

# The examination of sports club managers' attitudes toward healthy nutrition

Levent Atali<sup>1</sup>, Tabir Tarim<sup>2</sup>, Talha Altuntaş<sup>2</sup>, Makbule Atali<sup>3</sup>

<sup>1</sup>Kocaeli University, Faculty of Sports Sciences, Kocaeli, Turkey; <sup>2</sup>Kocaeli University, Institute of Health Sciences, Sport Sciences, Kocaeli, Turkey; <sup>3</sup>Kocaeli University, Kartepe Equestrian Vocational School, Kocaeli, Turkey

**Abstract.** *Study Objectives:* This study aimed to examine the attitudes of amateur sports club managers toward healthy nutrition in different variables. *Method:* The study's data was obtained using the Attitude toward Healthy Nutrition Scale, which has 21 elements and four sub-dimensions. The t-test was used to examine the difference between the obtained ATHNS dimensions according to gender and nutritional education. The analysis of variance (ANOVA) test was used to examine the study's dimensions according to education, age, and monthly income level, and the Sidak test for paired comparisons. *Results:* The attitude toward healthy nutrition (ATHN), feeling toward nutrition (FTN), positive nutrition (PN), and malnutrition (MN) levels of the female and male participants were similar ( $p > 0.05$ ). In the study, it was found that (ATHN) levels of some age groups were lower than the participants in other age groups ( $p < 0.05$ ). It was observed that the NK levels of the participants whose income levels were 6001-7000 TL were higher than the other income groups determined in the study group ( $p < 0.05$ ). It is seen that the participants' education level differ according to their (NK) level. In the study, it was observed that the NK levels of the high school and associate degree participants (NK) were higher than the undergraduate and graduate graduates ( $p < 0.05$ ). *Conclusion:* As a result, sports club managers need to have known both their health and managing processes related to nutrition in the sports club they manage. Also, it should be ensured that managers receive training on nutrition, and their level of knowledge on this subject should be at a sufficient level regarding nutritional conditions that may affect the athletes' performance. In this study, it was concluded that variables such as age, education, and income levels affect sports club managers to have nutritional knowledge.

**Key words:** Sports Clubs, Nutrition, Sports Manager

## Introduction

Nutrition has evolved and continues to do so (1). Many factors contribute to increasing health awareness and increase healthy nutrition (2). Nutrition contributes to the individuals' health improvements with many methods (3). On the other hand, climate change, the increase in air, water, noise pollution (2), and adverse nutritional conditions cause many health problems for individuals. Çakıcı and Yıldız (2020) stated that the increase in obesity, cancer, and cardiovascular disease

rates increased social anxiety in terms of healthy nutrition (2). Individuals need to be educated, and awareness needs to be raised about nutrition to protect and improve society's health (4-8).

The importance of proper eating habits in healthy individuals is also valid for athletes. The lack of knowledge and training about athletes' eating habits negatively affects their body structure and health, especially their performance. At this stage, the knowledge level of not only athletes but also trainers is important (9).

As Kurtipek and Sönmezoğlu (2018) stated, the effect of sports has reached new dimensions throughout the world. In this respect, professional awareness is a complementary role in addition to the qualified characteristics expected from a sports manager in sports (10). According to Yıldızhan and İmamoğlu (2018), the effect of executive behavior in the lives of athletes should not be overlooked. In sports clubs, elements such as managers, athletes, trainers, facilities, equipment, and sports competition programs should be brought together following the objectives (11).

Nutrition is important for athletes' health and performance (12,13), and sports clubs should be provided with training on nutrition with the support of experts (12-14). The manager needs to have sufficient knowledge and skills in many subjects, both for her/his success and its effect on the athlete's performance (11).

To understand basic nutritional knowledge, especially for athletes, it is necessary to provide educational programs to gain a healthy eating lifestyle and increase nutritional awareness. Nutritional knowledge must be known and applied by athletes and trainers (15). Athletes can display the desired performance with sufficient and balanced nutrition. A malnourished body may be debilitated and likely to experience more injury. Healthy nutrition has many mental and physical benefits for athlete performance (16).

Sports club managers are expected to know the subjects that affect the performance of the athletes they are responsible for, besides the many knowledge and skills related to the management field. This study aimed to examine the attitudes of amateur sports club managers toward healthy nutrition in different variables.

## Materials and Methods

### *Study Sample*

The study participants consisted of 302 amateur sports club managers being 268 men and 34 women. Ethics committee approval has been obtained from Kocaeli University Social and Human Sciences

Ethics Committee for the study, with document number E-10017888-044-140003 and decision number 28.

### *Data Collection Tool*

The scale consisting of two parts was used in the study. The first part consists of the participant's personal information such as age, gender, and educational status. In the second part, the ATHNS (Attitudes Toward Healthy Nutrition Scale), which consists of 21 items and 4 sub-dimensions and adapted into Turkish by Demir and Cicioğlu (2019), was used (17).

### *Statistical analyses*

Cronbach's Alpha analysis was applied to test the reliability of the Likert-type scale used in the study, and factor analysis was applied to test the structures. Descriptive statistics are presented as frequency, percentage, mean, and standard deviation. The t-test was used to examine the difference between the obtained ATHNS dimensions and the received gender and nutrition education states. Analysis of variance (ANOVA) test was used to examine research dimensions according to education, age, and monthly income level, and Sidak test was used for paired comparisons (post. Hoc.). P values less than 0.05 were considered statistically significant in the study ( $\alpha = 0.05$ ). Cronbach's Alpha coefficient was found to be 0.85. The obtained coefficient shows that the scale is quite reliable. In calculating the internal consistency coefficient, the lower limit value of the Cronbach's alpha value for the reliability of the measuring tool is taken as  $\alpha = 0.70$ . 0.70 and above value for Cronbach's alpha is considered sufficient for the reliability of the measurement tool, and the measurement tool that meets this value is considered reliable (18,19). In the study, the formula, recommended by the World Health Organization (WHO), in which the weight in kilograms of the person showing the nutritional status in adults is divided by the square of the person's height in meters ( $\text{kg}/\text{m}^2$ ), was used to calculate the BMI values. The rating has been classified as; below 18.5, underweight, 18.5–24.9 normal weight, 25.0–29.9 pre-obesity, 30.0–34.9 obesity class I, 35.0–39.9 obesity class II above 40 obesity class III (20). SPSS 25.0 package program was used for analyses.

## Results

In this section, the analysis of amateur sports club managers' demographic information and the effects of attitudes and sub-dimensions toward healthy nutrition on the gender, age, education level, and income of the participants are presented.

In Table 1, it was seen that 88.7% of the participants were men, and 11.3% were women. 3.3% of the participants were in the 18-24 age range, 6.3% were in the 25-29 age range, 12.3% were in the 30-34 age

range, 16.6% were in the 35-39 age range, 21.5% were in the 40-44 age range, 16.2% were in the 45-49 age range, 11.6% were in the 50-54 age range, 12.3% were found to be 55 years old and over. The income levels of the participants were observed as; below 3000 TL with 9.6%, 3001- 4000 TL with 14.2%, 4001- 5000 TL with 21.5%, 5001- 6000 TL with 18.9%, 6001- 7000 TL with 11.3% and 7001 TL and above with 24.5%. Participants were found to have primary education with 7.3%, high school with 27.8%, associate degree with 13.9%, Bachelor's degree with 10.6%, and doctorate with 2.3%. When the participants' BMI levels were examined, it was observed that 1% was underweight, 29.8% was normal, 49% was pre-obesity, 16.2% was first-degree obesity, 3% was second-degree obesity, 1% was third degree.

When Table 2 was examined, it was seen that 60.3% of the participants received information training on nutrition in the field of sports, and 39.7% did not receive training.

When Table 3 was examined, it was found that the gender of the participants did not differ according to the Attitude toward Healthy Nutrition, Feeling toward Nutrition (FTN), Positive Nutrition (PN), and Malnutrition (MN) levels. It was observed that the Attitude toward Healthy Nutrition, Feeling toward Nutrition (FTN), Positive Nutrition (PN), and Malnutrition (MN) levels of the female and male participants were similar ( $p > 0.05$ ). It was observed that the gender of the participants differed according to their Nutritional Knowledge (NK) levels. It was concluded that female participants' nutritional knowledge levels were higher than that of men ( $t = -2.14$ ;  $p < 0.05$ ).

In Table 4, it was seen that the levels of Attitude toward Healthy Nutrition of the participants were different according to their ages. In the study, it was observed that the levels of Attitude toward Healthy Nutrition of the participants between the ages of 25-29

**Table 1.** Demographic Information of Sports Club Managers

Variables	Groups	(f)	(%)
Gender	Man	268	88.7
	Women	34	11.3
Age	18-24	10	3.3
	25-29	19	6.3
	30-34	37	12.3
	35-39	50	16.6
	40-44	65	21.5
	45-49	49	16.2
	50-54	35	11.6
	55	37	12.3
Monthly Income	3000 TL and less	29	9.6
	3001- 4000 TL	43	14.2
	4001- 5000 TL	65	21.5
	5001- 6000 TL	57	18.9
	6001- 7000 TL	34	11.3
	7001 TL and more	74	24.5
Education Status	Primary School	22	7.3
	High School	84	27.8
	Associate Degree	42	13.9
	Degree	115	38.1
	Master Degree	32	10.6
	Ph. D.	7	2.3
Body Mass Index	Underweight	3	1
	Normal	90	29.8
	Pre-Obesity	148	49.0
	Obesity-1	49	16.2
	Obesity-2	9	3
	Obesity-3	3	1
Total	302		100

**Table 2.** Nutrition Education Status of Sports Club Managers

Question	Answer	(f)	(%)
Have you taken any special nutrition training for the sports field?	Yes	182	60.3
	No	120	39.7
Total		302	100

**Table 3.** Sports Club Managers' Attitudes towards Healthy Nutrition and Gender

Dimensions	Gender	n		t	p
Attitude Towards Healthy Nutrition	Man	268	3.92	-0.15	0.88
	Women	34	3.93		
Information About Nutrition	Man	268	4.23	-2.14	0.03*
	Women	34	4.47		
Feeling Toward Nutrition	Man	268	3.39	1.55	0.12
	Women	34	3.17		
Positive Nutrition	Men	268	4.01	-0.74	0.46
	Women	34	4.09		
Malnutrition	Man	268	4.14	0.05	0.96
	Women	34	4.14		

\*p&lt; 0.05

**Table 4.** Sports Club Managers' Attitudes towards Healthy Nutrition and Age

Dimensions	Age	N		SD	F	p
Attitude Towards Healthy Nutrition	18-24	10	3.96	0.63	2.77	0.01*
	25-29	19	3.66	0.52		
	30-34	37	4.01	0.58		
	35-39	50	3.72	0.39		
	40-44	65	3.90	0.48		
	45-49	49	4.06	0.49		
	50-54	35	4.01	0.54		
	55 and older	37	3.97	0.50		
Information About Nutrition	18-24	10	4.40	0.68	0.84	0.55
	25-29	19	4.23	0.65		
	30-34	37	4.34	0.63		
	35-39	50	4.14	0.62		
	40-44	65	4.26	0.59		
	45-49	49	4.32	0.70		
	50-54	35	4.34	0.61		
	55 and older	37	4.11	0.63		
Feeling Toward Nutrition	18-24	10	3.38	0.98	2.89	0.01*
	25-29	19	2.99	0.89		
	30-34	37	3.41	0.77		
	35-39	50	3.05	0.55		
	40-44	65	3.39	0.74		
	45-49	49	3.50	0.84		
	50-54	35	3.44	0.76		
	55 and older	37	3.64	0.84		

Dimensions	Age	N		SD	F	p
Positive Nutrition	18-24	10	4.18	0.78	2.53	0.02*
	25-29	19	3.74	0.57		
	30-34	37	4.09	0.73		
	35-39	50	3.92	0.53		
	40-44	65	3.89	0.65		
	45-49	49	4.23	0.57		
	50-54	35	4.20	0.74		
	55	37	3.95	0.57		
Malnutrition	18-24	10	3.98	0.51	2.00	0.06
	25-29	19	3.83	0.87		
	30-34	37	4.32	0.72		
	35-39	50	3.92	0.66		
	40-44	65	4.15	0.75		
	45-49	49	4.29	0.67		
	50-54	35	4.15	0.83		
	55 and older	37	4.25	0.69		

\*p< 0.05

and 35-39 were lower than the participants in other age groups ( $F = 2.77$ ;  $p < 0.05$ ). It was observed that the levels of Nutritional Knowledge (NK) were not at different levels according to the age of the participants ( $F = 0.84$ ;  $p > 0.05$ ). It was observed that the participants' Feeling toward Nutrition (FTN) levels differed according to their ages. In the study, it was observed that the participants' Feeling Toward Nutrition (FTN) levels between the ages of 25-29 and 35-39 were lower than the participants in other age groups ( $F = 2.89$ ;  $p < 0.05$ ). It was observed that the Positive Nutrition (PN) levels of the participants differed according to their ages. In the study, it was observed that the participants' Attitude Toward Healthy Nutrition levels between the ages of 25-29 and 35-39 were lower than the participants in other age groups ( $F = 2.77$ ;  $p < 0.05$ ). It was observed that nutritional, and malnutrition levels were not at different levels according to the participants' age ( $F = 2.00$ ;  $p > 0.05$ ).

When Table 5 was examined, it was found that the income levels of the participants did not differ according to the Attitude toward Healthy Nutrition, Feeling toward Nutrition (FTN), Positive Nutrition (PN), and Malnutrition (MN) levels. According to their income

levels, it can be stated that the Attitude toward Healthy Nutrition, Feeling toward Nutrition (FTN), Positive Nutrition (PN), and Malnutrition (MN) levels of the participants are similar ( $p > 0.05$ ). It was observed that the participants' income levels differ according to their Nutritional Knowledge (NK) levels. Participants with an income level of 6001-7000 TL were found to have higher nutritional knowledge levels ( $F = 3.04$ ;  $p < 0.05$ ).

In Table 6, it can be stated that the Attitude toward Healthy Nutrition, Feeling toward Nutrition (FTN), Positive Nutrition (PN), and Malnutrition (MN) levels are similar according to the education level ( $p > 0.05$ ). It was observed that the participants' education levels differ according to their nutritional knowledge levels (NK). In the study, it was observed that the nutritional knowledge levels of the high school and associate degree participants were higher than the undergraduate and graduate graduates ( $F = 3.13$ ;  $p < 0.05$ ).

## Discussion and Conclusion

According to the findings obtained, it was seen that the majority of the participants consisted of male

**Table 5.** Sports Club Managers' Attitudes towards Healthy Nutrition and Income Levels

Dimensions	Monthly Income	n		SD	F	p
<b>Attitude Towards Healthy Nutrition</b>	3000 TL and less	29	3.83	0.63	0.96	0.45
	3001-4000 TL	43	3.88	0.50		
	4001-5000 TL	65	3.90	0.51		
	5001-6000 TL	57	3.90	0.50		
	6001-7000 TL	34	4.08	0.38		
	7001 TL and more	74	3.93	0.53		
<b>Information About Nutrition</b>	3000 TL and less	29	4.19	0.63	3.04	<b>0.01*</b>
	3001-4000 TL	43	4.09	0.66		
	4001-5000 TL	65	4.27	0.59		
	5001-6000 TL	57	4.12	0.80		
	6001-7000 TL	34	4.57	0.40		
	7001 TL and more	74	4.31	0.55		
<b>Feeling Toward Nutrition</b>	3000 TL and less	29	3.25	1.01	0.60	0.70
	3001-4000 TL	43	3.52	0.72		
	4001-5000 TL	65	3.35	0.72		
	5001-6000 TL	57	3.30	0.75		
	6001-7000 TL	34	3.44	0.77		
	7001 TL and more	74	3.36	0.81		
<b>Positive Nutrition</b>	3000 TL and less	29	3.96	0.71	0.63	0.68
	3001-4000 TL	43	3.93	0.64		
	4001-5000 TL	65	3.95	0.68		
	5001-6000 TL	57	4.10	0.67		
	6001-7000 TL	34	4.09	0.53		
	7001 TL and more	74	4.05	0.61		
<b>Malnutrition</b>	3000 TL and less	29	4.03	0.79	0.88	0.49
	3001-4000 TL	43	4.07	0.63		
	4001-5000 TL	65	4.13	0.72		
	5001-6000 TL	57	4.20	0.60		
	6001-7000 TL	34	4.35	0.67		
	7001 TL and more	74	4.10	0.88		

\*p &lt; 0.05

managers, and women represented 11.3% of them. It has been determined that the participants have different levels of income in terms of income levels and education status. In their study, Eren et al. (2016) found that the higher the educational status competence, duration of service, and education levels of the managers working in sports clubs, the more successful they were in management planning, decision-making, communication, and technology (21).

When the participants' BMI levels were examined, it was observed that 1% was underweight, 29.8% was normal, 49% was pre-obesity, 16.2% was first-degree obesity, 3% was second-degree obesity, 1% was third degree. Sağın and Karasaç (2020) stated that obesity is not only a health-related problem but also the socio-cultural environment in which the individual lives is also effective on obesity (22). Most people can be evaluated well enough with simple questions about

**Table 6.** Sports Club Managers' Attitudes towards Healthy Nutrition and Education Levels

Dimensions	Education Status	n		SD	F	p
<b>Attitude Towards Healthy Nutrition</b>	Primary School	22	4.14	0.54	2.29	0.06
	High School	84	3.89	0.49		
	Associate Degree	42	3.78	0.57		
	Degree	115	3.92	0.49		
	Postgraduate Degree	39	4.01	0.48		
<b>Information About Nutrition</b>	Primary School	22	4.25	0.64	3.13	<b>0.02*</b>
	High School	84	4.11	0.62		
	Associate Degree	42	4.11	0.62		
	Degree	115	4.37	0.64		
	Postgraduate Degree	39	4.39	0.59		
<b>Feeling Toward Nutrition</b>	Primary School	22	3.72	0.93	2.31	0.06
	High School	84	3.44	0.78		
	Associate Degree	42	3.30	0.83		
	Degree	115	3.24	0.74		
	Postgraduate Degree	39	3.45	0.74		
<b>Positive Nutrition</b>	Primary School	22	4.28	0.65	2.11	0.08
	High School	84	3.96	0.65		
	Associate Degree	42	3.85	0.68		
	Degree	115	4.05	0.64		
	Postgraduate Degree	39	4.10	0.54		
<b>Malnutrition</b>	Primary School	22	4.38	0.59	1.53	0.19
	High School	84	4.12	0.64		
	Associate Degree	42	3.94	0.77		
	Degree	115	4.16	0.76		
	Postgraduate Degree	39	4.21	0.83		

\*p &lt; 0.05

their nutritional status, appearance, body weight, and general health. For a more critical evaluation, body masses can be determined by index (23). It cannot be stated that the majority of sports club managers are at a dangerous level according to their BMI values, but that they should pay attention to the obesity limit can.

It was observed that 60.3% of the participants received information training on nutrition in the sports field, and 39.7% did not receive training. In their study, Fişekçioğlu and Ark. (2008) found that 19% of them received training in the sports management field (participation in a sports management course, seminar, panel), while 81% did not (24). In this study, training of sports club managers about nutrition can be considered as a positive result.

It can be stated that the Attitude toward Healthy Nutrition, Feeling toward Nutrition (FTN), Positive Nutrition (PN), and Malnutrition (MN) levels of the female and male participants were similar. It was observed that the Nutritional Knowledge levels of female participants were higher than that of men. In their study, Keskin et al. (2017) found that students' eating behaviors were moderate. Considering the averages between men and women, they stated that it was in favor of women (25).

In the study, it was observed that the participants' Attitude toward Healthy Nutrition levels between the ages of 25-29 and 35-39 were lower than the participants in other age groups. In the study, it was observed that the participants' Feeling toward Nutrition (FTN)

levels between the ages of 25-29 and 35-39 were lower than the participants in other age groups. In the study, it was observed that the Positive Nutrition (PN) levels of the participants between the ages of 25-29 were lower than the participants in other age groups. In their study, Yurtseven et al. (2014) stated that healthy eating behaviors could be affected by many factors such as age, gender, marital status, educational status, and socio-economic level (26). Malkoç et al. (2020) predicted that individuals' healthy eating habits and awareness would increase with their age. As a result of their research, they found a relationship between the gender, age parameters, and healthy nutrition attitudes of the participants (27).

It was observed that the participants' income levels differ according to their Nutritional Knowledge (NK) levels. It was observed that the participants, whose income levels were 6001-7000 TL, had higher nutritional knowledge. In their study, Başoğlu et al. (1992) found that as income level increases, the share of nutrition expenses in total income decreases (28). In another study conducted by Gümüş et al. (2015), it was observed that as families' income levels increased, the frequency of preferring fast-ready meals such as hamburgers and pizza increased. The frequency of preference for snacks such as biscuits and crackers sold in school canteens decreases as the income levels of students' families increase. No statistically significant difference was found between the income levels of the students' families and their preferences for nuts, chips, candy, sweets, chocolate, fruit juice, tea, and coffee (29).

In the study, it was observed that the nutritional knowledge level of the high school and associate degree leveled participants was higher than the undergraduate and graduate graduates. Çekal (2008) stated that nutrition education should start from childhood and continue lifelong in line with the changes in nutrition science, i.e., it should provide continuity (30). It was found that as the educational status and competencies of managers working in sports clubs increased, the duration of their duty and their education levels increased, the more successful they were in management planning, decision-making, communication, and technology. It is thought that sports club managers should be trained in a versatile way to adapt to the changing world and should be possessed with high-level knowledge (31). We can say that this versatile

training and information equipment can be important both for their health and for managing the processes related to nutrition in the sports club they manage.

As a result, sports club managers need to know both their health and managing processes related to nutrition in the sports club they manage. Also, it should be ensured that managers receive training on nutrition, and their level of knowledge on this subject should be at a sufficient level regarding nutritional conditions that may affect the athletes' performance. In this study, it was concluded that variables such as age, education, and income levels affect sports club managers to have nutritional knowledge. Moreover, it is believed that this study will contribute to the realization of works about the trainers, athletes, and families in the sports club toward nutrition and making comparisons and obtain data for healthier individuals for future research.

**Conflicts of interest:** The authors declare that there is no conflict of interest about this manuscript.

## References

1. Medeiros MD, Wildman REC. Advanced human nutrition. Burlington Jones: Bartlett Learning Ascend Learning Company, 2019.
2. Çakıcı AC, Yıldız E. The impact of health value on food choice in restaurant customers: a comparison in terms of body-mass index. *Journal of Awareness Issue* 2020; (5)3: 269-284.
3. Rezzi S, Ramadan Z, Fay LB, Kochhar S. Nutritional meta-bonomics: applications and perspectives. *Journal of Proteome Research* 2007; 6(2): 513-525.
4. Özçelik Ö, Sürücüoğlu MS. Tıp doktorlarının beslenme bilgi düzeyleri üzerine bir araştırma. *Beslenme ve Diyet Dergisi* 2000; 29(1): 11-16.
5. Şanlıher N, Konaklıoğlu E, Güçer E. Gençlerin beslenme bilgi, alışkanlık ve davranışları ile beden kütle indeksleri arasındaki ilişki. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi* 2009; 29(2): 333-352.
6. Szabo K, Bettina FP, Kevin MF. Adolescents attitudes towards healthy eating: The role of self-control motives and self-risk perception. *Appetite* 2019; 143:10416
7. Hoca M, Özduvan G. Physical activity levels and eating habits of students in different educational levels. *Progress in Nutrition* 2020; 23(3): e2021081.
8. Köse G, Tayfur M. BMI, physical activity sleep quality eating attitudes emotions: which one is affected by mindful eating. *Progress in Nutrition* 2021; 23(1): e2021081.



9. Çakır AŞ, Güreş N, Arslan S. Tüketicilerin sağlıklı beslenmeye yönelik tutumlarının incelenmesine yönelik bir araştırma. Çukurova Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi 2016; 20(2): 99-110.
10. Kurtipek S, Sönmezoglu U. Spor kulüplerine üye bireylerin spor kulübü kavramına ilişkin algılarının belirlenmesi: bir metafor analizi çalışması. Spormetre Beden Eğitimi ve Spor Bilimleri Dergisi 2019; 17(1): 209-145.
11. İmamoğlu FA, Yıldızhan ÇY. Spor yöneticilerinin yönetimsel davranışlarının sporcu performansına etkisi. Nobel Akademik Yayıncılık 2018.
12. Güldemir H, Hızlı BE. Adölesan amatör futbolcuların beslenme durumunun değerlendirilmesi. Spormetre Beden Eğitimi ve Spor Bilimleri Dergisi 2020; 18(3): 42-51.
13. Kaçar M, Yeşilkaya B. Profesyonel kadın futbolcuların beslenme alışkanlıklarının araştırılması. Ulusal Spor Bilimleri Dergisi 2020; 4(2): 116-126.
14. Koldaş G, Saçaklı H, Sevim Y. Marmara bölgesindeki spor yüksekokullarında öğrenim gören beslenme dersi almış öğrencilerin beslenme konusundaki bilgi düzeylerinin değerlendirilmesi. Eurasian Research in Sport Science 2018; 3(2): 93-105.
15. Özdenk S. Genç Sporcuların Beslenme Okuryazarlığı Düzeylerinin İncelenmesi: Sinop İli Örneği. Uluslararası Spor Bilimleri Öğrenci Çalışmaları 2020; 2(2): 121-129.
16. Kırkbir F. Sporcularda sağlıklı beslenme ile mutluluk arasındaki ilişkinin incelenmesi. Spor Eğitim Dergisi 2020; 4(2): 125-130.
17. Tekkurşun DG, Cicioğlu H. Sağlıklı beslenmeye ilişkin tutum ölçeği (SBİTÖ): geçerlik ve güvenilirlik çalışması. Gaziantep Üniversitesi Spor Bilimleri Dergisi 2019; 4(2): 256-274.
18. Büyüköztürk Ş. Sosyal bilimler için veri analizi el kitabı. Pegem Akademik Yayıncılık 2018.
19. Şencan H. Sosyal ve davranışsal ölçümlerde güvenilirlik ve geçerlilik. Seçkin Yayıncılık 2005
20. World Health Organization. Body mass index-BMI. 2019. Available at:<http://www.euro.who.int/en/health-topics/disease-prevention/nutrition/a-healthy-lifestyle/body-mass-index-bmi>
21. Eren A, Kızar O, Yıldırım E. Spor kulüplerinde görev yapan yöneticilerin eğitim durumları ve yeterlilikleri. Spormetre Beden Eğitimi ve Spor Bilimleri Dergisi, 2016; 14(2): 135-143.
22. Sağın A, Karasaç F. Obezitenin sosyo-ekonomik belirleyicileri: OECD ülkeleri analizi. OPUS Uluslararası Toplum Araştırmaları Dergisi 2020; 15(21): 183-200.
23. Wiseman G. Nutrition and health. Tayl Dietary habits are changing with environmental factors and turning into new habits such as binge eating, unconscious eating, not being able to focus on eating, and eating fast and eating fast or Francis CRC Press. 2002.
24. Fişekçioğlu İB, Şahin M, Çağlayan HS, Tanır H. Turkcell süper ligi'nde oynayan kulüplerin yönetici yeterliliklerinin incelenmesi. Selçuk üniversitesi BES Bilim Dergisi 2008; 10(1): 32-38.
25. Keskin K, Alpkaça U, Çubuk A, Öztürk Y. 12-14 Yaş çocukların fiziksel aktivite düzeyleri ile beslenme davranışları arasındaki ilişkinin incelenmesi. İÜ Spor Bilimleri Dergisi 2017; 7(3): 1303-1414.
26. Yurtseven E, Eren F, Vehid S, Köksal S, Erginöz E, Erdoğan MS. Beyaz yakalı çalışanların beslenme alışkanlıklarının değerlendirilmesi. Kocatepe Tıp Dergisi, 2014; 15(1): 20-26.
27. Malkoc N, Yasar OM, Turgut M, Kerem M, Kose B, Atli A, Sunay H. Healthy nutrition attitudes of sports science students. Progress in Nutrition 2020; 22(3): e2020034.
28. Başoğlu S, Besler T, Çiğirim N, Ersoy G, Karaağaoğlu N, Pekcan G, Rakıcioğlu N, Sağlam F, Yurttagül M, Yücecian S. Ailelerin sosyo-ekonomik ve gelir düzeylerine bağıntılı olarak besin harcama payları. Beslenme ve Diyet Dergisi 1992; 21(1): 83-100.
29. Gümüş D, Kızıl M, Dikmen D, Uyar F. Gelir düzeyinin ilköğretim öğrencilerinin besin tercihlerine etkisinin değerlendirilmesi. Hacettepe University Faculty of Health Sciences Journal 2015; 2(1): 22-38.
30. Çekal N. Orta yaşlı ve yaşlı bireylerin beslenme bilgi düzeyleri. Yaşlı Sorunları Araştırma Dergisi 2008; 1(1): 14-28.
31. Eren A, Kızar O, Yıldırım E. Spor kulüplerinde görev yapan yöneticilerin eğitim durumları ve yeterlilikleri. Spormetre Beden Eğitimi ve Spor Bilimleri Dergisi 2016; 14(2): 135-143.

---

#### Correspondence:

Levent Atali  
 Faculty of Sports Sciences,  
 Kocaeli University, Kocaeli, Turkey  
 E-mail: leventatali@gmail.com