



RESEARCH ARTICLE

Investigation of University Students' Attitudes Towards Healthy Eating in Terms of Some Variables

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Abstract

The aim of this study is to determine the attitudes of undergraduate university students towards healthy nutrition. A descriptive survey model was employed in the research, and a total of 275 students, comprising 167 males and 108 females, who were continuing their education in undergraduate programs at Ordu University during the 2022-2023 academic year, were included in the study. As the data collection instrument, the 'Attitude Scale for Healthy Nutrition,' developed by TekkurşunDemir and Cicioğlu (2019), was used in the research. According to the results of the normality assumption, Student's T-test was utilized for pairwise comparisons, and One-Way Analysis of Variance (ANOVA) and Tukey's multiple comparison test were employed for multiple comparisons in the study. Significant differences were detected in the residence status variable of students in terms of the sub-dimensions of positive nutrition and malnutrition with the Attitude Scale for Healthy Nutrition ($p < 0,05$). However, no significant differences were found in terms of gender regarding students' attitudes towards healthy nutrition and its sub-dimensions ($p > 0,05$). Concerning physical activity, significant differences were observed in the sub-dimensions of information on nutrition, positive nutrition, and malnutrition with the Attitude Scale for Healthy Nutrition ($p < 0,05$). Additionally, it was determined that students who lived with their families and engaged in sports had higher mean scores compared to others. Hence, living with family and regularly participating in exercise positively influenced students' attitudes towards healthy nutrition. In conclusion, organizing seminars and educational programs regarding healthy eating habits for students is of utmost importance.

Keywords

Nutrition, Health, Sports, Attitude

INTRODUCTION

Every organism must nourish itself to sustain its life (Çalıştır, 2005). Likewise, human beings need to consume an adequate amount of nutrients to ensure their growth, development, and productivity (Demirezen and Coşansu, 2005). The fundamental factor for maintaining good health is that individuals' intake of nutrient saligns with the amount of energy they expend (Özçelik 2021). Consuming more nutrients than necessary on a sedentary day or consuming less than required on a day with high energy expenditure is one of the

factors that can adversely affect health (Baysal 2007). Health is associated with an individual's lifestyle (Kusan & Sabah, 2022). In order to establish a healthy society, individuals must have good health (Taşdelen 2021). To achieve this, individuals need to develop balanced and sufficient dietary habits from birth onwards (Uluç and Durukan 2021). However, recently, it can be said that individuals face certain issues related to healthy eating. This situation leads to various illnesses and negative impacts. In our era, the significant role of proper dietary habits in reducing or preventing many diseases such as obesity,

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cardiovascular diseases, diabetes, and hypertension is well recognized (Saygın et al. 2011).

In balanced nutrition habits, proper and diverse eating plays a pivotal role in ensuring the balanced intake of essential components such as fats and carbohydrates, as well as proteins that affect the formation of fundamental building blocks like muscles and tissues, required for daily energy consumption (Merdol et al. 2004; Şahin and Taş 2020). Individuals with good health contribute to forming a healthy society. Societies that are healthy are those free from anxieties about the future, peaceful, and physically fit. Individuals who have adopted a balanced nutritional routine and can lead a consistent, healthy life from birth onwards are defined as healthy individuals (Taşdelen 2021).

Nutrition is defined as maintaining lifelong healthy and appropriate physical performance by meeting age-specific, daily activity-related, and individualized nutritional needs, and implementing regular dietary strategies (Baysal 2003; Uluç and Durukan 2021). Healthy nutrition involves balanced and sufficient eating, ensuring the provision of necessary nutrients to the organism, and optimal nourishment (Aksayan 1998). Overeating, irregular meal timing, consuming snacks during non-meal hours, skipping meals, and suppressing hunger lead to adverse effects on the body (Namlı 2019).

In the existing literature, there are numerous studies related to healthy nutrition. Particularly noteworthy is the abundance of research conducted on university students. In this regard, the current research findings also possess the quality of supporting these studies. Adopting a healthy nutritional habit is of significant importance for all individuals, and this is especially pronounced among young individuals. It can be asserted that the healthy nutrition of young individuals, specifically university students, holds a crucial role in fostering a healthy and well-ordered society. In light of this information, the aim of this study is to examine the attitudes of university students at the undergraduate level towards healthy nutrition and, based on these results, to take the necessary measures for university students to acquire healthy nutritional habits.

MATERIALS AND METHODS

Design of Study

The study employed a quantitative research method with a descriptive survey design. Survey research aims to reveal the characteristic features of groups. Accordingly, the strength of this approach lies in obtaining responses to measurable variables and examining participants' responses to specific questions related to the trait to be measured (Neuman 2012).

Ethics Statement

For the implementation of the scales and the collection of data in the research, approval was obtained from the Ethics Committee for Social and Human Sciences Research of Ordu University with the decision dated 15/06/2022 and numbered 2022/158.

Study Group

The population of the study consists of university students enrolled in undergraduate programs at Ordu University during the academic year 2022-2023. The sample includes 275 university students who are enrolled in undergraduate programs at Ordu University and were selected randomly and voluntarily.

Data Collection Tools

In the study, 'Personal Information Form' and 'Attitude Scale Regarding Healthy Nutrition' were utilized. The personally developed personal information form by the researcher includes variables such as gender, residency status, and physical activity.

The Attitude Scale Regarding Healthy Nutrition, developed by TekkurşunDemir and Cicioğlu (2019), consists of 21 items forming 4 sub-dimensions. Items numbered 1, 2, 3, 4 and 5 pertain to knowledge about nutrition, items 6, 7, 8, 9, 10 and 11 relate to emotional aspects of nutrition, items 12, 13, 14, 15 and 16 signify positive dietary habits, and items 17, 18, 19, 20 and 21 represent poor dietary habits. The attitude scale concerning healthy nutrition, developed in 2019, follows a 5-point Likert scale. Items 6, 7, 8, 9, 10, 11, 17, 18, 19, 20, and 21 encompass negative statements within this scale. Positive attitude items are scored in reverse order: 1, 2, 3, 4, and 5; while negative attitude items are scored as 5, 4, 3, 2, and 1. The minimum score achievable from the scale is 21, and the maximum score is 105.

Analysis of Data

Prior to the data collection process in the study, participants were provided with information about the research. During this process, no time constraints were imposed. In order to assess the assumption of normality, skewness and kurtosis values were examined. For the analysis, the student's t-test was used to compare scale scores according to gender, while One-Way Analysis of Variance (ANOVA) and Tukey's multiple comparison test were employed for residency status and physical activity variables. SPSS 22.0 was utilized as the statistical software package for all statistical calculations. Research findings were presented as n (%), mean, and standard deviation values, and results were considered significant at the $p < 0.05$ level.

In the research, 108 of the participants (39.3%) are female, and 167 (60.7%) are male students. Among the participating students, 9 of them (3.3%) are in the 1st year, 46 (16.7%) are in the 2nd year, 98 (35.6%) are in the 3rd year, and 122 (44.4%) are in the 4th year. When their residence status is examined, 154 of them (56%) live with their families, 80 (29.1%) live with their friends, and 41 (14.9%) live alone. Regarding their sports history, 93 of the participating students (33.8%) have no sports background, 160 (58.2%) have participated in sports as amateurs, and 22 (8%) have a professional sports background. It is observed that 39 students (14.2%) do not engage in physical activity, 176 (64%) engage in irregular physical activity, and 60 (21.8%) engage in regular physical activity (Table 1).

RESULTS

Table 1. Frequency and percent distributions of demographic characteristics of participating university students

Variables		n	%
Gender	Female	108	39,3
	Male	167	60,7
Residence Status	With my family	154	56,0
	With my friends	80	29,1
	Alone	41	14,9
Physical activity	I don't do	39	14,2
	Irregularly	176	64,0
	Regularly	60	21,8

Table 2. University students' attitudes towards healthy eating according to residence status variable

Sub-dimensions	Residence Status	n	Mean	Sd.	p
Information on Nutrition	With my family	154	20,88	2,81	0,767
	With my friends	80	20,71	2,93	
	Alone	40	20,54	3,09	
Emotion for Nutrition	With my family	154	16,44	4,05	0,563
	With my friends	80	16,10	4,00	
	Alone	41	15,71	3,39	
Positive Nutrition	With my family	154	17,97	3,50	0,000
	With my friends	80	16,21	3,55	
	Alone	41	17,22	3,24	
Malnutrition	With my family	154	17,76	3,94	0,000
	With my friends	80	16,30	4,45	
	Alone	41	15,44	4,82	
Attitude Scale for Healthy Nutrition	With my family	154	73,05	8,90	0,000
	With my friends	80	69,39	9,72	
	Alone	41	69,90	6,85	

In the study, it has been determined that there is a significant difference in the total score of the attitude scale towards healthy eating, as well as

the sub-dimensions of positive dietary habits and negative dietary habits, according to the variable of students' residence status (Table 2).

Table 3. University students' attitudes towards healthy eating according to gender variable

Sub-dimensions	Gender	n	Mean	Sd.	p
Information on Nutrition	Female	108	20,80	2,74	0,940
	Male	167	20,77	2,98	
Emotion for Nutrition	Female	108	15,72	3,79	0,070
	Male	167	16,59	4,01	
Positive Nutrition	Female	108	17,44	3,77	0,710
	Male	167	17,28	3,41	
Malnutrition	Female	108	17,04	4,21	0,880
	Male	167	16,96	4,39	
Attitude Scale for Healthy Nutrition	Female	108	71,00	8,91	0,590
	Male	167	71,60	9,16	

In the study, it has been determined that there is no significant difference in the total score

of the attitudescale towards healthy eating according to the gender variable (Table 3).

Table 4. University students' attitudes towards healthy eating according to physical activity variable

Sub-dimensions	Physical activity	n	Mean	Sd.	p
Information on Nutrition	I don't do	39	19,85	2,72	0,000
	Irregularly	176	20,66	2,79	
	Regularly	60	21,73	3,01	
Emotion for Nutrition	I don't do	39	16,79	3,33	0,375
	Irregularly	176	16,00	3,84	
	Regularly	60	16,62	4,55	
Positive Nutrition	I don't do	39	15,77	3,50	0,000
	Irregularly	176	17,16	3,39	
	Regularly	60	18,92	3,50	
Malnutrition	I don't do	39	15,72	4,28	0,040
	Irregularly	176	17,45	4,15	
	Regularly	60	16,45	4,63	
Attitude Scale for Healthy Nutrition	I don't do	39	68,13	7,67	0,010
	Irregularly	176	71,28	8,72	
	Regularly	60	73,72	10,23	

In the study, it has been determined that there is a significant difference in terms of nutrition knowledge, sub-dimensions of positive dietary habits and negative dietary habits, as well

as the total score of the attitudescale towards healthy eating according to the variable of students' physical activity (Table 4).

DISCUSSION

This research was conducted to examine university students' attitudes towards healthy eating. A total of 275 students participated voluntarily in the study, including 108 females and 167 males, who were enrolled at Ordu University. In recent years in Turkey, the rate of scientific studies and activities related to healthy eating has increased due to the rising obesity rates. It is crucial for scientific research to have an informative aspect for the society. In addition to some studies serving this purpose (Göral and Yıldırım 2022; Sargın and Güleşçe 2022; Özenoğlu et al. 2021; Gürsoy Coşkun and Atmaca Demir 2021; Kırkbir 2020), this research aims to determine attitudes towards healthy eating and examines certain variables (gender, residence status, and participation in physical activity). Sub-dimensions of the attitude scale towards healthy eating and the total scale score, along with the variables of residence status and participation in physical activity, were analyzed for statistically significant differences in the research. Statistically significant differences were identified in the sub-dimensions and total scale score of the attitude scale towards healthy eating, as well as in residence status and participation in physical activity variables. However, no significant difference was found in the gender variable.

When examined according to the gender variable, no significant differences are observed in the sub-dimensions and total scale score of the attitudescale towards healthy eating. It can be said that gender does not have an impact on healthy eating. When the literature is reviewed, Ünalın et al. (2009), Çakır and Coşkuntürk (2022), and Uluç and Durukan (2021) show dissimilarity in their study results, while Süel et al. (2006) and Yılmaz et al. (2021) have congruent findings.

In a study conducted by Özenoğlu et al. (2021) to determine the nutrition literacy of adult individuals and examine its relationship with body mass index in terms of attitudes towards healthy eating, a significant difference in the emotional sub-dimension towards nutrition was found in favor of men, whereas a significant difference in the knowledge sub-dimension was found in favor of women. No significant difference was detected in the sub-dimensions of positive and negative dietary habits in terms of gender. Bıdıl (2020), in a study using the attitude scale towards healthy

eating, did not find any significant differences between sub-dimensions and gender. This situation is thought to be related to both young minds having equal access to information regardless of gender and the direct influence of technological advancements.

In the study, significant differences were identified in the sub-dimensions of negative dietary habits, positive dietary habits, and the total score of the attitudescale towards healthy eating according to the variable of residence status. The analysis revealed that students living with their families had Higher mean scores compared to others. This findings suggests that students' eating habits are positively influenced by being with their families. However, it can also be said that students have not completely abandoned negative dietary habits. When reviewing the literature, it is observed that the results of the present study do not coincide with the findings of Ünalın et al. (2009). In the study, significant differences were found in the sub-dimensions of nutrition knowledge, negative dietary habits, positive dietary habits, and the total score of the attitude scale towards healthy eating according to the physical activity variable. According to the obtained findings, students who engage in regular physical activity have higher mean scores in terms of nutrition knowledge, positive dietary habits sub-dimensions, and the attitude scale towards healthy eating compared to others. However, for the sub-dimension of negative dietary habits, students engaging in irregular physical activity have higher mean scores. This result indicates the positive impact of exercise and sports on eating habits. Healthy eating can be considered a mandatory aspect of human life. Otherwise, problems may arise concerning societal order and the future of humanity. The present study examines university students' attitudes towards healthy eating. In this regard, having positive attitudes towards healthy eating among young individuals and university students can contribute to the advancement of society. When reviewing the study results, it can be concluded that students Generally exhibit positive attitudes towards healthy eating and acknowledge the potential benefits of engaging in sports. However, some negative dietary habits are also observed. This could potentially be attributed to the influence of socializing among university students. Directing university students towards sports is believed to

have a positive impact on fostering healthy eating habits. In conclusion, the adoption of healthy eating habits by university students is likely to yield positive outcomes for their academic achievements. Additionally, conducting activities and meetings related to healthy eating within the university campus for students would also be significant.

Conflict of Interest

No conflict of interest is declared by the authors. In addition, no financial support was received.

Ethics Statement

In order to ensure ethical compliance of the research, approval was obtained from the Ordu University Ethics Committee by submitting an application. The ethical approval was granted on 15/06/2022 under the reference number 2022-158. Participants were provided with explanations about the research by the researchers, and written and verbal consent was obtained, stating that the data obtained from the research would be used solely for scientific purposes and confidentiality would be maintained.

Author Contributions

Study Design, HAÇ, YA; Data Collection, YA; Statistical Analysis, HAÇ; Data Interpretation, YA, HAÇ; Manuscript Preparation, YA, HAÇ; Literature Search, YA, HAÇ. All authors have read and agreed to the published version of the manuscript.

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