

Examining the Link Between Nutrition Quality, Bullying, and Victimization in High School Students

Lise Öğrencilerinde Beslenme Kalitesi, Zorbalık ve Mağduriyet Arasındaki İlişkinin İncelenmesi

Merve KUMRU YILDIRIM^{1*}, Sevda KARTAL², Özgür TUTAL³

^{1*} Hakkari University, Faculty of Health Sciences, Department of Nutrition and Dietetics, Hakkari, Türkiye

^{2,3} Hakkari University, Faculty of Health Sciences, Department of Child Development, Hakkari, Türkiye

Abstract

The aim of the study was investigated the relationship between diet quality, bullying, and victimization among 412 high school students. Data were collected through face-to-face interviews, using the Peer Bullying Adolescence Scale to assess bullying and victimization, and the Mediterranean diet (MD) index to determine diet quality. Descriptive data were analyzed using standard deviation, percentage, and frequency. For comparisons between two groups, the t-test was applied, and ANOVA was used for analyses involving three or more groups. Participants were distributed by sex, with 48.1% females and 51.9% males. The majority had a moderate diet quality (53%) and did not identify themselves as bullies (98%) or victims (97%). Participants' daily television/social media use, parental education levels, and weekly pocket money were not found to have a statistically significant effect on the mean scores of bullying, victimization, or adherence to MD. No statistically significant relationship was observed between adherence to MD score and bullying or victimization scores. However, a weak negative correlation was observed between adherence to MD and bullying, while a positive correlation was found between adherence to MD and victimization. Interestingly, students who reported consuming fast food 2–3 times per week exhibited significantly higher bullying and victimization scores compared to those who consumed it less frequently. These results suggest that while adherence to MD may not directly influence bullying or victimization, certain eating patterns, such as frequent fast food consumption, could be associated with an increased likelihood of both bullying and being victimized. This highlights the need to consider specific dietary habits when addressing bullying and victimization behaviors in adolescents.

Key Words: Bullying, diet, nutrition status

Özet

Bu çalışmada lise öğrencileri arasında beslenme kalitesi, akran zorbalığı ve mağduriyeti arasındaki ilişkiyi saptamak amaçlanmıştır. Çalışma, 412 öğrenciyle yüz yüze görüşmeler yoluyla gerçekleştirilmiş, zorbalık ve mağduriyet düzeyleri için Akran Zorbalığı Ergenlik Ölçeği, beslenme kalitesi için ise Akdeniz Diyeti İndeksi kullanılmıştır. Tanımlayıcı verilerin analizinde standart sapma, yüzde ve frekans değerlerinden yararlanılmış, İki grup arasındaki karşılaştırmalarda t-testi, üç ve daha fazla grup için ise ANOVA testleri uygulanmıştır. Katılımcıların %48,1'i kız, %51,9'u erkektir. Katılımcıların çoğunluğu orta düzeyde bir beslenme kalitesine sahiptir (%53) ve kendilerini zorba (%98) ya da mağdur (%97) olarak tanımlamamaktadır. Öğrencilerin, günlük televizyon/sosyal medya kullanımı durumlarının, baba veya anne eğitim düzeyinin, haftalık harçlık miktarlarının zorbalık, mağdurluk ve akdeniz diyetine uyum ortalama puanları üzerinde istatistiksel olarak anlamlı bir etkisinin bulunmadığı belirlenmiştir. Katılımcıların akdeniz diyetine uyum skorlarının zorbalık veya mağduriyet puanları üzerine istatistiksel olarak anlamlı bir etkisi olmadığı ortaya koymuştur. Bununla birlikte, akdeniz diyetine uyum ile zorbalık arasında zayıf bir negatif ilişki, mağduriyet ile arasında ise pozitif bir ilişki olduğu saptanmıştır. İlginç bir şekilde, haftada 2–3 kez fast food tüketen öğrencilerin, daha az tüketenlere kıyasla zorbalık ve mağduriyet puanlarının anlamlı derecede daha yüksek olduğu görülmüştür. Bulgular, akdeniz diyetine uyumun doğrudan zorbalık veya mağduriyet üzerinde etkili olmadığına ancak sık fast food tüketiminin hem zorbalık hem de mağduriyet davranışlarıyla ilişkili olabileceğine işaret etmektedir.

Anahtar Kelimeler: Bullying, diet, nutrition status

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1. Introduction

Bullying and victimization behaviors among adolescents are significant psychosocial problems in the school environment. On the other hand, adherence to the Mediterranean Diet (MD) is thought to be associated with psychosocial health indicators in adolescents. Since there are a limited number of studies on this issue, addressing this problem is important.

In Turkish, the word "violence" refers to the intensity or degree of an action or force, severity, harshness, speed, the force arising from an act, the use of brute force against opposing views, and excessiveness in emotion or behavior (Akalin et al., 2019: 2223). The fact that violence acquires different meanings depending on its source, emergence, perception, effects, and consequences according to various structures and variables leads to diversity and differences in attempts to define violence (Kartal, 2021). According to Budak (2009: 689), violence is the expression of hostility and anger through destructive physical force directed at individuals or objects. Violent behavior in individuals manifests as the use of force to harm others, disobey the law, insult, degrade, disturb peace and tranquility, violate someone's rights, batter, hurt, inflict pain; it also includes destructive extreme behaviors and expressions of intense anger (Erten & Ardalı, 1996).

One of the most comprehensive classifications of violence belongs to Ünsal. Ünsal (1996) addressed the concept of violence under two main headings: "individual violence" and "collective violence." However, he went beyond this in his study and categorized violence in more detail. Individual violence refers to violence affecting a single person. Collective violence refers to violence that affects many people and involves mass violent practices, including bloody terrorist acts, protest marches, strikes, civil wars, international wars, revolutions, genocides, and mass violence and extermination practices of brutal dictatorial regimes (Ünsal, 1996).

Another general classification of violence belongs to Güneş. He divides violence into two categories: "visible violence" and "hidden violence" (Güneş, 2018: 19–20). Polat (2017: 19) also classifies violence within a tripartite system. The first type is "Self-Directed" violence, which is divided into "Suicide Attempt" and "Suicide." The second type is "Interpersonal" violence, which is further divided into "Family/Partner" and "Community." "Family/Partner" violence is categorized into "Child," "Spouse/Partner," and "Elderly," while "Community" violence is divided into "Dating" and "Stranger." The third type in Polat's classification is "Collective" violence, which he categorizes into "Social," "Political," and "Economic."

An important concept closely related to violence, and perhaps considered a type of it, is bullying. Bullying is an abnormal condition encountered worldwide regardless of religion, language, race, age, or gender, and it leads to serious problems. It involves socially isolating individuals or groups through malicious behavior, cruelty, torment, unjust criticism, and spreading gossip (Di Martino, 2003: 6). Bullying occurs when one party, who is more powerful, intentionally and repeatedly uses force or intimidation against a weaker party to dominate or humiliate them. For a behavior to be considered bullying, there must be a power imbalance between the bully and the victim (Pişkin, 2002). Furthermore, this behavior must be repeated at intervals rather than being a one-time incident. Although bullying can be seen in all aspects of daily life, it is most commonly encountered in schools and across all levels of education, including universities. There are four types of bullying: physical, verbal, covert, and cyberbullying. These effects often last for many years and vary depending on age and gender (Kartal, 2021: 56).

The number of children exposed to violence is steadily growing. Bullying is a subgroup of violence, its frequency of occurrence is rapidly increasing, particularly in school environment (WHO, 2020). Based on the 2022 data from Programme for International Student Assessment (PISA), average proportion of students exposing any form of bullying behavior is 20% in Organisation for Economic Co-operation and Development (OECD) country, whereas in Turkey this proportion is increased to 27% (Ortacalar, 2024). According to a scientific report conducted by the Turkish Statistical Institute, 13.8% of children aged 6–17 experience bullying at least a few days per month (TUİK, 2023). Bullying primarily aims to humiliate the other person, and in pursuit of this goal, the person exhibits cruel behavior, makes negative criticisms, and through this mechanism, creates an imbalance of power between the individuals (Pişkin, 2002; Di Martino, 2003).

It is known that over one billion children worldwide experience violence each year (World Health Organization, 2020). One form of violence, bullying, involves repeated physical, psychological, or social harm, often occurring in schools, online, and in environments where children gather (World Health Organization, 2019).

When examining the prevalence of schoolchildren encountering or perpetrating bullying, it is reported that 34% have experienced bullying in the past month, while 40% have been involved in physical fights in the past year (World Health Organization, 2019). In some studies conducted in our country, it has been found that between 24% and 44% of adolescents have been subjected to bullying (Gökkaya & Tekinsav Sütücü, 2020; Dikbıyık and Yılmaz, 2016).

The initial impact of bullying on the victim is feelings of disappointment and distress. Over time, these feelings can escalate into depression, alcohol and substance abuse, criminal behavior, suicide attempts (Rigby, 1998; Beran & Li, 2005).

Although bullying and victimization have been associated with various individual, familial, and school-related factors, one risk factor that is frequently overlooked is the quality of diet. There are several hypotheses regarding the clarification of the relationship between diet quality and bullying behavior. Firstly, being bullied by peers due to the body image of obese individuals leads to the development of unhealthy eating behaviors and a decline in their diet quality (Sadat et al., 2014). Psychological issues such as depression, anxiety, and low self-esteem, commonly observed in bullied individuals, are assumed to reduce their physical activity levels, which could negatively impact their weight management (Pont et al., 2017). The increase in stress levels as a result of bullying and the tendency to use eating as a coping mechanism to deal with this stress are factors that deteriorate the overall situation. The stress resulting from being victimized causes people to consume energy-dense foods and reduces the quality of their diet (Jenkins & Horner, 2005). Another hypothesis is that nutritional deficiencies negatively affect the parts of the brain that control impulsive and emotional functions, as well as brain development and growth, leading to the emergence of antisocial and aggressive behaviors in children (Liu et al., 2004). Research indicates that nutritional deficiencies experienced in early childhood can contribute to external behavioral disorders, such as aggression and hyperactivity, in individuals through alterations in cognitive functions during school age and adolescence (Liu et al., 2004; Gete et al., 2021).

El-Sahar and Sopeah (2019), conducted a study assessing the nutritional status and growth indicators of school-aged children who are victims of bullying. The results showed that these children often had deficiencies in essential nutrients and are at higher risk of growth problems. Considering the impact of nutrition on children's health and development, exploring dietary patterns such as the MD, may offer insights into how a high-quality diet could support both physical growth and overall well-being.

In this context, MD stands out as a model of high diet quality with well-documented health benefits. MD is recognized as one of the world's healthiest dietary patterns and providing notable protection against numerous diseases such as cancer, cardiovascular disease, type 2 diabetes (Guasch-Ferré & Willett, 2021). High adherence to the M in adolescents is associated with better physical activity levels, higher quality of life, and lower rates of obesity (Galan-Lopez et al., 2018).

In the present study, the relationship between adherence to the MD and bullying and victimization among adolescents was examined. There is limited research examining the relationship between nutrition and bullying behavior. (Jackson et al., 2017). Therefore, the present study contributes to the literature by examining this link in a high school population, providing insight into how to adherence to the MD may influence social behaviors. Furthermore, understanding the potential protective role of adequate nutrition against bullying in this age group can inform interventions aimed at promoting both physical and psychosocial well-being.

2. Method

2.1. Aim of The Study

The aim of this cross-sectional study conducted on high school students is to evaluate the bidirectional relationship between students' adherence to the MD and their involvement in bullying, whether as perpetrators or victims.

2.2. Questions of The Study

Is there a relationship between adherence to the MD and bullying behavior among high school students?

Is there a relationship between adherence to the MD and victimization among high school students?

Is there a relationship between the frequency of consumption of food groups and bullying behavior among high school students?

Is there a relationship between the frequency of consumption of food groups and victimization among high school students?

2.3. Sample of The Research

Study included students attending the first, second, third, and fourth grades of high schools in Hakkari and Van. For the sample size calculation, the total active high school student population in these provinces 136,315 was considered as the study universe (MEB, 2021). The formula $n = N \cdot t^2 \cdot p \cdot q / [d^2 \cdot (N-1) + t^2 \cdot p \cdot q]$ was used to determine the sample size, and the sample size was calculated as 382 based on a 95% confidence level and a 5% margin of error (Cochran, 1977). It was determined that at least 382 participants were required to represent the universe. The study was completed with the participation of a total of 412 students.

2.4. Data Collection Tools

In the study, the Peer Bullying Scale Adolescent was used to identify bullying and victimization among high school students, the Demographic Form and the Mediterranean Diet Quality-KIDMED scale was used to assess adherence to the MD and diet quality in adolescents. The data of the study were collected through face-to-face interactions.

2.4.1. Demographic Form: Information about adolescent's age, gender, parents' occupations, meal skipping, and the consumption of sugary drinks and junk food was collected. (Arslan, 2018; Jackson et al., 2017). Adolescents' junk food and sugary drinks consumption was assessed using the demographic form. For each item, participants were asked to select one of the following four response options that best reflected their usual consumption habits: 'Never,' '1 day a week,' '2–3 days a week,' and 'Everyday.'

2.4.2. Peer Bullying Scale Adolescent: The Peer Bullying Scale, developed by Ayas and Pişkin, is used to assess bullying and victimization among adolescents. The first part, 'I did,' determines the behaviors of the bullying individuals, while the second part, 'It was done to me,' evaluates the experiences of the victimized individuals. The increase in scores indicates a higher level of bullying and victimization (Ayas & Pişkin, 2015). The minimum score that can be obtained from the bully and victim dimensions of the scale is 53, while the maximum score is 265. As the scores increase, the levels of being a bully and a victim also rise. The Cronbach's alpha reliability coefficient for the bully scale is 0.92 for the total scale, with sub-factor values ranging between 0.66 and 0.88. For the victim scale, the Cronbach's alpha reliability coefficient is 0.93 for the total scale, with sub-factor values varying between 0.75 and 0.88 (Ayas and Pişkin, 2015). In this study, the Cronbach's alpha for the bully scale was found to be 0.94, with sub-factor values ranging from 0.68 to 0.88; for the victim scale, it was 0.94, with sub-factor values between 0.77 and 0.85.

2.4.3. Mediterranean Diet Quality- KIDMED: This scale validated and developed by Serre-Majem and colleagues, translated in Turkish and validated by Sahingöz to for assessing the Mediterranean-style diet practiced among adolescent. The Cronbach's alpha coefficient for the index was found to be 0.857, indicating good internal consistency. KIDMED has 12 positive and 4 negative item. The total score of the scale ranges from 0 to 12. Responses to the items are calculated as follows: a 'yes' response is scored as +1, while a 'no' response is scored as - 1. Higher scores on the scale indicate higher diet quality. (Şahingöz et al., 2019; Serra-Majem et al., 2004)

2.5. Ethical Consideration

This study was approved by the ethics committee of a Hakkari University (Approval Number: 2025/114) and conducted in accordance with the principles of the Declaration of Helsinki.

2.6. Limitation of The Study

The study has an inherent limitation due to its cross-sectional design. Additionally, since the data were collected from only two cities, the findings cannot be generalized to the entire population of Turkey. Furthermore, no randomization or stratification procedures were applied when selecting the schools, and only public schools were included; private schools were not part of the sample.

2.7. Statistical Analysis of Data

The study data were analyzed using SPSS version 26.0 (IBM Corp.). In the analysis of descriptive data, standard deviation, percentage, and frequency were used. The Kolmogorov-Smirnov test confirmed that the data followed a normal distribution. Therefore, for analyzing differences between variables, the t-test was used for comparisons between two groups, and ANOVA tests were applied for analyses involving three or more groups. Correlation analysis was performed to evaluate the associations between adherence to the MD, bullying, and victimization scores. In all analyses, a p-value of <0.05 was considered statistically significant.

3. Results

It was determined that the majority of the participants had a moderate diet quality (53%) and did not define themselves as bullies (98%) or victims (97%). The proportion of participants who defined themselves as bullies was only 2%, while 3% identified as victims. Among the participants, 48.1% were female and 51.9% were male. It was determined that participants' daily television/social media use, parental education levels, and weekly pocket money did not have a statistically significant effect on the mean scores of bullying, victimization, or adherence to MD ($p > 0.05$).

Table 1. Descriptive Statistics on Adherence to the MD and Self-Reported Bullying and Victimization Status

Variable	Category	Percentage (%)
Diet Quality	Moderate	53%
	(Other levels)	47%
Self-Identification as Bully	Yes	2%
	No	98%
Self-Identification as Victim	Yes	3%
	No	97%
Sex of the Participants	Female	48.1%
	Male	51.9%

The results of the t-test, conducted to determine whether the participants' adherence to the MD scores differed according to their bullying scores, are presented in Table 2. According to Table 2, there are no statistically significant differences in students' adherence to the MD and bullying scores ($p>0,05$).

Table 2. Findings on the Comparison of adherence to the MD and Bullying Scores

	N	X	SD	t	p
Bully	8	2.87	2.64	-1.387	0.207
Neutral	404	4.18	2.38		

N= sample size, X=Mean, SD= Standard Deviation, P= Significance Level

The results of the t-test, conducted to determine whether the participants' adherence to the MD differed according to their victim scores, are presented in Table 3. As indicated in Table 3, there are no statistically significant differences in students' diet quality and victimization scores ($p>0,05$).

Table 3. Findings on the Comparison of adherence to the MD and Victimization Scores

	N	X	SD	t	p
Victim	14	4.57	2.44	0.649	0.527
Neutral	11	4.14	2.39		

N= sample size, X=Mean, SD= Standard Deviation, P= Significance Level

The results of the one-way ANOVA analysis conducted to examine whether there are significant differences in adherence to the MD based on bullying and victimization scores are presented in Table 4. The one-way ANOVA test determined that there were no statistically significant differences in bullying and victimization scores based on students' low, moderate, or high diet quality ($p>0,05$).

Table 4. Findings on the Comparison of adherence to the MD , Bullying and Victimization Scores

Variable	Categories	N	X	SD	F	p
Bullying	Low	158	77.57	33.80	0.13	0.878
	Moderate	219	75.83	32.43		
	High	35	76.88	31.56		
Victimization	Low	158	88.74	34.10	0.751	0.472
	Moderate	219	89.37	38.31		
	High	35	97.02	39.92		

N= sample size, X=Mean, SD= Standard Deviation, P= Significance Level, F=statistic test

When comparing participants' frequency of junk food consumption as shown in Table 5, it was found that students' bullying scores differed statistically significantly, with students who consumed junk food 2-3 days a week having higher bullying scores than those who consumed junk food 1 day a week ($p < 0.05$). Additionally, adolescents' victimization scores also differed statistically significantly, with students who consumed junk food 2-3 days a week having higher victimization scores than those who consumed junk food 1 day a week ($p < 0.05$).

Table 5. Findings on the Comparison of Junk Food Consumption, Bullying and Victimization Scores

	Frequency of junk food consumption	N	X	SD	F	p	Significant Differences
Bullying	Everyday	86	75.94	35.10	4.245	0.015	2>3
	2-3 days a week	200	80.92	36.93			
	1 day a week	126	70.15	21.46			
Victimization	Everyday	86	84.37	29.78	4.291	0.014	2>3
	2-3 days a week	200	95.21	41.01			
	1 day a week	126	84.84	33.14			
Adherence to the MD	Everyday	86	4.03	2.42	0.377	0.686	-
	2-3 days a week	200	4.26	2.31			
	1 day a week	126	4.07	2.48			

N= sample size, X=Mean, SD= Standard Deviation, P= Significance Level, F=statistic test, Significant Differences = The column shows which groups differed significantly based on post-hoc comparisons after ANOVA. For bullying and victimization scores, students consuming junk food 2–3 days a week had higher scores than those consuming it 1 day a week. A dash (–) indicates no significant difference between groups.

As shown in Table 6, it was revealed that there is a weak negative correlation between participants' adherence to the MD and bullying scores, and a weak positive correlation between adherence to the MD and victimization scores.

Table 6. Findings on the Correlation Between Adherence to the MD, Bullying, and Victimization Scores

	Adherence to the MD	Bullying	Victimization
Adherence to the MD	1	-0.059	0,037
Bullying	-0.059	1	0.529**
Victimization	0.037	0.529**	1

** $p < 0.01$

4. Discussion

In the present study, there were no statistically significant differences in students' adherence to the MD, bullying, and victimization scores ($p=0,207$, $p=0,527$). This finding does not align with current literature. Several studies examining the relationship between diet quality and bullying behavior found that improving diet quality is associated with a reduction in bullying behavior (Okada et al., 2024; Jackson, 2017; Jackson & Vaughn, 2018; Albaladejo-Blázquez et al., 2018). The main reasons for the discrepancy with the findings in the literature are thought to be factors contributing to the study's main limitations, such as the sample size and the limited representativeness of the sample location. Although the correlation analysis conducted showed a negative association between adherence to MD and bullying behavior which is consistent with findings in the literature. In addition, the present study revealed a positive correlation between bullying and victimization score. Although this finding may appear contradictory, research has shown that bullies are also victims, rather than belonging exclusively to either a bully or a victim group (Haynie et al., 2001). In their study of middle school students, Haynie et al. (2001) found that some students were bullied, some were victimized, and some were both victims and perpetrators of bullying. In their study, they reported that more than half of the bullies were victims.

Another notable finding is that high school students consuming junk food 2 to 3 days per week had significantly higher bullying scores than their peers consuming it only once a week ($p<05$). The results of the research conducted by Özenoğlu and colleagues, who traced the relationship between nutrition habits and bullying in high school

students, are consistent with the findings of our study. In this study, it was observed that students with high bullying scores consumed more sugary drinks and chocolate than other students (Özenoğlu & Alakuş, 2016). A recently published study examining the link between the frequency of ultra-processed food consumption and bullying behavior demonstrated that consuming ultra-processed foods had a significant impact on physical aggression and property damage types of bullying (Okada et al., 2024). Furthermore, an additional study conducted in Iran found that the frequency of daily salty snack consumption was associated with physical fighting and bullying. This study, similar to other studies, it supports the idea that junk food consumption may increase the risk of aggressive behavior among adolescents (Sadat et al., 2014). Jackson and colleagues concluded from their research conducted with adolescents between the ages of 10-16 that junk food consumption increased the likelihood of bullying behavior by 66% (Jackson & Vaughn, 2018). The underlying mechanisms linking junk food or ultra-processed food consumption to bullying behavior may involve the impact of diet on brain function. Optimal brain development and function require adequate intake of vitamins, minerals which are often lacking or insufficient in junk food and ultra-processed foods. An unhealthy diet, lacking these essential nutrients, may influence adolescents' behavior by affecting neurotransmitter activity and brain function, potentially contributing to increased involvement in bullying (Gómez-Pinilla, 2008). The association have been highlighted between junk food consumption and bullying behavior contributes meaningfully to the emerging interdisciplinary discourse linking nutrition with psychosocial outcomes. While most bullying research traditionally focuses on psychological or environmental factors, integration of dietary habits introduces a novel biopsychosocial dimension. However, further elaboration on possible mechanisms could enrich the analysis.

Beyond this point, our research indicated that not only the bullying scores but also the victimization scores of students who consumed junk food 2-3 days per week were statistically significantly higher than those of students who consumed it only once per week ($p < .05$). This finding reflect the outcome of Smith and colleagues' study aiming to explore the relationship between obesogenic behaviors and bullying-related victimization. They determined that individuals affected by bullying are inclined to consumption of fast food, soft drink which are related factors that cause obesity (Smith et al., 2021). Another study conducted by Albaladejo-Blázquez and colleagues showed that individuals with higher victimization had a statistically significant higher frequency of eating fast food at restaurants once a week compared to those with low exposure to victimization (Sampasa-Kanyinga & Willmore, 2015). Similarly, another study revealed that higher consumption of junk food increases the likelihood of experiencing victimization (Jackson & Vaughn, 2018). That discussion insightfully expands the scope of analysis by addressing not only the perpetrators of bullying but also its victims, thereby highlighting the bidirectional relationship between dietary habits and peer-related psychosocial outcomes. This dual perspective strengthens the argument that junk food consumption may both reflect and reinforce vulnerability within the school environment. However, to deepen the academic rigor, it would be valuable to consider whether junk food consumption is a coping mechanism for stress or social exclusion resulting from victimization.

5. Conclusion

In the present study, which aims to determine the relationship between diet quality, bullying, and victimization among high school students, it was concluded that the adherence to the MD of the students and bullying are negatively related. In addition, it has been revealed that students with higher junk food consumption tend to experience bullying or victimization more frequently than those with lower consumption.

Promoting healthy eating behaviors among the young generation is a critical and important strategy for decreasing the prevalence of bullying and victimization in schools. An unbalanced diet has the potential to precipitate bullying behavior, and early nutritional interventions may prove effective in mitigating these undesirable consequences, particularly among populations identified as being at risk. Improving the nutritional habits and diet quality of high school students requires a comprehensive, collaborative effort that includes governmental bodies, private institutions, families, and the broader social environment. Public authorities should prioritize the integration of structured nutrition education into school curricula and implement regulations that limit students' access to unhealthy, ultra-processed foods within school settings. Furthermore, public policies should support the provision of healthy school meals, especially for socioeconomically disadvantaged students, and initiate nationwide campaigns that raise awareness about the long-term consequences of poor dietary habits. Families play a central role in shaping adolescents' eating behaviors. Parents should model healthy eating at home, include their adolescents in the preparation of meals, and reduce the presence of junk food in the household. It is also crucial to maintain an emotionally supportive environment where food-related discussions can take place without judgment or pressure, allowing teenagers to develop a healthy relationship with food and their bodies. The impact of nutrition on bullying is significant, and schools can encourage students to reduce their intake of junk and fast food and consume healthier products. School lunches can be supported by both parents and institutions. Seminars can be held for parents, students, and staff to promote healthy meal consumption. The Ministry of Health and the Ministry of National Education could undertake a joint project. They could collaborate to prevent bullying and malnutrition.

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Conflicts of Interest

The authors declare that they have no conflicts of interest.

Ethics Committee Approval

This study was approved by the Hakkari University Ethics Committee (Approval date: 09.08.2022; Decision No: 2022/73).

Author Contributions

Conceptualization: S.K.; Study design: Ö.T.; Data collection: M.K.Y.; Data analysis: Ö.T.; Data interpretation: Ö.T.; Manuscript writing: M.K.Y.; Critical review: S.K.; Final approval: M.K.Y.

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