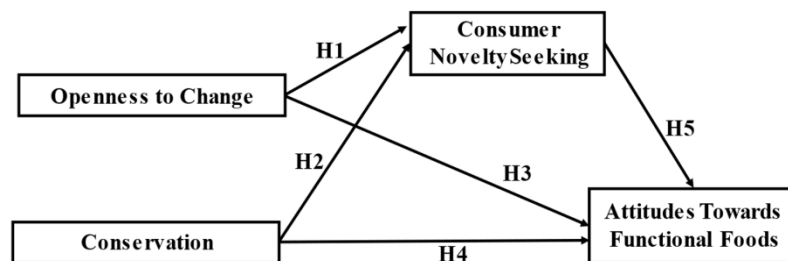
**H1:** Consumers' Openness to Change Values Have a Positive Effect on Their Novelty Seeking.

**H2:** Consumers' Conservation Values Have a Negative Effect on Novelty Seeking.

In addition, the value of consumers' openness to change values positively affects their attitudes towards functional foods as an innovative product group; conservation values are expected to negatively affect their attitudes towards functional foods. In this direction, hypotheses H3 and H4 were formed.

**H3:** Consumers' Openness to Change Values Have a Positive Effect on Attitudes Towards Functional Foods.

**H4:** Consumers' Conservation Values Have a Negative Effect on Attitudes Towards Functional Foods.



**Figure 1:** Research Model

Consumers' innovative tendencies and functional foods, which are considered as innovative products, are two different variables that are often associated. The common view accepted in the literature is that consumers' innovative tendencies determine their attitudes towards functional foods. In this direction, the H5 hypothesis was formed.

**H5:** Consumers' Novelty Seeking Has a Positive Effect on Attitudes Towards Functional Foods.

According to the research model, H6 and H7 hypotheses were formed to determine the mediating effect of novelty seeking in the effect of consumers' personal values on their attitudes towards functional foods.

**H6:** Consumers' Novelty Seeking Has a Mediating Effect in the Effect of Consumers' Openness to Change Values on Their Attitudes Towards Functional Foods.

**H7:** Consumers' Novelty Seeking Has a Mediating Effect in the Effect of Consumers' Conservation Values on Their Attitudes Towards Functional Foods.

This research has multiple limitations. In addition to the time and cost constraints that exist in many studies, the participants were limited to the provinces of Istanbul, Aydın and Muğla during the data collection phase of the study. In addition, among the consumers, only those with functional food awareness and over the age of 18 were included in the study.

The data collected within the scope of the research were first separated into descriptive statistics, and then their conformity to the normal distribution was interpreted by considering the kurtosis and skewness measures suggested by Hair et al. (2014). It was determined that the kurtosis and skewness values of the sub-dimensions in each measurement scale used within the scope of the research were in the range of +/- 1.5, and thus it was decided that the data were in accordance with the normal distribution. In the next stage, the factor structure of each measurement scale was revealed with the help of explanatory factor analysis, and then the construct validity of the scales was examined with confirmatory factor analysis. The internal consistency of each scale was interpreted by calculating the Cronbach alpha value, and the reliability of the scales was interpreted by calculating the composite reliability (CR) and average explained variance (AVE) values.

The results obtained from this study contribute to the literature in terms of explaining the factors affecting consumer attitudes towards functional foods, one of the innovative product groups; it is expected that the actors in the sector will make inferences based on the cause-effect relationship about what consumers' attitudes, which is one of the most important factors affecting the consumer purchasing decision, can be affected.

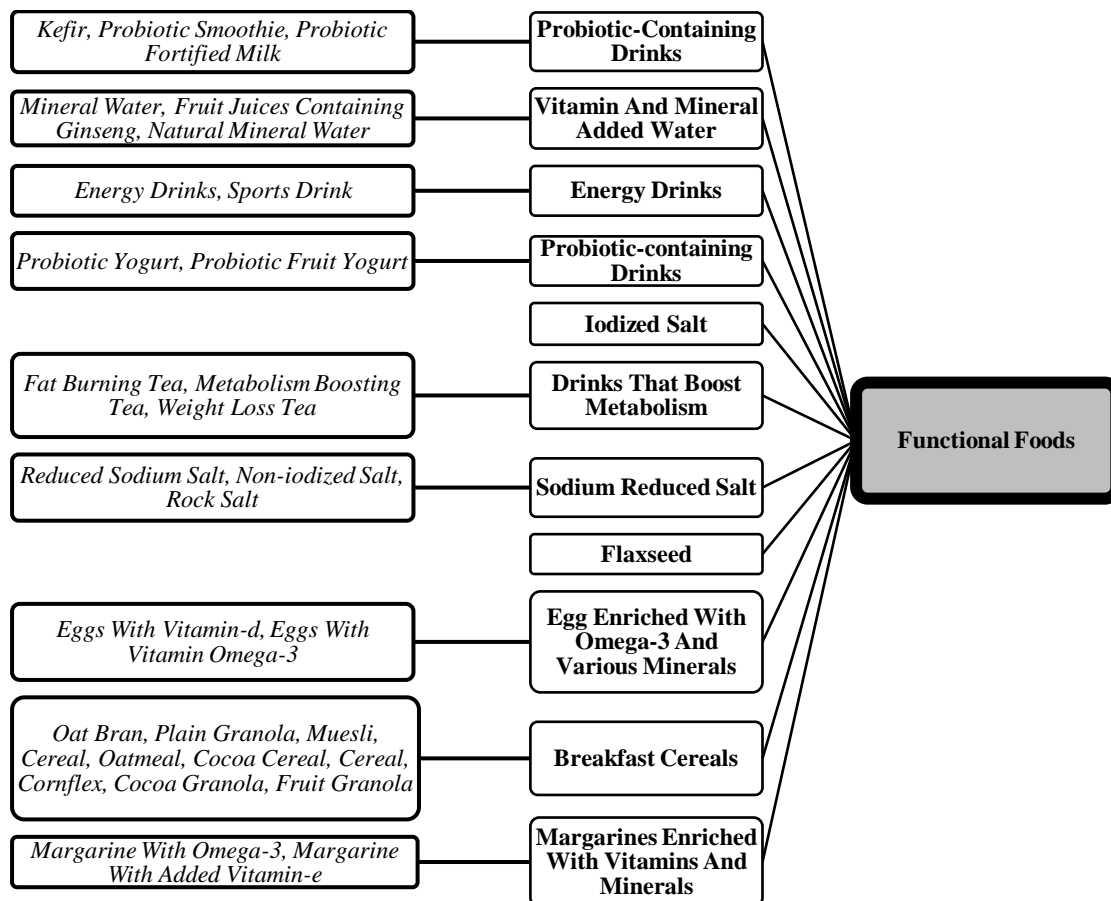
### **3.2. Sampling and Questionnaire Development**

The population of this research is consumers aged 18 years and over with functional food awareness. For the data to be collected within the scope of the study, it was decided to select a sample since it was not possible to reach the entire population. At the stage of quantitative data collection of the research, individuals aged 18 and over, living in the provinces of Istanbul, Aydın and Muğla, with functional food awareness were included in the research using the snowball sampling method. While determining the sample size in the study, the formulation suggested by Aaker (2013:382) was followed. Although it is not possible to calculate the population, according to the formulation and the target population determined within the scope of the research is larger than one hundred thousand, the sufficient sample size was determined as 384; in order to reduce the sampling error (Anderson vd., 2008), the data collected from 470 people were analyzed through appropriate statistical package programs in line with the research model. Questionnaire was preferred as the data collection method in the study. Since the questionnaires will be administered to human participants, necessary ethical permissions were obtained before the research. The questionnaire form consists of three parts. In the first part, there are questions to define the sample profile regarding the gender, age, marital status, monthly personal income in Turkish Lira, education level and employment status of the participants. In the questions to determine the demographic profile of the participants, only the age variable was prepared as open-ended, while the other questions were prepared as equally spaced and closed-ended.

In the second part of the questionnaire, product groups for functional foods were determined to determine the awareness of the participants about functional foods and to determine their usage habits. At this stage, qualitative research method was used. Accordingly, first, functional food product groups that were discussed in previous studies in the literature were determined (Ginger, Turmeric, Energy Drinks, Greentea, Brazil Nuts, Coconut oil, Erythritol, Iodized Salt, Blueberries, Natto, Cereals, Bitter melon, Fatty Fish, Bone Broth, Manuka honey, Hypoallergenic Peanuts, Fermented foods etc.) and the presence of these products in the Turkish market was investigated. In the second stage, in the phenomenological research design; data were collected by conducting semi-structured interviews with the people in the close circle of the researcher and other consumers reached in line with their suggestions. In the first stage of the

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interviews, which were conducted on a voluntary basis by phone call, the participants were asked whether they had heard of the term functional food before, and consumers who were aware of functional foods were included in the study, while the others were excluded from the study. The consumers who participated in the study were asked whether they encountered functional foods, which were determined as a result of the literature review, on the market shelves and the frequency of use of these products. As soon as the answers from the participants included in the study began to repeat each other, it was understood that the sample for which data was collected for the interview reached sufficient saturation and the interview process was terminated (Charmaz, 2006; Silverman, 2015). At this stage, data were collected from 21 participants. Since the collected data should be listed under certain groups, it was analyzed by content analysis technique (Neuendorf & Kumar, 2015:2). As a result of the analysis, the products were grouped by sticking to the data and it was decided to be evaluated by the consumers in the questionnaire form. As a result of the qualitative content analysis, the functional food samples given by the participants during the semi-structured interview and their categorized themes are summarized in Figure 2.



**Figure 2:** Functional Foods Obtained as a Result of Qualitative Content Analysis

The most important methodological step in approaches to analyzing qualitative data is coding the data, also referred to as reminders or evocative written reflections (Flick, 2014). At this stage, concept coding method, one of the elemental coding methods, was used. Concept coding, which gives great meaning to data, consists of symbolic words or phrases that express the common features of an object or event and gather it under a common name (Saldaña, 2021).

Another step after the coding phase is the determination of the categories. Categories that should be detailed, inclusive and address the purpose of the research; it is important that it is suitable for classification in a way that is distinctive, can organize the data set, and can be placed under the codes. After each successive coding cycle, the codes are collected under categories, and these are processed into main themes or concepts (Saldaña, 2021). As seen in Figure-2, all the foods obtained as a result of the coding and categorization stages applied to the data set obtained by the qualitative method were gathered under the main theme of Functional Foods. These obtained categories were then adapted to the relevant scale in the questionnaire applied within the scope of the quantitative research method. Qualitative research has been done to show how adapted foods are obtained. In the third part of the questionnaire, the propositions determined by the Likert type scale were included.

To finalize the questionnaire, a pilot study was conducted with 30 participants. According to the data collected from the pilot application, the absence of some functional food products in the Turkish market (Natto, Blood pressure stabilizer milk drink, Cholesterol lowering spreads, Hypoallergenic Peanuts, Erythritol etc.) and some functional foods (Blueberries, Avocado Oil, Bitter Melon etc.) also excluded from the study because of the lack of willingness to buy. In the final questionnaire form, 11 functional products to be evaluated by consumers were determined.

The final questionnaires, the preparation phase of which was completed and finalized, were applied to consumers between the date of 05.12. / 20.12.2019. During the application of the questionnaire, the close circle of the researcher was reached through various social networks, and the sample size was expanded by reaching the people in the close circle of these individuals in the following process. Data were collected using the online survey method. During the preparation phase of the questionnaire, the questions in the questionnaire were transferred to the free data provider website. During the implementation of the survey, some measures were taken to ensure data security. In this direction, the first question of the online questionnaire was determined as the eliminating question. Participants first come across the phrase "Have you ever heard of functional food?" If they answered "yes" to the question, they could answer the other questions within the scope of the research, and the surveys were ended by thanking the participants who gave a negative answer to the eliminating question. In addition, regulations such as only one participant responding to the survey over an IP address, showing the progress time during the response, adding a confirmation button to save the answers, and not displaying the answers from other participants were also included in the online survey application. 470 people responded to the final questionnaire and as a result of the preliminary examination before the analysis, it was determined that there were no missing or incorrect data entries.

### **3.3. Demographic Characteristics of The Participants**

While 61.5% of the participants are women, 38.5% are men, 48.5% are married and 51.5% are single. In addition, 21.7% of the participants have a high school education or below, 60% have a university education and 18.3% have a postgraduate education. The age of the participants was asked as an open-ended question. According to the answers obtained, the

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participants were divided into 6 different age groups. The average age of the participants is 30.6, 20% between the ages of 18-25, 29.6% between the ages of 26-33, 16.6% between the ages of 34-41, 12.8% between the ages of 42-49 ages, 12.3% are in the 50-57 age range, while 8.7% are 58 years old or over. While 16% of the participants have an income of 2.800 Turkish Liras or less, 22.1% of them are between 2.801-5.600 TL, 22.8% are between 5.601-8.400 TL, 18.3% are 8.401-11.200 TL and 20.9% of them had an income of 11.201 TL or more. On the other hand, 14.5% of the participants are students, 26.8% are civil servants, 31.7% are workers, 8.1% are retired, 10.9% are self-employed, 8.1% are ' of them are individuals who do not work or unemployed.

**3.4.Functional Food Awareness and Consumption Habits**

The awareness levels of the individuals participating in the research towards functional foods were determined with the help of a 5-level questionnaire. Accordingly, participants rated 11 functional foods 1 = I do not recognize this product, 2 = I recognize this product, but I have not tasted it, 3 = I have tasted this product, but I do not use it, 4 = I use this product occasionally and 5 = I use this product frequently. While evaluating the answers, frequencies 2 and 3 were classified as "aware", and frequencies 4 and 5 were classified as "users". On the other hand, the participants evaluated their willingness to use these 11 functional foods in the future with a 5-level questionnaire (1=not at all willing, 5=extremely willing). The answers obtained are summarized in Table-1.

**Table 1:** Participants' Awareness of Some Functional Foods, Frequency of Use and Willingness to Use in the Future

	Willingness To Use*		At Least Recognized**	Users **
	Mean	St. Dev.	% of Respondents	% of Respondents
<i>Probiotic-containing drinks</i>	3,37	1,17	60,6	33,0
<i>Vitamin and Mineral Added Water</i>	4,10	0,90	9,0	91,0
<i>Energy Drinks</i>	2,27	1,18	71,5	24,5
<i>Flaxseed</i>	3,18	1,14	63,7	25,8
<i>Probiotic-containing Yogurt</i>	3,41	1,13	52,6	38,7
<i>Breakfast Cereals (Muesli etc.)</i>	3,30	1,16	42,7	53,8
<i>Drinks That Boost Metabolism</i>	3,25	1,21	46,4	48,5
<i>Sodium Reduced Salt</i>	3,16	1,13	51,1	26,8
<i>Margarines enriched with vitamins and minerals</i>	2,51	1,23	60,4	17,0
<i>Egg enriched with omega-3 and various minerals</i>	3,30	1,27	41,7	31,0
<i>Iodized Salt</i>	3,64	1,16	21,0	76,2

It is seen that the first three functional foods with the highest awareness among the participants are flaxseed, drinks containing probiotics, and margarines enriched with various vitamins and minerals. In addition, the first three functional foods that the participants frequently buy are mineral water, iodized salt and breakfast cereals.

### **3.5. Measures**

#### **3.5.1. Schwarts List of Values Scale**

Consumers' personal values were measured with a scale developed by Shalom H. Schwartz (1992) and adapted into Turkish by Kuşdil and Kağıtçıbaşı (2010). The value of openness to changes was measured by self-direction and stimulation, while the conservation value was measured by the basic values of security, tradition and conformity and their sub-values. Participants evaluated 12 personal values presented to them on a 7-point Likert scale (*1=It totally goes against my principles and 7=It is important at the highest level*) in terms of the degree of directing their own lives. According to the scores obtained from the scale, choosing own goals value in the dimension of openness to changes (mean=6.33 and st.dev. =0.88) and family security value in conservation value (mean=6.58 and st.dev. =0.81) are the most are high mean values. According to the explanatory factor analysis applied to determine the factor structure, the scale explains 54.068% of the variance in the personal values of consumers and consists of 9 items under two dimensions (KMO: 0,831, Chi-square: 1142,168, df: 36, sig: 0,000). In the confirmatory factor analysis applied to determine the construct validity of the scale, which was adapted into Turkish, freedom, a varied life, obedient values with a factor load below .05 were excluded from the study. According to the standardized factor loads and goodness-of-fit indexes obtained as a result of the analysis, it was confirmed that the scale consisted of two dimensions and 9 items (CMIN/DF:3,804 GFI:0,958 CFI:0,937 NFI:0,917 TLI:0,910 RMSEA:0,077). The discriminant validity was provided by considering the Average Variance Explained (AVE) (*Openness to Innovation: 0,40, Conservation: 0,40*) and Composite Reliability (CR) (*Openness to Innovation: 0,72, Conservation: 0,76*) values according to the standardized factor loads of each item in the scale (Fornell & Larcker, 1981, Lam, 2012). According to the reliability analysis, the Cronbach's alpha coefficient of the scale was calculated as 0.802.

#### **3.5.2. Consumer Novelty Seeking Scale**

The scale developed by Manning et al. (1995) and adapted into Turkish by Eryiğit and Kavak (2011) was used to measure consumers' novelty seeking. Consumers' level of participation in propositions consisting of 7 items was determined using a 7-point Likert scale (1=Strongly Disagree and 7=Strongly Agree). Firstly, the single-factor structure of the scale was revealed by the principal components factor analysis. (KMO:0,915, Chi-square: 2415,446, df:28, sig:0,000). According to the results of the analysis, the scale explains 63,999% of the variance towards the novelty seeking of consumers. According to the confirmatory factor analysis applied to determine the construct validity of the scale, which was adapted into Turkish, the single factor model had acceptable fit values (CMIN/DF:3.473 GFI:0.969 CFI:0.983 NFI:0.976 TLI:0.971 RMSEA:0.073), with standardized factor loads. It was understood that the calculated AVE (.58) and CR (.92) values also provided discriminant validity. The Cronbach's alpha coefficient of the scale is 0.811.

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**3.5.3. Attitudes Towards Functional Foods Scale**

The scale, which was developed by Urala and Lahteenmaki (2007) and adapted into Turkish by Hacıoğlu and Kurt (2012), was used. The original form of the scale consists of 26 items and 4 dimensions, and the respondents evaluate the propositions presented to them according to a 7-point Likert scale (*1=Strongly Disagree and 7=Strongly Agree*). The collected data were first subjected to explanatory factor analysis and the factor structure of the scale was determined (KMO: 0,916, Chi-square: 7101,260, df: 231, sig: 0,000). Accordingly, the scale used in the current study consists of 22 items under 4 dimensions and explains 68.149% of the variance of consumers' attitudes towards functional foods. 5.6.7, which is under the Necessity for functional foods dimension. It was decided to exclude items from the study because items and 8 were under more than one factor, corrected-item total correlation values were below 0.3, and standardized factor loads were below .05. On the other hand, in the study of Urala and Lahteenmaki (2007), the 3rd item, which is under the dimension of safety of functional foods, was included under the dimension of confidence in functional foods in the current study. Confirmatory factor analysis was applied to ensure the construct validity of the scale, which was adapted into Turkish. According to the second order confirmatory factor analysis, it was determined that the scale was within acceptable limits (CMIN/DF:3,501; GFI:0,883; CFI:0,928; NFI:0,903; TLI:0,917; RMSEA:0,073). As a result of the confirmatory factor analysis, the discriminant validity of the measurement tool was interpreted according to the AVE (*Reward from Using Functional Food:0,68 Necessity for Functional Foods:0,59 Confidence in Functional Foods:0,53 Safety of Functional Foods:0,48*) and CR (*Reward from Using Functional Food:0,94 Necessity for Functional Foods:0,87 Confidence in Functional Foods:0,85 Safety of Functional Foods:0,79*) values, taking into account the standardized factor loads, and it was determined that there was discriminant validity. The Cronbach's alpha value of the scale was determined as 0.918 and it was decided that the scale was reliable.

**4. RESULTS**

**4.1. The Relationships Between Study Variables**

Descriptive statistics regarding the study variables and the relations between the variables are summarized in Table-2.

**Table 2: Correlations Between Study Variables**

<i>Variables</i>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>1</b>	<b>Openness to Innovation</b>	1			
<b>2</b>	<b>Conservation</b>	0,49**	1		
<b>3</b>	<b>Consumer Novelty Seeking</b>	0,224**	0,046	1	
<b>4</b>	<b>Attitudes Towards Functional Foods</b>	0,178**	0,082	0,348**	1
	<b>Mean</b>	5,73	6,03	4,23	4,30
	<b>Standart Deviation</b>	0,78	0,79	1,47	0,96

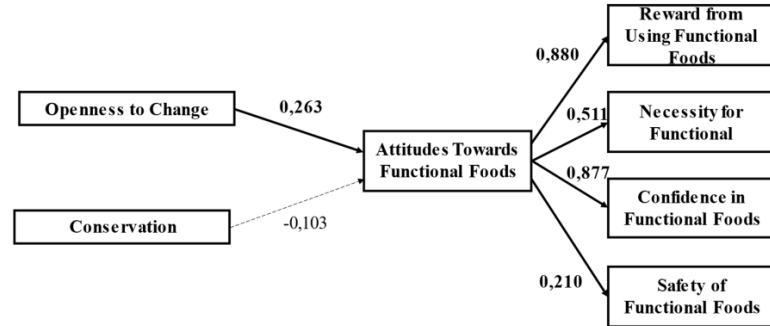
\*\* Correlation is significant at the 0,01 level (2-tailed)

According to the results of the analysis, there is a positive relationship between the values of consumers' openness to changes, their novelty seeking and their attitudes towards functional foods.



#### 4.2. The Effect of Personal Values on The Attitude Towards Functional Foods

A structural regression model was created to determine the effect of personal values on consumers' attitudes towards functional foods. The model is summarized in Figure-3.



**Figure 3:** The Effect of Personal Values on Attitudes Towards Functional Foods

According to the results of the analysis, the two dimensions that most affect consumers' attitudes towards functional foods are reward from using functional foods and confidence in functional foods. On the other hand, while the openness to change value affects the attitude towards functional foods positively ( $r=0.263$ ,  $p=0.009$ ), the conservation value ( $r=-0.103$ ,  $p=0.290$ ) has no significant effect.

#### 4.3. Mediating Role of Consumer Novelty Seeking

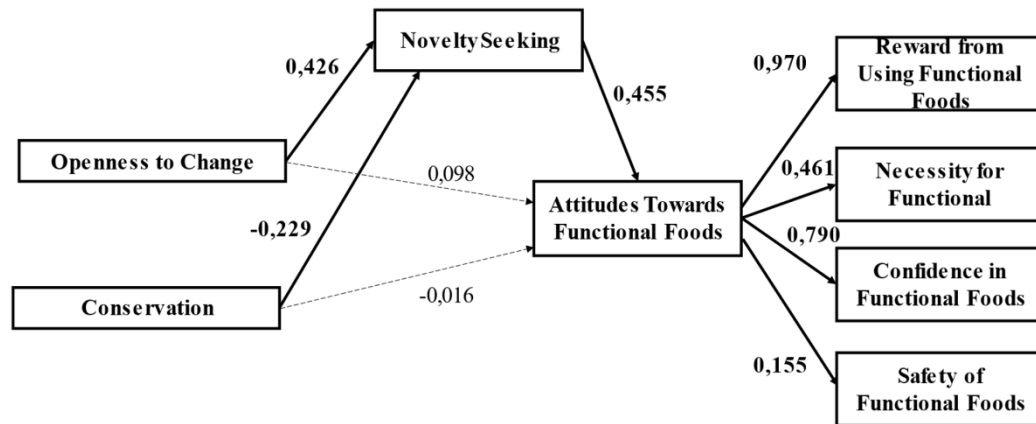
The research model created to determine the mediating role of innovation seeking in the effect of consumers' personal values on their attitudes towards functional foods was tested with the structural equation model. As a result of the analysis, it was seen that the goodness of fit values of the research model were within acceptable limits (CMIN/DF:2,509 GFI:0,840 CFI:0,905 NFI:0,853 TLI:0,898 RMSEA:0,057). The significance levels of the standardized path coefficients in the model are summarized in Table-3.

**Table 3:** Standardized Path Coefficients Between Study Variables

	$\beta$	p
<i>Novelty Seeking</i> $\leftarrow$ <i>Openness to Innovation</i>	0,426	***
<i>Novelty Seeking</i> $\leftarrow$ <i>Conservation</i>	-0,229	0,016
<i>Attitudes Towards Functional Foods</i> $\leftarrow$ <i>Openness to Innovation</i>	0,098	0,286
<i>Attitudes Towards Functional Foods</i> $\leftarrow$ <i>Conservation</i>	-0,016	0,854
<i>Attitudes Towards Functional Foods</i> $\leftarrow$ <i>Novelty Seeking</i>	0,455	***
<i>Reward from Using Functional Food</i> $\leftarrow$ <i>Attitudes Towards Functional Foods</i>	0,970	***
<i>Necessity for Functional Foods</i> $\leftarrow$ <i>Attitudes Towards Functional Foods</i>	0,461	***
<i>Confidence in Functional Foods</i> $\leftarrow$ <i>Attitudes Towards Functional Foods</i>	0,790	***
<i>Safety of Functional Foods</i> $\leftarrow$ <i>Attitudes Towards Functional Foods</i>	0,155	0,005

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The standardized path coefficients for the research model tested are given in figure-4.



**Figure 4:** Test of Reserch Model

According to the research model, the factors that determine consumers' attitudes towards functional foods are reward from using functional foods, necessity for functional foods, confidence for functional foods, safety of functional foods. According to the results of the analysis, while the personal values of consumers have a significant effect on their novelty seeking, their novelty seeking also significantly affects their attitudes towards functional foods. The direct and indirect effects between the variables are summarized in Table-4.

**Table 4:** Standardized Direct, Indirect and Total Effects Between Study Variables

	St.Direct Effects	St.Indirect Effects	St.Total Effects
<i>Novelty Seeking ← Conservation</i>	-0,229	-	-0,229
<i>Attitudes Towards Functional Foods ← Conservation</i>	-	-0,104	-0,104
<i>Novelty Seeking ← Openness to Innovation</i>	0,426	-	0,426
<i>Attitudes Towards Functional Foods ← Openness to Innovation</i>	-	0,194	0,194
<i>Attitudes Towards Functional Foods ← Novelty Seeking</i>	0,455	-	0,455

According to the results of the analysis, while the personal values of consumers about openness to innovation have a positive direct effect on their novelty seeking, it also has a positive indirect effect on their attitudes towards functional foods. On the other hand, while the personal values of the participants about conservation have a negative direct effect on their novelty seeking behavior, they have a negative indirect effect on their attitudes towards functional foods.

According to the results of the analysis, novelty seeking has a full mediating effect in the effect of the personal values of the participants on functional foods.

On the other hand, the research model created to determine the mediating role of novelty seeking in the effect of personal values on the attitude towards functional foods was also analyzed with two separate Sobel tests. According to the results of the first Sobel test (statistics: 2.48, p:0.000), the mediating effect of novelty seeking is significant in the effect of openness to innovatives value on the attitude towards functional foods (R=0.36, F=35.43, p=0.000). In addition, according to the results of the second Sobel test (statistics: 1.97, p:0.04), the mediating effect of novelty seeking is significant in the effect of conservative values on the attitude towards functional foods (R=0.35, F=33.53, p=0.000).

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## **5. CONCLUSION**

In this study, four factors that constitute consumers' attitudes towards functional foods were determined. These factors are Reward from Using Functional Food, Necessity for Functional Foods, Confidence in Functional Foods, and Safety of Functional Foods. While Reward from Using Functional Food is the most important factor affecting consumers' attitudes towards functional foods, the effect of Safety of Functional Foods on attitudes towards functional foods is lower than other factors. Lusk and Briggeman (2009) found that there is a food value with a high safety value in their study, in which they determined the values of consumers for food products. However, in the current study, the factor that has the least effect on consumers' attitudes towards functional foods is the safety of functional foods. Although this is the first comment that comes to mind that this surprising result may be due to cultural differences, it should be supported by future studies.

Within the scope of the study, the values of openness and conservation, which were determined to theoretically affect consumers' novelty seeking and their attitudes towards innovative products, were examined. According to the results of the analysis, it was seen that the personal values of the individuals participating in the research affected their novelty seeking behavior. Accordingly, the H1 and H2 hypotheses were accepted. While consumers' values of openness to changes affect their novelty seeking positively, their conservation values affect them negatively. This result was interpreted as the novelty seeking behaviors of individuals with high values of being openness to change are affected by these values, and the tendency of consumers with high traditional and conservative values to seek innovation and change is negatively affected by these values. Kitsawad and Guinard (2014) emphasize that individuals with high conservation values are individuals who are afraid of taking risks and do not change their product or brand because they do not take the risk of paying extra money. In the current study, the fact that individuals with high conservation value do not seek novelty and have a negative attitude towards functional foods, which is an innovative product, was associated with this situation.

Self-direction value has been found to be the most important value for individuals in many studies (Schwarz & Bardi, 2001; Doran, 2009). These motivated consumers are willing to break with tradition and pay extra for products that are often hard to find (Doran, 2009). On the other hand, Thøgersen and Zhou (2012) found that individuals who tend to adopt innovations early in their study, which determined the adaptation of consumers to organic foods, were related to the universalism value, while the current study found that the tendency to adopt innovations early and openness-to-change value were related. It is thought that this situation arises due to cultural differences. In this study, the fact that individuals with openness to change tend to seek novelty has shown that their attitudes towards functional foods have a positive effect. For this reason, it can be thought that marketing managers' developing strategies that guide the search for innovation in consumers will benefit them to gain profit advantage in the long run. On the other hand, in a study conducted in Hungary, Szakaly et al. (2012) found that individuals with high conservation values exhibit positive health behaviors. However, in the current research, it is seen that consumers with conservation values have negative attitudes towards functional foods, even though they do not seek novelty. At this stage, it is expected that the actors in the market, acting in partnership with dietitians, food engineers and other health professionals, carry out some promotional and informative activities on functional foods, and that these individuals who care about their health can affect their attitudes towards functional foods.

While the values of openness to changes of the participants affected their functional food consumption positively, it was seen that the conservation values did not have any effect.

However, H3 and H4 hypotheses were rejected as the direct effect of personal values on functional foods was not significant according to the research model. In addition, according to another result obtained from the structural equation model, it was seen that the participants' novelty seeking behavior affected their attitudes towards functional foods positively. Therefore, the H5 hypothesis was accepted. Accordingly, novelty seeking behavior positively affects consumers' attitudes towards functional foods as an innovative product group. This result fully supports the results of the study conducted by Cranfield et al. (2011) on Canadian consumers. Similarly, Carrillo et al. (2013) found in their study that novelty seeking positively affects attitudes and spending towards functional foods. Although in the current study, it was not determined how much of the functional food expenditures of the participants were in search of innovation, investigating this issue in similar studies to be conducted in the future will contribute to the literature.

According to the results of the analysis, novelty seeking behaviors have a mediating role in the personal values of the participants towards functional foods. Therefore, hypotheses H6 and H7 were accepted. Accordingly, the positive attitudes of individuals with personal values openness to change towards functional foods are realized through their novelty-seeking behaviors. Individuals with change-seeking ideals and openness to innovation develop positive attitudes towards functional foods when they turn to change-seeking behavior. Contrary to this situation, since the novelty seeking behaviors of individuals with traditional values are negatively affected by this value, their attitudes towards functional foods are also negatively affected. The most important conclusion to note here is that while personal values do not have a direct effect on their attitudes towards functional foods, different personal values of individuals who tend to seek innovation have different effects on these attitudes.

Obtained from qualitative and quantitative research, it shows that the functional food products market in Turkey is developing. While consumers do not know many functional foods yet, some of them are not aware of whether the food they consume is functional food. De Barcellos and Lionello (2011) faced a similar result and stated that this situation could be turned into an opportunity by the actors in the market. According to the results obtained, the importance of effective strategies that should be applied by the actors in the market for consumers in search of innovation has emerged. Accordingly, companies aiming to grow in the functional food market should prepare new environments where information about these products and brands is provided for consumers who like to try new products or brands frequently. This requires emphasis on promotion strategies in the product mix for businesses. It is necessary and important to increase the opportunity of advertising and promotion activities, public relations activities, product promotion and informative brochures to meet with individuals seeking novelty. In fact, considering that brands that not only keep up with the change but also direct the change in today's competitive conditions, gain a competitive advantage in the sector, it has become necessary for businesses operating in the functional food market to develop strategies that will create the need for innovation in consumers, and to make consumers realize that they need innovations. With this result, the importance of obtaining marketing information through market research that guides companies in new product development strategies has been revealed for the actors in the functional food market.

In this research, attitudes that lead consumers to buy are discussed in terms of personal values in the context of the theory of diffusion of innovations. In the future, revealing different variables that create attitudes towards functional foods or identifying different variables that affect this attitude will contribute to the field. One of the most important limitations of the research is that personal values that affect consumer attitudes are considered in the context of a

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single mediating variable. In the future, it is expected that important progress will be made in the process of illuminating the dark motives that motivate consumers to buy, with studies that also deal with different mediating variables such as consumers' tendency to make independent decisions in the context of the theory of diffusion of innovations. According to the results of the research, the effect of personal values on attitudes as a part of people's lifestyle has been revealed. Conducting studies in which traditional product groups are handled comparatively with different innovative product groups in future studies will contribute to the knowledge in the field. On the other hand, although researchers in the literature report that consumers' attitudes towards functional foods differ according to their gender (Ares & Gambaro, 2007), it was seen that the research model did not differ according to gender in this study. In future studies, it will contribute to the literature to investigate whether consumers' attitudes towards functional foods are different according to their various demographic characteristics.

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### EXTENDED ABSTRACT

In the last 20 years, consumer innovativeness has been one of the issues that have been handled with different aspects in the studies carried out in the field of consumer behavior. There are many different variables that explain the innovative tendencies and novelty seeking behaviors of consumers. One of these variables is personal values that affect many decisions of individuals in their lives. Personal values are abstract beliefs that individuals adopt to reach the point they desire, want to be, and aim to be in their lives. These beliefs direct many behaviors of the individual in their daily life, moreover, individuals develop attitudes or take various decisions in line with these beliefs. Many researchers in the field of social psychology have suggested different approaches to what personal values are and how they can be measured. The basis of these approaches is the view that the personal values that direct the lives of individuals are the precursors of their attitudes and behaviors. Some people like certain colors, products, people, while others dislike them; having a certain style of dressing or adopting a special eating habit is mostly because personal values direct the individual. As a matter of fact, some individuals are loyal individuals who are loyal to their traditions and attach importance to family ties, while others are open to innovations and changes, desiring change and being in pursuit of continuous personal development is one of the concrete examples of this.

One of the concepts most associated with the personal values of consumers is the novelty seeking behavior of consumers. It has been observed that the search for novelty of individuals with certain personality traits and personal values is positively affected by these characteristics and values, while some negatively affect their novelty seeking behavior. While most of the research in consumer behavior has focused on this dual relationship, some have explored how personal values and innovative tendencies shape purchasing decisions for certain products. While these studies generally address the purchase intention, they sometimes overlooked the attitudes that affect the purchase intention and the factors shaping these attitudes, especially based on functional products as an innovative product group. Functional products are a product group in which it is possible to see more and more varieties on the market shelves since the 2000s. A product can be considered as a functional food in its purest form (Walnut, etc.) without undergoing any processing, only because of the nutritive products it contains, and various foods whose nutritional properties are increased as a result of some additional processes during the production stage are also included in the category of functional food products.

The aim of this research is to determine the mediating role of novelty seeking in the effect of consumers' personal values on attitudes towards functional foods, which are seen as an innovative product group. For this purpose, the values of openness to changes and conservation values, which are often associated with the innovative tendencies of consumers and their attitudes towards innovative products, are discussed. The sub-values constituting these two-person value groups were determined and the way consumers' personal values affected their attitudes towards functional foods were examined. Then, the relations between the variables were examined and the conceptual model was tested. A field study was conducted within the scope of this study. The structure of the research is descriptive of the relationships between the variables. In the research, mixed research method, in which qualitative and quantitative research methods are handled together, was preferred. In the process of giving the final shape to the survey forum, semi-structured telephone interviews were conducted with consumers using a phenomenological research design. The final form of the questionnaire was uploaded to the free online data provider website and the participants were answered. 470 people were reached by snowball sampling

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method. The obtained data were first divided into descriptive statistics, then statistical analyzes suitable for the research model were decided. In this direction, firstly, the Cronbach's alpha coefficient was calculated as the reliability coefficient of the collected data, the factor structure was revealed by explanatory factor analysis, and then the collected data were subjected to confirmatory factor analysis. After all these stages were completed, the research model was tested with the structural regression model.

According to the findings obtained because of the research, consumers' attitudes towards functional foods consist of four factors. These are reward from using functional food, necessity for functional foods, confidence in functional foods, safety of functional foods. While consumers' openness to change values affect their attitudes towards functional foods positively, their conservation values do not have a significant direct effect on their attitudes towards functional foods. However, when the consumer novelty seeking variable is included in the model; the direct effect of the openness to change value on the attitude towards functional foods disappears and has an indirect effect. In addition, the conservation values of consumers also have an indirect effect on their attitudes towards functional foods, thanks to their novelty seeking. The result of the research shows that; there is a full mediating effect of novelty seeking in the effect of personal values on attitudes towards functional foods.

Within the scope of the research, some suggestions were made to the actors in the market. In addition, marketing managers should increase their product and brand promotional activities that will lead consumers to seek innovation. Moreover, in order to carry out these promotional activities more effectively, actors in the market area should organize these activities with health professionals and influencer groups. In this way, the openness to change values of consumers will be stimulated, and thus individuals who tend to seek innovation will develop positive attitudes towards innovative products. One of the most important limitations of this research is that the effect of consumers' attitudes towards functional foods on purchase intention has not been examined. In future studies, examining the effects of consumers' attitudes towards innovative product groups on their purchasing intentions will contribute to the literature.