

INVESTIGATION OF THE ROLE OF FUNCTIONAL FOOD-BASED CHIPS AND SIMILAR PRODUCTS IN CONSUMER PREFERENCES AMONG INDIVIDUALS AGED 25-50

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Abstract

This study investigates the role of chips and similar products made from functional foods in the consumer preferences of individuals aged 25-50. The research employs a general survey method, with a sample size of 395 individuals within the specified age range. The study compares the knowledge levels, attitudes, and preference reasons between consumers who consume functional foods and those who do not. The results indicate that consumers who eat functional foods have statistically significant higher knowledge levels, attitudes, and reasons for preferring functional chips compared to non-consumers. In contrast, non-consumers have higher reasons for not preferring them. Those with no knowledge of functional foods had the lowest scores, and as consumption frequency increases, so do knowledge levels and positive attitudes. Women tend to prefer functional chips less than men. No significant difference was found between age groups. Divorced participants scored higher in positive attitudes and preference reasons compared to married individuals. As education level increases, knowledge and positive attitudes also increase. Higher income and food expenditures are associated with more favorable attitudes toward functional foods and higher preference reasons. A positive relationship was found between knowledge and attitudes, where higher knowledge and positive attitudes led to increased preference and consumption of functional chips.

Keywords: Consumer preference, functional chips, functional foods, healthy eating.

Introduction

The desire for healthier foods has not emerged as a recent phenomenon. However, increasing income levels, higher education standards, technological advancements, and the widespread aspiration for longer life have significantly influenced individuals' preference for functional foods. This shift towards alternative food sources, particularly functional foods, has spread from developed countries to the rest of the world. In addition to consumers' desire for healthier foods, food companies, benefiting from technological innovations, have also introduced a range of alternative products to the market, which has facilitated the emergence and diversification of functional foods [7] [1] [3].

Another key reason for the increasing popularity of functional foods is the unsustainable nature of existing food consumption habits. The consumption of red meat, particularly, has become increasingly difficult to sustain due to the growing global population. As the global population continues to grow, feeding individuals a meat-based diet poses serious concerns regarding food security, nutritional value, and sustainability. According to the Food and Agriculture Organization [4], it will be impossible to meet the global demand for red meat by 2050, with the global population expected to reach 10 billion. Furthermore, red meat consumption is linked to several health concerns, including cardiovascular diseases, cancer, diabetes, and obesity [12]. Reducing excessive red meat consumption not only positively affects human health but also alleviates the burdens on health systems, national economies, and the environment, while reducing ethical concerns regarding animal welfare [13] [5] [9].

The emergence and widespread use of functional foods have also been significantly influenced by their relationship with consumer behavior. Many national and international institutions have supported the development of functional foods to ensure food security and create sustainable food policies. The increasing consumer demand for functional foods has prompted numerous food companies to diversify their product offerings and develop new functional food products to meet this demand [10] [6]. Functional foods, which can replace traditional foods, not only avoid the

health risks associated with excessive consumption of traditional foods but also contribute positively to both physiological and psychological well-being. According to Katan and De Roos (2004), the International Food Information Council (IFIC) defines functional foods as those that offer benefits beyond traditional nutrition. The American National Academy of Sciences describes functional foods as foods that are modified to provide health benefits, while the European Functional Food Science Council defines them as foods that provide essential nutritional needs while preventing or reducing disease risks [8] [11].

Over time, certain criteria have emerged to define which foods qualify as functional foods. The European Union Functional Food Council has provided broad definitions of functional foods [14]. In Turkey, although studies on the factors influencing functional food consumption and consumer attitudes have been conducted, there is still limited data regarding consumer preferences for functional foods. As the market is new and dynamic, the rapid increase in the availability of functional food products has resulted in a limited understanding of consumer preferences [2]. Research by Gök and Ulu (2018) suggests that dairy-based functional foods are among the most popular functional food products in Turkey. However, the legal infrastructure and market regulations for functional foods are still under development. In countries like Turkey, where information about these foods may be insufficient, consumers may attempt to substitute unhealthy eating habits with functional foods, potentially leading to an overemphasis on disease prevention through these products. This concern emphasizes the need for balanced communication regarding the role of functional foods in human health [6].

The objective of this study is to examine the position of functional food products, specifically chips and similar products made from functional foods, in consumer preferences among individuals aged 25-50. The study aims to explore the positive health effects of functional foods, consumer awareness and preferences, and factors such as taste and nutritional value. Furthermore, the study seeks to analyze the attitudes and behaviors of different age groups and genders towards functional food products. This research aims to provide a scientific foundation for

strategic decisions in the functional food industry, assisting in the development of marketing strategies and innovation in product development. By understanding consumer preferences, this study aims to contribute to the growth of the functional food market and better address consumer needs.

To achieve this goal, the study investigates various factors such as consumer knowledge about functional foods, the relationship between functional foods and health, consumer attitudes towards functional foods, and the reasons behind the preference or non-preference for functional chips. In this context, this research explores the place of functional food products in the preferences of consumers aged 25-50.

Method

This study aims to determine the role of chips and similar products made from functional foods (e.g., chickpea flour, tarhana, bulgur) in the consumer preferences of individuals aged 25-50. It is designed as a descriptive research using a survey model to explore consumer preferences and analyze societal trends. The research focuses on whether consumer preferences for functional food products vary based on demographic variables.

The survey questions were developed based on the literature and reviewed by ten experts in functional foods. Following a pilot test with 200 participants and statistical analysis, the final version of the survey was applied to 400 participants. The sample was selected from Turkey using convenience sampling via Google Forms. The population consists of adults aged 25-50 who consume functional foods. The sample size was calculated to be 384 participants, with a 95% confidence level and a 5% margin of error. A total of 400 surveys were conducted, and after excluding invalid responses, 395 valid responses were analyzed.

The study is limited to the Marmara region, specifically Istanbul, and focuses only on individuals aged 25-50. Participants under 25 and over 50 were excluded due to their differing consumption patterns of functional foods and traditional products.

The data collected from participants aged 25-50 were analyzed using SPSS 23. Before analysis, the data were checked for

errors and missing values. The normality of the data was tested using the Kolmogorov-Smirnov and Shapiro-Wilk tests, which indicated that the data followed a normal distribution. Consequently, parametric methods were used in the analysis. Descriptive statistics, including means and standard deviations, were calculated for the participants' knowledge of functional foods, attitudes toward them, and reasons for preferring or not preferring functional chips. Independent samples t-tests were used to compare the demographic groups, while one-way ANOVA was applied for comparisons involving three or more groups.

Findings

The demographic structure of the consumers participating in the survey and the distribution of the data are shown in Table 1. The survey results reveal that 87.34% of participants consume functional foods, with 82.03% consuming chickpea-based products, 73.42% consuming tarhana-based products, and 66.84% consuming bulgur-based products. Consumption frequency varies, with 16.46% consuming these products weekly, 16.71% monthly, and 30.38% rarely. Demographically, 64.81% are female, 35.19% male; 25.82% are aged 25-30, 39.49% are 31-40, and 34.68% are 41-50. Regarding marital status, 60% are married, 30.63% are single. Educationally, 58.99% have a bachelor's degree, and 23.54% have a master's or doctorate. In terms of income, 34.18% earn over 100,000 TL monthly. Food spending as a percentage of household income shows 45.06% spending 21-30%, and 52.66% of participants spend under 500 TL monthly on functional foods.

Evaluation of Data According to Functional Food Consumption:

Table 2. presents the comparison of scale data based on functional food consumption using an independent samples t-test. According to the analysis results: Participants who consume functional foods have significantly higher scores in terms of knowledge about functional foods, attitudes towards functional foods, and reasons for preferring functional chips compared to those who do not consume them ($p < 0.05$). On the other hand, those who do not consume functional foods have significantly higher scores for reasons not to prefer

functional chips compared to those who consume them ($p < 0.05$).

Table 3. presents the results of the independent samples t-test comparing the data based on the consumption of chickpea flour-based chips/crackers or similar products. The analysis reveals that participants who consume these products have significantly higher scores in terms of their knowledge of functional foods, attitudes toward functional foods, reasons for preferring functional chips, and reasons for consuming functional chips compared to those who do not consume them ($p < 0.05$). On the other hand, participants who do not consume chickpea flour-based chips/crackers have significantly higher scores for reasons not to prefer functional chips compared to those who consume them ($p < 0.05$).

Table 4. presents the results of an independent samples t-test comparing the data based on the consumption of chips/crackers or similar products made from tarhana. According to the analysis: Participants who consume tarhana-based chips/crackers or similar products scored significantly higher on knowledge of functional foods, attitudes toward functional foods, reasons for preferring functional chips, and reasons for consuming functional chips compared to those who do not consume them ($p < 0.05$). Additionally, participants who do not consume tarhana-based chips/crackers reported significantly higher reasons for not preferring functional chips than those who consume them ($p < 0.05$).

The data comparison regarding the consumption of bulgur-based chips/crackers or similar products is presented in Table 5. The analysis reveals that participants who consume bulgur-based chips/crackers or similar products have significantly higher scores in terms of their knowledge about functional foods, attitudes toward functional foods, reasons for preferring functional chips, and reasons for consuming functional chips, compared to those who do not consume them ($p < 0.05$). On the other hand, participants who do not consume bulgur-based chips/crackers have significantly higher scores for reasons not to prefer functional chips compared to those who consume them ($p < 0.05$).

Table 6 presents the results of a One-Way ANOVA test comparing data based on the frequency of consuming chickpea flour, bulgur, and tarhana-based chips, crackers, or similar

products. The analysis revealed significant differences between consumption frequency groups for various factors:

- **Knowledge of Functional Foods:** A significant difference was found ($p < 0.05$). Participants who never consumed functional foods had the lowest knowledge scores. Additionally, those who consumed them rarely scored lower than those who consumed them 1-2 times a week or 3-4 times a month.
- **Attitudes toward Functional Foods:** A significant difference was observed ($p < 0.05$), with those who never consumed functional foods having the lowest attitude scores. Rare consumers had lower attitude scores compared to those who consumed functional foods 3-4 times a month.
- **Reasons for Preferring Functional Chips:** A significant difference was found ($p < 0.05$). Those who never consumed functional foods had the lowest scores for preferring functional chips. Rare consumers scored lower than those who consumed functional foods 1-2 times a week or 3-4 times a month.
- **Reasons for Consuming Functional Chips:** A significant difference was found ($p < 0.05$). Those who consumed functional chips 3-4 times a month had higher scores for consumption reasons compared to those who consumed them rarely.
- **Reasons for Not Preferring Functional Chips:** A significant difference was detected ($p < 0.05$). Those who never consumed functional foods had the highest scores for not preferring functional chips. Rare consumers scored higher than those who consumed functional foods 1-2 times a week or 3-4 times a month.

Evaluation of Data According to Demographic Variables:

The reasons for women not preferring functional chips are statistically significantly higher than those of men ($p < 0.05$). According to the analysis results, no statistically significant

difference was found between age groups in terms of scale scores ($p>0.05$).

Table 7 presents the results of the one-way ANOVA test based on marital status. The analysis showed statistically significant differences in several areas: divorced participants had higher attitude scores toward functional foods and reasons for preferring functional chips compared to married participants ($p<0.05$). Additionally, married participants had significantly higher scores for not preferring functional chips than single participants ($p<0.05$).

Table 8 presents the results of the One-Way ANOVA test comparing data based on educational status. The analysis reveals significant differences between education groups in terms of knowledge about functional foods, attitudes toward functional foods, and reasons for preferring functional chips ($p<0.05$). High school graduates scored the lowest in all these areas, particularly in knowledge and attitude, while they also had lower preference scores for functional chips compared to university graduates.

Table 9 presents the results of the one-way ANOVA test based on the number of children. The analysis revealed statistically significant differences in the reasons for consuming functional chips and not preferring functional chips among the groups ($p<0.05$). Specifically, participants without children had higher scores for consuming functional chips compared to those with multiple children, while participants without children had lower scores for not preferring functional chips compared to those with one child.

The results of the one-way ANOVA test based on income levels are presented in Table 10. The analysis revealed significant differences in attitudes and preferences toward functional foods and chips. Participants with an income of 50,000 TL or below had lower attitude scores toward functional foods and functional chips compared to those with an income of 75,000-100,000 TL. Additionally, individuals with an income above 100,000 TL had significantly lower scores for the reasons for consuming functional chips compared to those earning between 75,000-100,000 TL.

The results of the one-way ANOVA test based on the share of food expenditures in household income are presented in Table 11. The analysis revealed statistically significant differences among food expenditure groups in terms of knowledge about functional foods, attitudes toward functional foods, reasons for preferring functional chips, and reasons for consuming functional chips ($p<0.05$). Specifically, participants whose food expenditures made up 10%-20% of their household income had the lowest knowledge about functional foods and the lowest reasons for preferring functional chips. On the other hand, participants whose food expenditures were 31% or more of their household income had the highest attitudes toward functional foods and reasons for consuming functional chips. These differences were statistically significant across the groups.

The results of the one-way ANOVA test based on the budget allocated for functional foods are presented in Table 12. According to the analysis:

- A statistically significant difference was found in the knowledge level about functional foods among the budget groups ($p<0.05$). Participants who allocated less than 500 TL for functional foods had the lowest knowledge scores.
- A statistically significant difference was also observed in attitudes toward functional foods between the groups ($p<0.05$), with participants allocating more than 1,000 TL having the highest attitude scores and those allocating less than 500 TL having the lowest.
- Regarding the reasons for preferring functional chips, participants with a budget of less than 500 TL had the lowest preference scores ($p<0.05$).
- A statistically significant difference was found in the reasons for consuming functional chips, with those allocating less than 500 TL having the lowest consumption scores ($p<0.05$).
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Lastly, a significant difference was found in the reasons for not preferring functional chips ($p<0.05$). Participants with a budget of less than 500 TL had the

Highest scores for not preferring functional chips, while those allocating more than 1,000 TL had the lowest scores.

Conclusion

As a result of the research, significant findings were obtained regarding the preferences of consumers aged 25-50 for chips and similar products made from functional foods. According to the study, the knowledge levels, attitudes, and reasons for preferring functional chips were found to be significantly higher among individuals who consume functional foods compared to those who do not. This indicates that the consumption of functional foods is associated with health awareness, nutritional knowledge, and positive attitudes towards such foods.

The reasons for not preferring these products were found to be higher among individuals who do not consume functional foods, generally explained by factors such as distrust, dislike of taste, or high price. The literature also suggests that individuals with more knowledge about functional foods tend to prefer them more and develop more positive attitudes, which aligns with the findings of this study. Furthermore, it was found that women were more likely than men to report reasons for not preferring functional chips. This may be explained by women's greater sensitivity to health and nutrition issues and their more critical perspective towards sensory characteristics.

The education level appears to play an important role in the preference for functional foods and the shaping of positive attitudes towards these foods. It was observed that high school graduates had lower knowledge about functional foods and chips. Additionally, income level was found to influence these preferences. Individuals in the middle-income group showed more interest in functional foods, while those in the higher-income group tended to lean towards more prestigious health products.

In conclusion, it is understood that the consumption and preferences of functional

foods vary depending on various demographic factors such as individuals' knowledge levels, attitudes, health awareness, and income. These findings provide valuable insights for the marketing of functional foods and the development of consumer education programs.

Suggestions

Based on the findings, the following recommendations can be made:

- Awareness campaigns on functional foods should be increased, with universities and healthcare institutions organizing seminars and online programs to educate consumers about their health benefits and proper consumption methods.
- The food industry can focus on innovative functional products, especially those made from local, nutritious ingredients such as chickpea flour, tarhana, and bulgur.
- Specialized educational programs and affordable pricing policies should be developed for lower-income groups to increase their knowledge and attitudes towards functional foods. Government support and subsidies can help expand the reach of these products.
- Tailored strategies targeting family structures, especially for divorced individuals and those without children, should be developed to promote healthier eating habits.
- Specific marketing and educational strategies for women should address their health concerns, while efforts to engage men in functional food consumption are also important.

Future research should focus on deeper insights into how knowledge about functional foods influences consumer attitudes and preferences, considering various demographic factors like income, education, and family structure. Moreover, studies should aim to develop strategies to increase the acceptance and consumption of functional foods.

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Table 1. Distribution of Demographic Data

		N	%
Do you consume functional foods?	Yes	345	87,34
	No	50	12,66
Do you consume chips/crackers or similar products made from chickpea flour, classified as functional foods?	Yes	324	82,03
	No	71	17,97
Do you consume chips/crackers or similar products made from tarhana, classified as functional foods?"	Yes	290	73,42
	No	105	26,58
Do you consume chips/crackers or similar products made from bulgur, classified as functional foods?	Yes	264	66,84
	No	131	33,16
How frequently do you consume chips, crackers, or similar products made from chickpea flour, bulgur, and tarhana, classified as functional foods?	1-2 times per week	65	16,46
	3-4 times per month	66	16,71
	1-2 times per month	101	25,57
	Rarely	120	30,38
	Never	43	10,89
Gender	Female	256	64,81
	Male	139	35,19
Age	Aged 25-30	102	25,82
	Aged 31-40	156	39,49
	Aged 41-50	137	34,68
Marital Status	Married	237	60,00
	Single	121	30,63
	Divorced/Widowed/Separated	37	9,37
Educational Background	High School	30	7,59
	Associate Degree	39	9,87
	Bachelor's Degree	233	58,99
	Master's/PhD Degree	93	23,54
Number of Children	I have no children	161	40,76
	One	109	27,59
	More than one	125	31,65
Total Monthly Household Income	50,000 TL or below	77	19,49
	50.001-75.000 TL	93	23,54
	75.000-100.000 TL	90	22,78
	100,001 TL or above	135	34,18
Approximately what percentage (%) of your household income is allocated to food expenditures?	%10-%20	91	23,04
	%21-%30	178	45,06
	%31 and more	126	31,90
How much of your monthly food budget is allocated to snack products such as chips made from bulgur, tarhana, and chickpea flour, classified as functional foods?	500 TL and less	208	52,66
	500-1.000 TL	103	26,08
	1.000 TL and more	84	21,27

Table 2. Evaluation of Data According to Functional Food Consumption Status

	Yes		No		t	p
	ort.	ss.	ort.	ss.		
Awareness of Functional Foods	24,15	5,42	19,10	6,79	5,036	0,000*
Attitude Towards Functional Foods	46,88	11,38	36,54	12,88	5,903	0,000*
Reasons for Preferring Functional Chips	37,38	9,29	29,90	10,07	5,267	0,000*
Reasons for Consuming Functional Chips	11,86	4,29	10,68	4,26	1,825	0,069
Reasons for Not Preferring Functional Chips	11,31	4,64	14,72	4,31	-4,896	0,000*

Table 3. Evaluation of the Data Based on the Consumption of Chickpea Flour-Based Chips/Crackers or Similar Products

	Yes		No		t	p
	ort.	ss.	ort.	ss.		
Awareness of Functional Foods	24,28	5,31	19,99	6,84	4,974	0,000*
Attitude Towards Functional Foods	47,08	11,44	38,69	12,56	5,501	0,000*
Reasons for Preferring Functional Chips	37,83	9,15	30,08	9,69	6,391	0,000*
Reasons for Consuming Functional Chips	11,96	4,30	10,58	4,11	2,476	0,014*
Reasons for Not Preferring Functional Chips	11,07	4,59	14,80	4,17	-6,703	0,000*

Table 4. Evaluation of Data According to the Consumption of Chips/Crackers or Similar Products Made from Tarhana

	Yes		No		t	p
	ort.	ss.	ort.	ss.		
Awareness of Functional Foods	24,41	5,39	21,04	6,34	4,848	0,000*
Attitude Towards Functional Foods	47,42	11,28	40,49	12,75	4,917	0,000*
Reasons for Preferring Functional Chips	38,22	9,09	31,50	9,66	6,390	0,000*
Reasons for Consuming Functional Chips	12,20	4,28	10,37	4,08	3,798	0,000*
Reasons for Not Preferring Functional Chips	10,71	4,58	14,60	3,90	-8,345	0,000*

Table 5. Evaluation of Data Based on the Consumption of Bulgur-Based Chips/Crackers or Similar Products

	Yes		No		t	p
	ort.	ss.	ort.	ss.		
Awareness of Functional Foods	24,76	4,94	20,99	6,68	5,729	0,000*
Attitude Towards Functional Foods	48,44	10,56	39,79	12,87	6,662	0,000*
Reasons for Preferring Functional Chips	39,00	8,67	31,27	9,64	7,755	0,000*
Reasons for Consuming Functional Chips	12,44	4,24	10,24	4,06	4,926	0,000*
Reasons for Not Preferring Functional Chips	10,59	4,62	14,06	4,06	-7,296	0,000*

Table 6. Evaluation of Data According to the Frequency of Consumption of Chips, Crackers, and Similar Products Made from Chickpea Flour, Bulgur, and Tarhana

	1-2 times per week		3-4 times per month		1-2 times per month		Rarely		Never		F	p
	ort.	ss.	ort.	ss.	ort.	ss.	ort.	ss.	ort.	ss.		
Awareness of Functional Foods	25,77	6,62	25,67	3,84	24,11	4,38	22,38	5,78	18,53	6,72	13,548	0,000*
Attitude Towards Functional Foods	48,18	15,47	49,59	10,50	47,18	8,24	43,82	11,77	36,60	11,98	10,275	0,000*
Reasons for Preferring Functional Chips	38,94	11,96	40,56	8,29	37,81	6,90	34,26	9,23	29,16	9,76	13,143	0,000*
Reasons for Consuming Functional Chips	12,20	4,62	12,77	4,53	11,92	4,02	11,08	4,22	10,65	3,95	2,630	0,034*
Reasons for Not Preferring Functional Chips	9,08	4,73	9,89	4,37	11,81	4,59	13,20	4,11	14,40	4,33	16,032	0,000*

Table 7. Evaluation of Data Based on Marital Status

	Married		Single		Divorced/Widowed/Separated		F	p
	ort.	ss.	ort.	ss.	ort.	ss.		
Awareness of Functional Foods	23,11	6,09	23,80	5,32	25,14	5,67	2,149	0,118
Attitude Towards Functional Foods	44,52	12,29	46,45	11,41	49,46	12,02	3,180	0,043*
Reasons for Preferring Functional Chips	35,65	10,10	36,96	9,09	39,73	8,40	3,111	0,046*
Reasons for Consuming Functional Chips	11,35	4,48	12,41	3,83	11,76	4,40	2,469	0,086
Reasons for Not Preferring Functional Chips	12,23	4,96	11,05	4,27	10,89	4,38	3,362	0,039*

Table 8. Evaluation of Data Based on Educational Status

	High School		Associate Degree		Bachelor's Degree		Master's/PhD Degree		F	p
	ort.	ss.	ort.	ss.	ort.	ss.	ort.	ss.		
Awareness of Functional Foods	19,67	6,10	23,74	4,86	23,99	5,65	23,46	6,24	5,013	0,002*
Attitude Towards Functional Foods	37,10	14,86	46,69	10,24	45,79	12,00	47,31	10,99	4,040	0,010*
Reasons for Preferring Functional Chips	31,67	11,80	37,59	9,59	36,81	9,58	36,55	9,02	2,757	0,042*
Reasons for Consuming Functional Chips	11,27	4,62	12,18	4,38	11,85	4,20	11,32	4,42	0,593	0,620
Reasons for Not Preferring Functional Chips	12,53	5,59	11,23	4,37	11,68	4,71	11,86	4,67	0,461	0,709

Table 9. Evaluation of Data Based on the Number of Children

	I have no children		One		More than one		F	p
	ort.	ss.	ort.	ss.	ort.	ss.		
Awareness of Functional Foods	23,93	5,56	23,69	5,77	22,82	6,24	1,321	0,268
Attitude Towards Functional Foods	46,86	11,27	44,50	12,96	44,85	12,20	1,578	0,208
Reasons for Preferring Functional Chips	37,07	8,96	35,40	10,63	36,51	9,78	0,969	0,380
Reasons for Consuming Functional Chips	12,43	3,93	11,34	4,72	11,11	4,26	4,227	0,016*
Reasons for Not Preferring Functional Chips	11,00	4,45	12,68	5,10	11,89	4,63	4,246	0,015*

Table 10. Evaluation of Data Based on Income Levels

	50.000 TL and less		50.001-75.000 TL		75.000-100.000 TL		100.001 TL ve üstü		F	p
	ort.	ss.	ort.	ss.	ort.	ss.	ort.	ss.		
Awareness of Functional Foods	22,39	6,00	23,42	6,04	24,50	5,24	23,56	5,95	1,826	0,142
Attitude Towards Functional Foods	42,12	13,86	45,45	12,58	47,74	9,76	46,19	11,70	3,022	0,031*
Reasons for Preferring Functional Chips	33,92	10,98	36,54	9,89	38,91	8,15	36,15	9,45	3,798	0,010*
Reasons for Consuming Functional Chips	11,70	4,24	11,84	4,38	12,69	4,33	10,99	4,16	2,904	0,035*
Reasons for Not Preferring Functional Chips	12,17	4,88	11,35	4,48	11,60	4,47	11,87	5,00	0,473	0,701

Table 11. Evaluation of Data Based on the Share of Food Expenditures in Household Income

	%10-%20		%21-%30		%31 and more		F	p
	ort.	ss.	ort.	ss.	ort.	ss.		
Awareness of Functional Foods	21,31	6,70	23,55	5,37	25,05	5,35	9,830	0,000*
Attitude Towards Functional Foods	42,02	13,13	45,13	11,64	48,77	11,10	8,817	0,000*
Reasons for Preferring Functional Chips	33,47	10,26	36,62	9,40	38,31	9,26	6,824	0,001*
Reasons for Consuming Functional Chips	10,81	3,79	11,78	4,30	12,27	4,56	3,106	0,046*
Reasons for Not Preferring Functional Chips	12,65	4,44	11,54	4,67	11,37	4,97	2,221	0,110

Table 12. Evaluation of Data According to the Budget Allocated for Functional Foods

	500 TL and below		500-1.000 TL		1.000 TL and more		F	p
	ort.	ss.	ort.	ss.	ort.	ss.		
Awareness of Functional Foods	21,84	6,17	24,61	4,53	26,30	5,06	22,215	0,000*
Attitude Towards Functional Foods	41,36	12,44	48,39	9,26	52,57	9,80	35,868	0,000*
Reasons for Preferring Functional Chips	33,19	9,94	39,11	7,46	41,19	8,61	29,200	0,000*
Reasons for Consuming Functional Chips	10,90	4,13	12,44	4,12	12,83	4,57	8,294	0,000*
Reasons for Not Preferring Functional Chips	13,37	4,27	11,12	4,56	8,50	4,19	39,247	0,000*

Figure 1. Evaluation of Data According to Functional Food Consumption Status

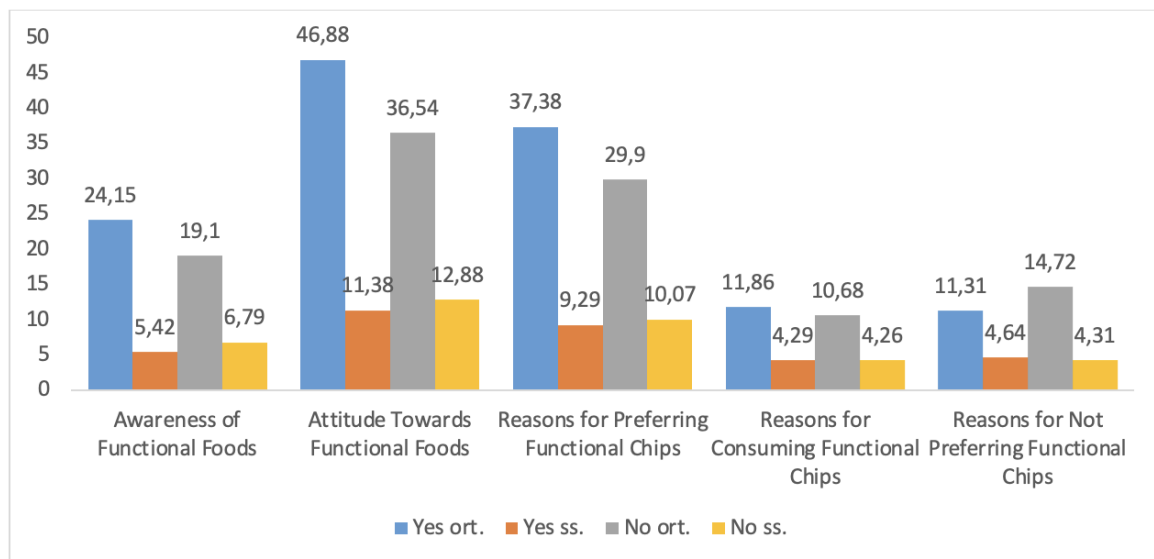


Figure 2. Evaluation of the Data Based on the Consumption of Chickpea Flour-Based Chips/Crackers or Similar Products

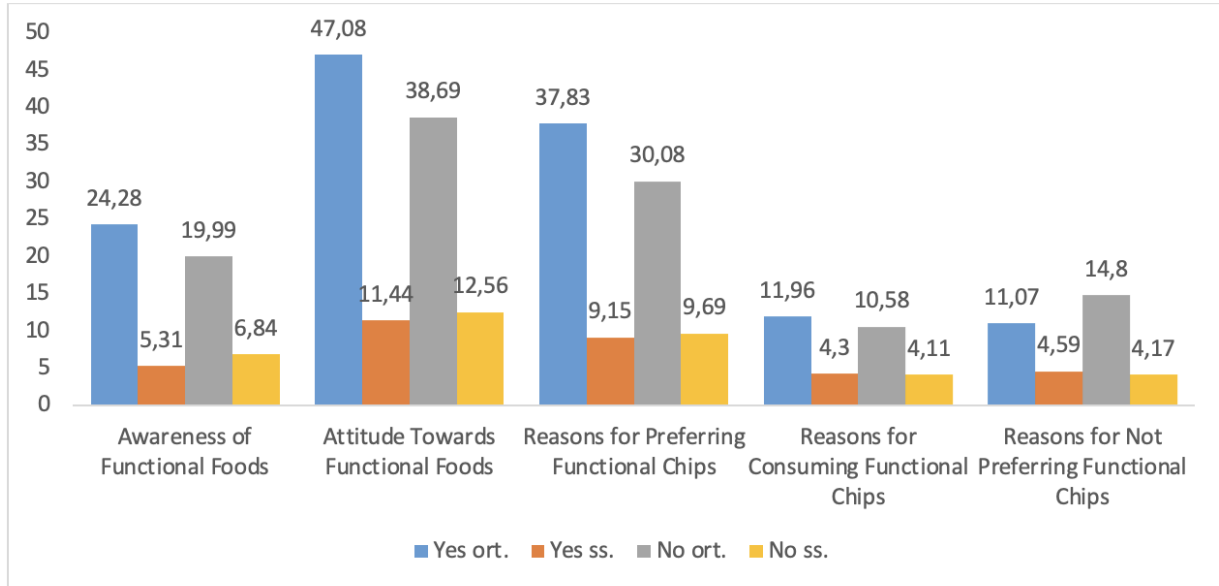


Figure 3. Evaluation of Data Based on the Consumption of Bulgur-Based Chips/Crackers or Similar Products

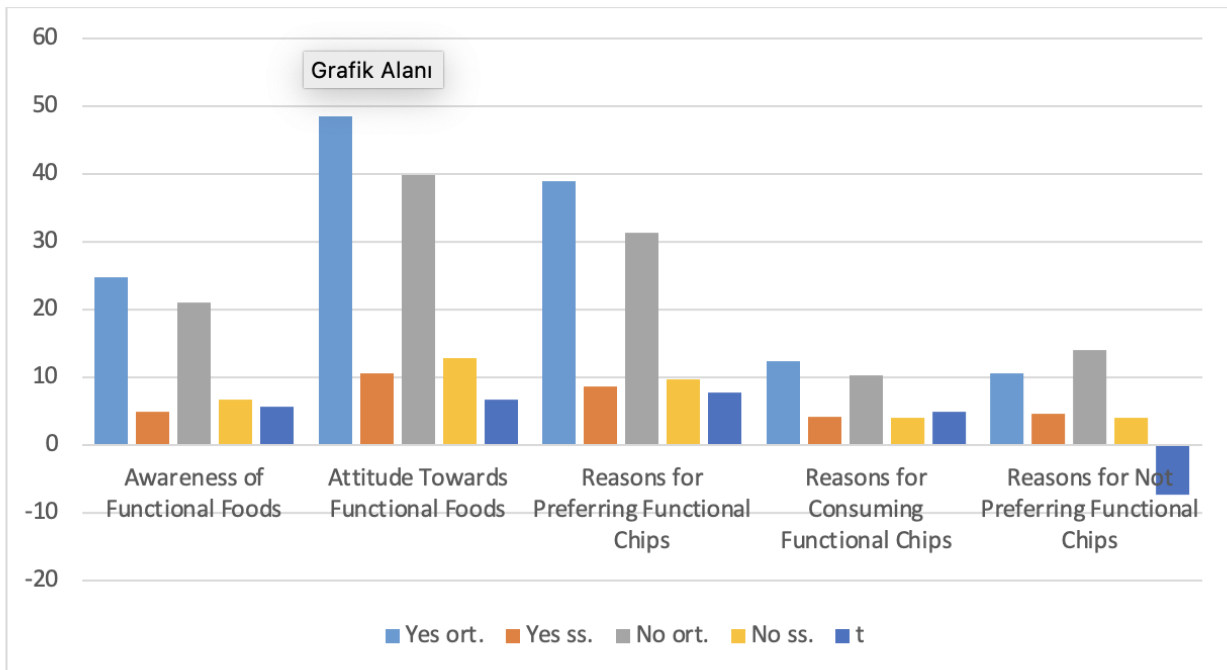


Figure 4. Evaluation of Data According to the Frequency of Consumption of Chips, Crackers, and Similar Products Made from Chickpea Flour, Bulgur, and Tarhana

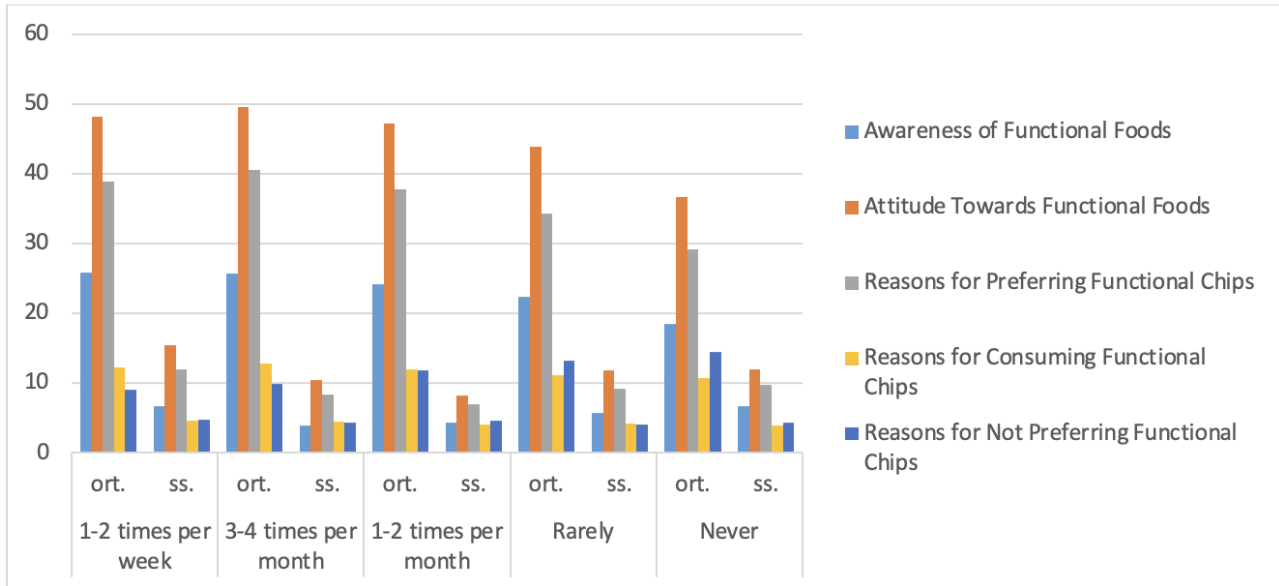


Figure 5. Evaluation of Data Based on Marital Status

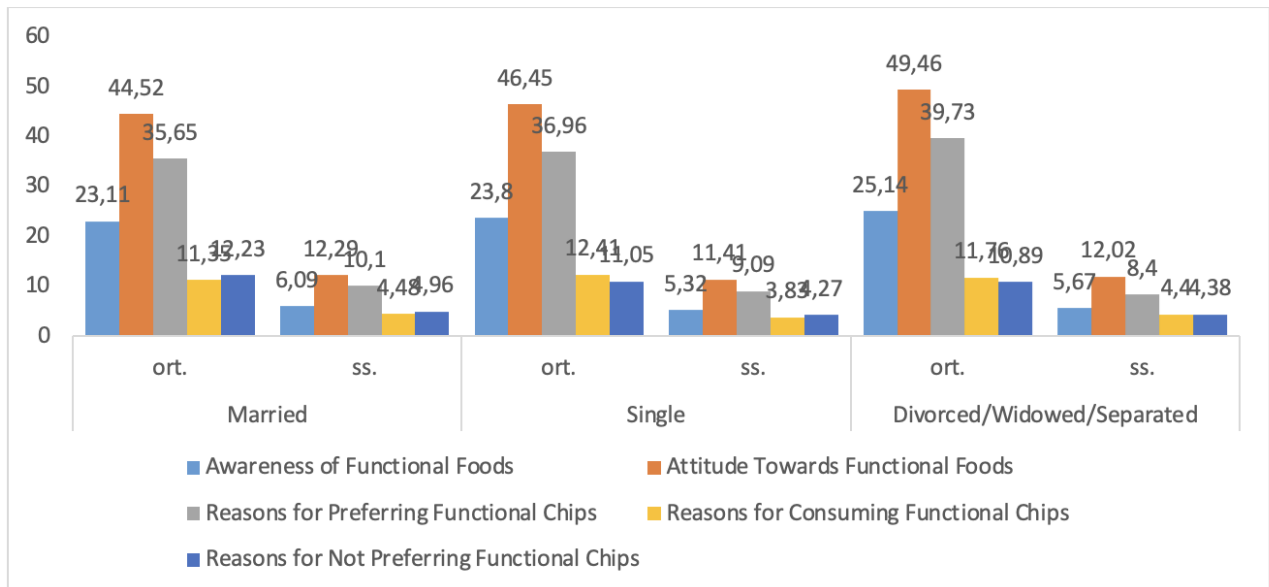


Figure 6. Evaluation of Data Based on Educational Status

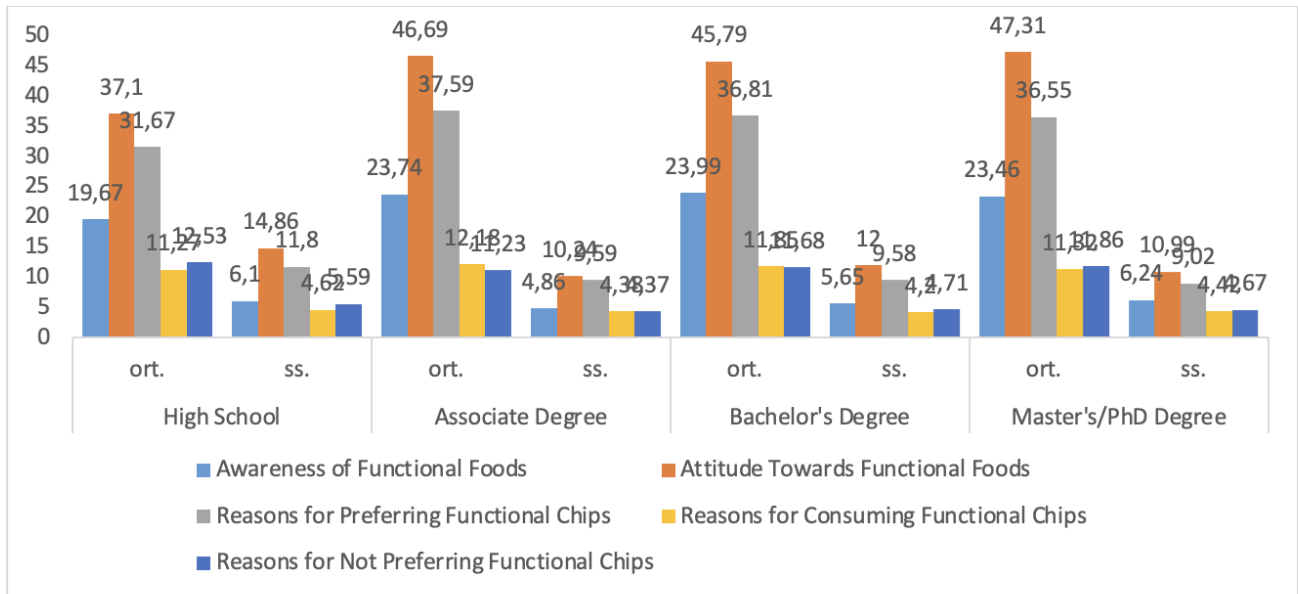


Figure 7. Evaluation of Data Based on the Number of Children

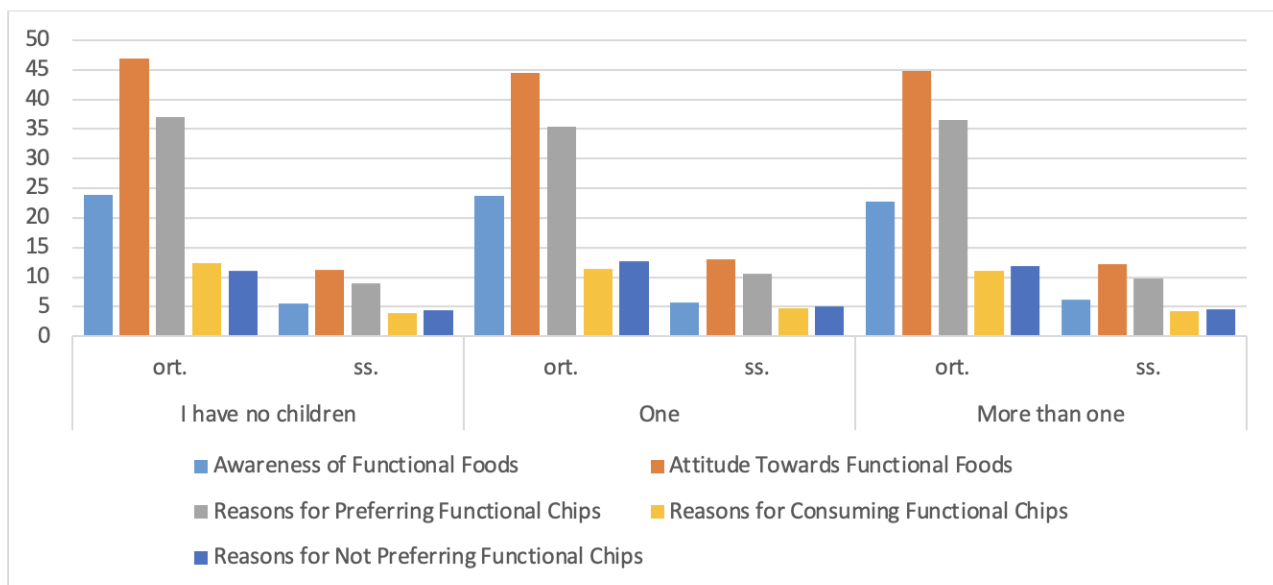


Figure 8. Evaluation of Data Based on Income Levels

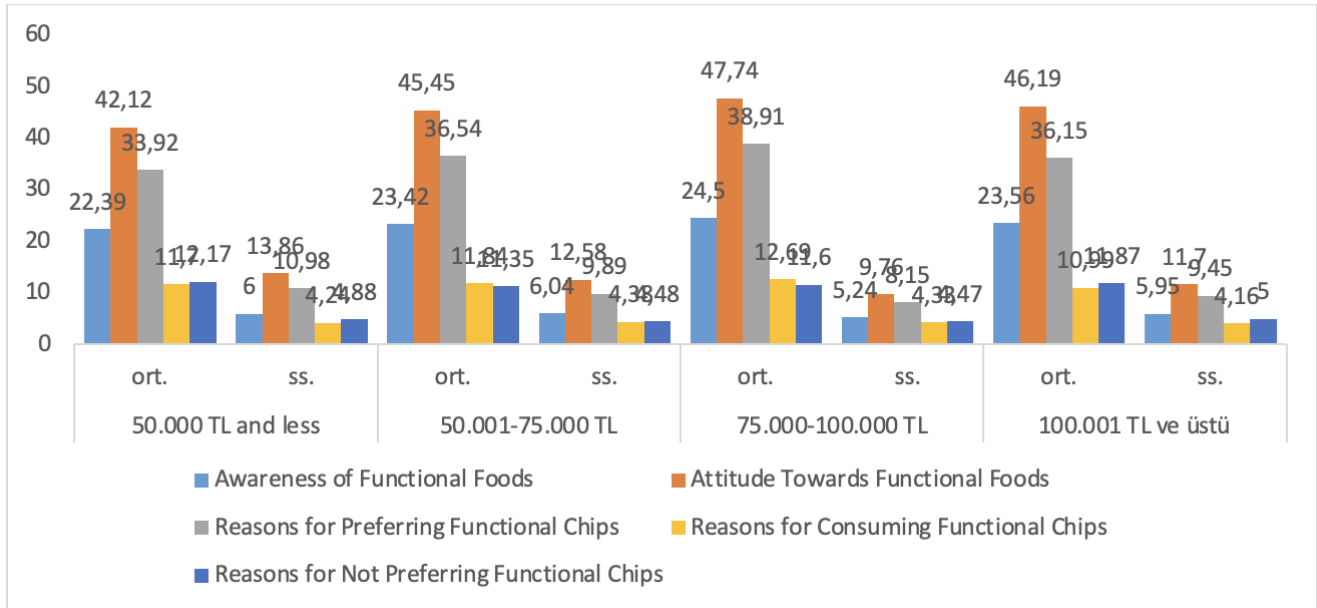


Figure 9. Evaluation of Data Based on the Share of Food Expenditures in Household Income

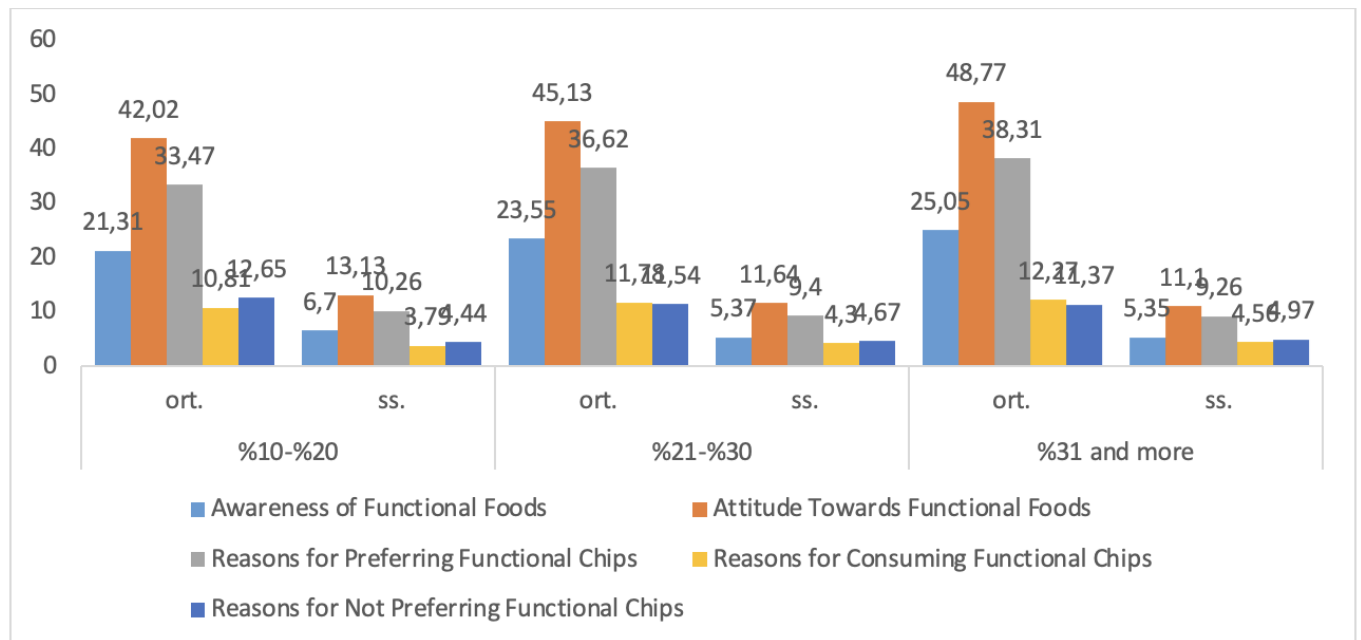


Figure 10. Evaluation of Data According to the Budget Allocated for Functional Foods

