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AN EVALUATION OF DIETARY AND EXERCISING HABITS OF THE STUDENTS STUDYING IN THE FACULTY OF SPORTS SCIENCES

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ABSTRACT

This study is conducted to evaluate the dietary and exercising habits of the students studying in the Faculty of Sports Sciences.

This descriptive-type research is conducted with 317 students from Ondokuz Mayıs University, Faculty of Sports Sciences. The data obtained are statistically analyzed on computer through SPSS 19.0 program. Minimum, maximum and average percent values are used for data analysis. It is observed that 49.5% of the students are between 21 and 23 years of age. It is observed that 54.6% of the participants eat breakfast on a regular basis. It is also observed that 56.2% of the students practice

3-4 times in a week, and 29% of the students practice 1-2 times a week.

It is observed that half of the students eat breakfast on a regular basis. The water consumption of the majority of the participants (50.5%) is also found sufficient. BMI is also determined within the normal range in both male (23,37 kg/m²) and female (20,56 kg/m²) students. It is observed that seafood consumption of most of the students (%73,6) is below the recommended frequency, but 40,4% of the students of meat consumption is closer to the recommended levels. The majority of the students (89.6%) believed that they could not follow a healthy diet.

Key Words: Dietary Habits, Sports, College Students.

INTRODUCTION

While rapidly-developing science and technology are forcing people towards malnutrition and living a life with less physical activities, ever-changing living conditions require a dynamism beyond being healthy. Today, people cannot spare time to exercise within their daily routines and they also cannot follow a well-balanced and a proper diet. It is hard to talk about physical and mental well-being of individuals in both cases.

Access to all nutritional ingredients required by human body through healthy and reliable food products is one of the most important problems in today's world. While defining nutrition, Baysal (1997) emphasized consumption of adequate amounts of all nutritional ingredients required for growth, development and a healthy and long life before they lose their nutritional values. Garibağaoğlu et al. (2006) stated that growth, development and a healthy and productive life of an organism require a well-balanced and conscious cycle of diet. The same principle is also pertinent for continuity of societies. It is impossible to maintain a healthy and mentally consistent societies with high levels of economic and social welfare, and to be confident about the future without individuals keeping a healthy and a balanced diet. From this viewpoint, nutrition should not only be discussed as a physiological fact, but should also be considered multi-dimensionally as a sociological and psychological phenomenon.

Students go through their adolescent period within the first couple of years of college. In adolescent period, growth and development accelerate, lifestyles and dietary habits change and dieting, chronic diseases, smoking and physical activities have major effects on energy and nutrient requirements of the body (Spear, 2002). College years appear as a period, where the most extensive changes occur in individuals' lives.

Within the phenomenon of physical activities/sports, the concept of nutrition refers to a mandatory process of education and practicing. Considering the variety of daily nutritional ingredients required by the organism, it is clear that insufficient consumption of some of these nutritional ingredients will lead to negative effects on health and performance.

Since nutrition, which is considered one of the most important elements of sports sciences, affects both the general state of health and performance of the athletes, it should be carefully reviewed. Along with the effects of nutrition on health and physical performance of the athletes and physically active individuals, its effects on mental capacity, which is one of the

most important elements of athletic performance, recovery from injuries and illnesses, growth and development are also discussed in many studies.

In order to ensure behavioral changes about nutrition, the individuals should be well-informed and their attitudes and beliefs regarding nutrition should be changed. Within this context, the literature, where sports and exercise are discussed in conjunction with nutrition, should be constantly updated and expanded.

METHOD

The population consists of 317 students (115 female, 202 male) between the ages of 17 and 30 from Ondokuz Mayıs University, Faculty of Sports Sciences. The survey data are collected through face-to-face interview method with a questionnaire form. The questionnaire consists of two sections, namely, the general information about the students and information about their dietary habits. The students submitted their body weights and heights, and their Body Mass Indexes were calculated [$BMI = \text{Body Weight (kg)} / \text{Height (m}^2\text{)}$].

SPSS 19.0 (Statistical Package for the Social Science) program for Windows was utilized to evaluate the data obtained. The survey data were shown in charts with absolute and percent (%) values, and where necessary, arithmetic means and standard deviation values ($X \pm S$) were calculated.

FINDINGS

317 students from Ondokuz Mayıs University, Faculty of Sports Sciences participated in this study, which was conducted to determine the dietary and exercising habits of college students.

Table 1. Frequency table about socio-demographic characteristics

	Parameter	Frequency	%
Gender	Female	115	36,3
	Male	202	63,7
	Total	317	100
Age	18-20	66	20,8
	21-23	157	49,5
	24-26	76	24
	27	18	5,7
	Total	317	100
BMI	Normal	283	89,3
	Overweight	29	9,1
	1. obese	4	1,3
	2. obese	1	0,3
	Total	317	100
Major/Department	Teaching	124	39,1
	Sports Coaching	109	34,4
	Sports management	84	26,5
	Total	317	100
Extra Income	Yes	190	59,9
	No	127	40,1
	Total	317	100
Housing/Accommodation	Public dormitories	65	20,5
	Private dormitories	44	13,9
	Student house	122	38,5
	Family house	86	27,1
	Total	317	100

It is observed in Table 1 that out of 317 students, 115 (36.3%) students are female, 202 (63.7%) are male; 39.1% of these students are majoring in PE Teaching, 26.5% in Sports Management, and 34.4% in Sports Coaching Departments. 49.5% of the students are between 21 and 23, 20.8% are between 18 and 20, and 24% are between 24 and 26 years of age. When BMI values of the students are analyzed, it is observed that 89.3% of the students are weighed within the normal range, and 9.1% of the students are found to be overweight. 20.5% of the

students are living in public dormitories, 13.9% are in private dormitories, 37.8% are living in student houses and 27.1% are living with their families. It is observed that 59.9% of the students make their own money and have an extra income, and 49.1% of the students do not have any extra income.

Table 2. Frequency table about dietary habits

	Parameter	Frequency	%
Do you think you eat healthy?	Yes	33	10,4
	No	284	89,6
	Total	317	100
Do you eat breakfast on a regular basis?	I eat breakfast on a regular basis	173	54,6
	I eat breakfast occasionally	115	36,3
	I never eat breakfast	29	9,1
	Total	317	100
Seafood consumption	Once in a week	83	26,2
	Once in a month	131	41,3
	Once in a year	66	20,8
	Never	37	11,7
	Total	317	100
Meat consumption	At least once in a week	128	40,4
	Once in a month	120	37,9
	Once in a year	34	10,7
	Never	35	11
	Total	317	100
Water consumption	Less than 1 liter	59	18,6
	1-2 liters	8	2,5
	2-3 liters	160	50,5
	More than 3 liters	90	28,4
	Total	317	100

It is observed in Table 2 that 10.4% of the participants think that they follow a healthy diet, but 89.6% of them do not think they can follow a healthy diet. It is also observed in Table 2 that 54.6% of the participants have breakfast on a regular basis, 36.3% have breakfast occasionally and 9.1% never have breakfast. It is observed that 41.3% of the students eat seafood once in a month, 26.4% once in a week, and 20.8% once in a year; 11.7% of the participants stated that they never eat seafood. When the meat consumption of the students is analyzed, it is observed that 40.4% eat meat once in a week, 37.9% once in a month, and 10.7% once in a year; 11% of the students stated that they never eat meat. When the daily water consumption levels of the students are analyzed, it is observed that 50.5% of the students drink 2-3 liters of water, 28.4% drink more than 3 liters, 18.6% drink less than 1 liter and 2.5% drink 1-2 liters of water.

Table 3. Gender-based BMI averages of the students

	N	Avg. ± SD
Female	115	20.56 ± 1.36
Male	202	23.37 ± 3.60
Total	317	22.35 ± 3.28

According to Table 3, the BMI average of the students is determined as 22.35 kg/m². When the BMI averages of the students are analyzed according to their genders, the BMI average of female students is determined as 20.56 kg/m², and BMI average of male students is determined as 23.37 kg/m².

Table 4. Frequency table about exercising patterns

Parameter	Frequency	%	
Years of regular exercising	1 - 5 years	76	24
	6 - 10 years	173	54,6
	11 - 15 years	54	17
	16 years and over	14	4,4
	Total	317	100
Are you a licensed athlete?	Yes	273	86,1
	No	44	13,9
	Total	317	100
Weekly exercise routine	1-2 times a week	92	29
	3-4 times a week	178	56,2
	5-6 times a week	15	4,7
	Never	32	10,1
	Total	317	100
Branch	Soccer/Football	67	21,1
	Basketball	37	11,7
	Volleyball	51	16,1
	Handball	24	7,6
	Swimming	26	8,2
	Track & Field	13	4,1
	Judo	15	4,7
	Wrestling	17	5,4
	Orienteering	5	1,6
	Rugby	1	0,3
	Tennis	7	2,2
	Karate	3	0,9
	Taekwondo	5	1,6
	Archery	31	9,8
	Kickbox	5	1,6
	Badminton	4	1,3
	Weight Lifting	2	0,6
	Fencing	2	0,6
	Table Tennis	2	0,6
	Total	317	100

It is observed in Table 4 that 86.1% of the students are licensed athletes, and the remaining 13.9% are not licensed. It is also observed that 54.6% of the participants have been practicing between 6 and 10 years, 24% between 1 and 5 years and 17% between 11 and 15 years.

When the weekly exercise routine of the students is analyzed, it is observed that 56.2% are practicing 3-4 days in a week, 29% are practicing 1-2 times in a week, and 4.7% are practicing 5-6 times in a week, while 10.1% have never been engaged in any kind of activities. When the branches of the students are analyzed, it is observed that 21.1% play soccer/football, 11.7% play basketball, 16.1% play volleyball, 9.8% of the students are archers, 8.2% are swimmers, 7.6% play handball, 5.4% are wrestlers, 4.7% are judokas, and 4.1% are track & fielders. The percentages of participants engaged in branches, such as orienteering, karate, kickbox, badminton, tennis, rugby, weight lifting, fencing, table tennis and taekwondo, are relatively lower than the other sports.

Table 5. BMI averages of the students according to their exercising frequencies

	N	Mean	±	SD
1 - 2 times	92	22,11	±	3,51
3 - 4 times	178	22,57	±	2,73
5 - 6 times	15	23,45	±	4,25
Never	32	21,33	±	4,58
Total	317	22,35	±	3,28

Table 5 gives the BMI averages of the students according to their exercising frequencies. While the BMI average of the students, who practice 1-2 times a week, is found to be 22.11 kg/m², it is found to be 22.57 kg/m², in students, who practice 3-4 times a week, 23.45 kg/m² in students, who practice 5-6 times a week, and found to be 21.33 kg/m² in students, who never exercise. The overall BMI average of the students is 22.35 kg/m².

DISCUSSION

This study was conducted to evaluate the dietary and exercising habits of the students studying in Ondokuz Mayıs University, Yaşar Doğu Sports Sciences Faculty. It is observed that 49.5% of the students are between 21 and 23 years of age, and their average BMI (Body Mass Index) is 22.35 kg/m^2 . Vançelik et al. (2007) determined the age average of the students from Atatürk University as 21.6 ± 1.9 years, and the BMI as $21.9 \pm 2.7 \text{ kg/m}^2$. In their recent study, where they analyzed the dietary habits of junior and senior college students, Mazıcıoğlu and Öztürk (2003) found the age average of female students as 21.33 ± 1.48 years, and BMI average as $20.77 \pm 2.06 \text{ kg/m}^2$. The percentage of female students, who participated in a research conducted by Özdoğan et al. (2012), was 65.9%, and the percentage of male students was 34.1%. The age average of the students was 21.4 ± 2.22 years, height average was 1.70 ± 0.09 meters, bodyweight average was $64.7 \pm 13.5 \text{ kg}$, and BMI average was $22.1 \pm 3.07 \text{ kg/m}^2$.

While 20.5% of the students live in public dormitories, 37.8% live in student houses. In their research, Yılmaz and Özkan (2007) found that 32% of the students were living in residence halls and 48.6% were living in student houses with their friends. Onurlubaş et al. (2015) found that 14% of college students were living in pre-furnished rental apartments, 49.3% were living rental apartments, 30.2% were living in residence halls and 6.5% were living in boarding houses, 4.7% were living with their families, 87.8% with their friends and 7.5% were living alone.

While 10.4% of the students in our study stated that they follow a healthy diet, 89.6% of the students stated that they could not follow a healthy diet. Similar to the findings of our study, Yılmaz and Özkan (2007) found that 78.9% of the students stated that they could not follow a healthy diet. Unlike our findings, Onurlubaş et al. (2015) found in their study, which they conducted in Trakya University, School of Keşan Yusuf Çapraz Applied Sciences, that 36% of the students stated that they follow a healthy diet, but 64% stated that they could not follow a healthy diet. Mazıcıoğlu and Öztürk (2006) stated that 35.9% of the students stated that they follow a healthy diet, and Erten (2006) stated that 22.8% of the students stated that they follow a health and well-balanced diet.

It is observed that 54.6% of the participants eat breakfast on a regular basis. While Yıldırım et al. (2011) found in their study, which they conducted in Afyon Kocatepe

University, School of Physical Education and Sports, that 38.5% of the students eat breakfast on a regular basis, it was observed that 61.5% of the students did not eat breakfast on a regular basis.

It is observed that 26.4% of the participants eat seafood once in a week, and 41.3% of the students eat seafood once in a month. As the studies on revealing the effects of seafood consumption on human health suggest, it is best to eat seafood 2-3 times a week, which is an excellent nutritional source due to its nutritious content that should be consumed for medicinal purposes to help treating some certain diseases of our age (Turan et al., 2006). Aytekin (1999) found that 25% of college students never eat seafood; Erten (2006) found that 35.2% of college students never eat seafood, and 37.2% eat seafood once in a week.

Within this context, it is observed both in our study and the studies of Aytekin (1999) and Erten (2006) that seafood consumption of college students does not allow for optimum levels of nourishment.

When the meat consumption patterns of the participants are analyzed, it is observed that 40.4% of the students eat meat once in a week and 37.9% of the students eat meat once in a month. In order to talk about a well-balanced and a healthy diet, the amount of proteins consumed becomes important, and it is recommended that animal proteins should constitute 40-50% of our daily protein intake (Karabacak and Direk, 2007). It is observed that the meat consumption of the participants is insufficient in accordance with the principles of healthy nutrition. Erten (2006) stated that 31.6% of the students eat red meat 1-2 times in a week. Vassigh (2012) found that male and female college students (28.7% male, 33.8% female) eat red meat 1-2 times in a week. The rate of male students, who eat red meat 3-4 times in a week was 20.1% and it was 22.3% for female students. The ratios of male and female students, who never eat red meat, were similar (male: 6.6%, female: 6.7%).

When the water consumption patterns of the students are analyzed, it is observed that 50.5% of the students drink 2-3 liters of water. Arslan and Mendeş (2004) found that daily average water consumption of college students was 913 ± 9.27 ml. Özdoğan et al. (2012), the ratio of college students living in residence halls, who drink 2 liters or more water, was relatively lower (18.7%); the highest daily water consumption was found in students, who drink 4-6 glasses of water every day (43.4%).

When the weekly exercise frequencies of the students are analyzed, it is observed that 56.2% of the students practice 3-4 times a week, and 29% of the students practice 1-2 times a week. In the study of Avşar et al. (2013), it was stated that 23.5% of the college students practice less than 1 hour a week, 28.2% practice 1-3 hours a week, 20% practice more than 4 hours a week and 28.2% of the students never practice.

CONCLUSION

The dietary and exercising habits of college students were analyzed in this study. It is observed that half of the participating students eat breakfast on a regular basis. It is also observed that the students consume adequate amounts of water. BMIs were determined within the normal range in both male and female students. It is observed that seafood consumption of the students is below the recommended frequency, but meat consumption is closer to the recommended levels. The majority of the students stated that they did not have a healthy diet. Considering healthy nutrition requires some sort of awareness, the students should be informed about healthy nutrition through related events, conferences, presentations and panels, and it must be ensured that they adopt a life-long awareness on healthy nutrition.

It is also found that some students never eat meat and seafood.

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