Evaluation of Dietary Habits of Students at the Department of Physical Education and Sports Teaching/ Sample of Harran University

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Abstract

Purpose: The purpose of this research is to evaluate eating habits of students at physical education and sports teaching department.

Material and Method: Research population consists of the students studying at universities while research sample consists of the students studying at Department of Physical Education and Sport Teaching at Harran University. As an example of a descriptive research, our study had 156 volunteer students involved in total, 57 of them being female students and 99 being male students. Eating habits of the participants were taken through "Eating Habits Index" with 6 items (BAİ) developed by Demirezen.

Finding: Age, Height, Body Weight (BW) and Body Mass Index (BMI) averages of male students were found respectively 22,69±2,62(years), 173,34±6,54 (cm), 65,45±8,35 (kg), 21,78±2,19 (kg/m2). Age, Height, Body Weight (BW) and Body Mass Index (BMI) averages of female students were found respectively 20,78±1,19 (years), 166,40±5,37(cm), 56,17±6,34(kg), 20,26±1,66 (kg/m2) (Table 1). It was observed that %63 of the participants were male, and the rest %36,5 were female students. %49,1 of the students stated that they often consume fatty and sugared products, %67,4 stated they add salt to foods, %78,2 stated they sometimes consume coke, tea and coffee in a day more than 3 cups, %97,3 stated that they sometimes eat veal and mutton; and also hotdog, salami, sausage etc. which includes such meat types, %51 stated that they eat fastfood products like hamburger, fried potatoes and pizza and %80,5 stated that they rarely consume fruits, vegetable dish and food made of legume. When the relationship between body mass index of the students and questionnaire items were examined, it was observed that there was a positive linear relationship between body mass index values of the students and the item-3 (r:0,333/p=0,011). Although, there is a positive increase between item-2 and body mass index, it was not found statistically significant (r:0,228/p=0,088) (Table, 5)..

Result: It is possible to say that the students studying at the Department of Physical Educationa and Sports Teaching have insufficent eating habits and are under a high risk.

KEYWORDS: Eating, University, Young, Adult

INTRODUCTION

Dietary habits of individuals from different geographical regions and with different socioeconomic background may change. Nowadays, living by improving one's

quality of life has become as an important topic as living a long life. The key factors for a healthy aging and reducing health risks to minimum level through different methods are a healthy nutrition and promotion of physical activities (Tucker and Gilliland, (2007). Nutrition is an important topic for everyone in our society, and especially university students place a particular importance to it. A great majority of the students studying at universities have had to live away from a family environment for the first time in their lives. While dietary habits of the students remain as is required by a family environment, a differentiating life style due to the university life may change these habits(Yılmaz and Özkan 2007). An inadequate knowledge of nutrition and difficult economical problems of the students make it difficult to have an adequate nutrition. It is socially important for the university students to have a healthy dietary habits in terms of both their own health and being a role model as the parents of the future (Garibağaoğlu et. al., 2006). When considered from the perspective of its definition, nutrition is to take necessary items and utilize these in the body for growth, development and living for a long time healthily and productively (Kunter ve Öztürk, 1999). Malnutrition and inadequate nutrition are community health problems which can influence not only the present generation but also the next generation and therefore this problem should be approached over the whole course of life (Hosseinpoor et all., 2006).

The purpose of this study is to evaluate dietary habits of the students at the department of Physical Education and Sports and to put forward suggestions according to the results.

Material and Method

While the population of the research includes the students studying at universities, the sample includes the students studying at the department of physical education and sports teaching. In total 156 students as 57 females and 99 males voluntarily participated in our research which is a sample of a descriptive research. The dietary habits of the participants were collected through "Dietary Pattern Index (DPI)"developed by Demizeren (Demirezen & Coşansu, 2005).

SPSS-16 software package was used in order to analyze the raw data obtained from the questionnaires and reliability analysis was conducted (by Cronbach's Alpha: 0,439). Mean, standard deviation, frequency and percentage values of the data obtained were determined. The relationship between the body mass index of all participants and questionnaire items were tested by applying Pearson's correlation analysis.

All the participants filled in the questionnaire with 6 items given below.

1.I consume fatty and sugary foods.
2. I add salt to foods
3. I drink more than 3 cups coffee, coke or tea a day.
4. I consume veal, mutton and sausage, salami made from these.
5. I consume fast-food like hamburger, chips and pizza.
6. I consume fruit and vegetable products and foods made from legume such as bulgur, haricot, pea, lentil.

The participants answered 6 questionnaire items given above like the following: ***Never - Rarely – Sometimes – Often - Always.***

Scoring of the answers is like the following: Never: 0 point, Rarely: 1 point, Sometimes: 2 point, Often: 3 point and Always: 4 point. However, scoring was made

reversely for the last item (Always: 0 point, Never: 4 point) (Demirezen & Coşansu, 2005).
"Dietary Habits Risk Level" was determined according to the total points obtained from the research by using the scale given below;

0 point: No risk
1-6 point: Low risk
7-12 point: Medium Risk
13-18 point: High Risk
19-24 point: Very High Risk

FINDINGS

Age, Height, Body Weight and Body Mass Index averages of male students were found respectively 22,69±2,62(years), 173,34±6,54 (cm), 65,45±8,35 (kg), 21,78±2,19 (kg/m2). Age, Height, Body Weight and Body Mass Index averages of female students were found respectively 20,78±1,19 (years), 166,40±5,37(cm), 56,17±6,34(kg), 20,26±1,66 (kg/m2) (Table 1). Considering the answers the participants gave to the items, it was observed that the item " I consume fruit and vegetable products and foods made from legume such as bulgur, haricot, pea, lentil" had the highest average which was 2,81 while the item " I consume veal, mutton and sausage, salami made from these" had the lowest average which was 1,97. (Table 2) It was observed that %63 of the participants were male, and the rest %36,5 were female students. %49,1 of the students stated that they often consume fatty and sugary products, %67,4 stated they often add salt to foods, %78,2 stated they sometimes consume more than 3 cups of coke, tea or coffee a day, %97,3 stated that they sometimes eat veal and mutton; and also salami, sausage etc. made from these, %51 stated that they consume fast-food products like hamburger, fried potatoes and pizza, %80,5 stated that they rarely consume fruit and vegetable foods and foods made from legume (Table 3). When dietary habits risk levels of the students were analysed, 43,4 % of the male students were found at low level risk while 47,4 % were found at high risk. 33,3% of the female students were found to be at low risk while a great majority like 68,7% were found to be at high risk.(Table 4). When the relationship between body mass index and questionnaire items was analyzed, , it was observed that there was a positive linear relationship between body mass index values of the students and the Item-3 (r:0,333/p=0,011). Although there was a positive increase between item-2 and body mass index, it was not found statistically significant (r:0,228/p=0,088) (Table, 5)

Table 1: Anthropometric Values of the Participants

Variables	**Male (xx/ss)**	**Female (xx/ss)**
Age (Year)	22,69±2,62	20,78±1,19
Height (cm)	173,34±6,54	166,40±5,37
Weight (kg)	65,45±8,35	56,17±6,34
Body Mass Index (kg/m^2)	21,78±2,19	20,26±1,66

Table 2: Arithmetic Means of the Ratings on the Questionnaire Items and Their Standard Deviations

Questionnaire Items	*XX*	*SS*
I consume fatty and sugary foods	2,56	0,90
I add salt to foods	2,27	1,18
I drink more than 3 cups coffee, coke or tea a day	2,04	1,07
I consume veal, mutton and sausage, salami etc. made from these	1,97	0,92
I consume fast-food like hamburger, chips and pizza	2,14	1,07
I consume fruit and vegetable products and foods made from legume such as bulgur, haricot, pea, lentil	2,81	0,86

Table 3: Ratings on the Questionnaire Items and their Distribution by Gender

Questionnaire Items	*N: (156)*	*Never*		*Rarely*		*Sometimes*		*Often*		*Always*	
	Gender	*Num.*	*%*	*Num.*	*%*	*Num*	*%*	*Num.*	*%*	*Num.*	*%*
I consume fatty and sugary foods	Male	-	-	8	8,1	45	45,1	26	26,3	20	20,2
	Female	-	-	5	8,8	28	49,1	13	22,8	11	19,3
	Total	-	-	13	16,9	73	94,2	39	49,1	31	39,5
I add salt to foods	Male	9	9,1	18	18,2	31	31,3	25	25,3	16	16,2
	Female	6	10,5	6	10,5	13	22,8	24	42,1	8	14
	Total	15	19,6	24	28,7	44	54,1	49	67,4	24	30,2
I drink more than 3 cups coffee, coke or tea a day	Male	9	9,1	24	24,2	34	34,3	20	20,2	12	12,1
	Female	-	-	17	29,8	25	43,9	8	14	7	12,3
	Total	9	9,1	41	54	59	78,2	28	34,2	19	24,4
I consume veal, mutton and sausage, salami etc. made from these	Male	5	5,1	29	29,3	39	39,4	19	19,2	7	7,1
	Female	-	-	13	22,8	33	57,9	7	12,3	4	7
	Total	5	5,1	42	52,1	72	97,3	26	31,5	11	14,1
I consume fast-food like hamburger, chips and pizza	Male	12	12,1	16	16,2	44	44,4	20	20,2	7	7,1
	Female	1	1,8	8	14	20	35,1	18	31,6	10	17,5
	Total	13	13,9	24	30,2	64	79,5	38	51,8	17	24,6
I consume fruit and vegetable products and	Male	22	22,2	38	38,4	33	33,3	6	6,1	-	-

foods made from legume such as bulgur, haricot, pea, lentil	Female	15	26,3	24	42,1	15	26,3	3	5,3	-	-
	Total	37	48,5	62	80,5	48	59,6	9	11,4	-	-

Table 4: Distribution of the Dietary Habits Risk Level by Gender

		No Risk		Low		Medium		High		Very High	
		n	%	n	%	n	%	n	%	n	%
Gender	Male					43	43,4	47	47,4	9	9
	Female					19	33,3	31	68,7	7	12,3

Table 5: Analysis of the Relationship Between Body Mass Index Values of the Participants and the Answers They Provided for Questionnaire Items

Variable	r/p	Item-1	Item-2	Item-3	Item-4	Item-5	Item-6
VKİ (kg/m^2)	Correlation	0,070	0,228	0,333	0,037	0,038	-0,012
	P	0,605	0,088	**0,011***	0,782	0,778	0,929

RESULT AND DISCUSSION

Age, Height, Body Weight and Body Mass Index averages of male students were found respectively 22,69±2,62(years), 173,34±6,54 (cm), 65,45±8,35 (kg), 21,78±2,19 (kg/m2). Age, Height, Body Weight and Body Mass Index averages of female students were found respectively 20,78±1,19 (years), 166,40±5,37(cm), 56,17±6,34(kg), 20,26±1,66 (kg/m2).

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In the research conducted by Hull et., in which they examined the differences between body weight and body composition during academic year and summer time, they found out that the increase in the body weight was higher in the academic year than it was in the summer time (Hull et . al. 2007).

In the research, conducted by Özdemir to evaluate dietary habits of the students actively involved in sports, he found out the matter was an application-oriented mistake for students (Özdemir 2002).

In some dietaries, it is particularly stated that individuals should consume at least 15 types of food. It is important to take macro elements and microelements as required by daily needs (Kunter & Öztürk, 1999).
When the present data is combined with anthropometric measurements, it can be seen that community state of health is at risk. It was confirmed that the students generally do not pay attention to meal time, have only one meal a day, consume foods like bagel and sandwich, economical difficulties have an impact on malnutrition and inadequate nutrition, and the students staying at dormitories have malnutrition because of poor conditions in dormitories (Durmaz & et al. 2002; Garibağaoğlu & et al. 2006; Akyol & et al. 2008; Heşeminia ve ark. 2002).

In the research they conducted, Yılmaz and Özkan stated that 59,4% of the individuals attached importance to breakfast. In this research, the students were asked whether they skipped meal or not; it was found that the great majority of the males skipped breakfast and lunch; the females skipped lunch. The reason for this was told to be lack of time (Yılmaz & Özkan, 2007).

Nowadays, it is possible to see high incidences of problems related to nutrition in many countries. The most outstanding reasons for this are inadequacy of the nutrition in amount and quality, and lack of knowledge (Baysal & et al. 2008).

Yaman and Çelik found out in the research they conducted that the subjects put the implementations into practice insufficiently and imperfectly and that they didn't quit their habits and that they didn't have enough level of nutrition consciousness although they claimed that they had enough level of knowledge (Yaman & Çelik 2008). In the research conducted by Ault et. al in order to increase the amount of crop, fruit and vegetables consumption, they stated that the group who conducted applied activities was more successful in terms of knowledge than the group conducting desk-based studies (Sakar, 2013).

Regarding the life styles of the university students, it is an expected result for us that these students are at risk in terms of dietary habits.

As a result, it was settled that students studying at the Department of Physical Education and Sports Teaching are at risk in terms of dietary habits. It is possible to say that giving nutrition education to students in an effective way, struggling with companies and institutions in the environment to stop sale of unhealthy foods or limiting them may minimize the risk of unhealthy nutrition.

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REFERENCES

1. Yılmaz E., Özkan S., (2007)., Üniversite Öğrencilerinin Beslenme Alışkanlıklarının İncelenmesi V. Temel Sağlık Hizmetleri Sempozyumu bildirisi Garibağaoğlu, M., Budak, N., Öner, N., Sağlam, Ö., Nişli, K. (2006). Üç farklı üniversitede eğitim gören kız öğrencilerin beslenme durumları ve vücut ağırlıklarının değerlendirilmesi. Sağlıklı Bilimleri Dergisi, 15(3), 173-180.

2. Kuter, M., Öztürk, F., (1999)., Antrenör ve Sporcu El Kitabı, Bağırgan Yayınevi, 2.Baskı, Ankara

3. Hosseinpoor, A.R., van Doorslaer, E., Speybroeck, N., Naghavi, M., Mohamma, K., Majdzadeh, R. ve diğerleri. (2006)., Decomposing socioeconomic inequality in infant mortality in Iran. International Journal of Epidemiology,35(5),1211- 1219.

4. Demirezen E., Coşansu G., (2005)., Adölesan Çağı Öğrencilerde Beslenme Alışkanlıklarının Değerlendirilmesi İstanbul Ü. Florence Nightingale HYO, Halk Sağlığı Hemşireliği AD, İstanbul, cilt 14, sayı 8, 174

5. Tucker, P., Gilliland, J. (2007)., The effect of season and weather on physical activity: a systematic review. Public Health. 121,909-922.

6. Hull, H.R., Morrow, M.L., Heesch, K.C., Dinger, M.K., Han, J.L., Fields, D.A. (2007). Effect of the summer months on body weight and composition in college women. Journal of Women's Health. 16,1510-1515.

7. Yılmaz, E., Özkan, S., (2007)., Üniversite öğrencilerinin beslenme alışkanlıklarının incelenmesi. Fırat Sağlık Hizmetleri Dergisi. 2(6),87-104.

8. Yaman Ç., Çelik E.,(2008)., Sakarya Üniversitesi Beden Eğitimi ve Spor Öğretmenliği Bölümünde Okuyan 1. ve 4. Sınıf Öğrencilerinin Beslenme Bilgi ve Tutumlarının Karşılaştırılması, 34 TSA / Yıl: 12, S: 3, Malatya

9. Akyol A., Bilgiç P., Ersoy G., (2008)., Beslenme ve Diyetetik Bölümü der notları, Hacettepe Üniversitesi-Sağlık Bilimleri Fakültesi ANKARA, Yayın No: 729

10. Durmaz, H., Sağun, E. ve Tarakçı Z. (2002)., Yüksekokul Öğrencilerinin İçme Sütü Tüketim Alışkanlıkları, YYÜ Vet. Fak. Derg.,13(1-2): 69-73.

11. Garibağaoğlu, M., Budak, N., Öner, N., Sağlam, Ö. ve Nişli, K. (2006)., Üç Farklı Üniversitede Eğitim Gören Kız Öğrencilerin Beslenme Durumları ve Vücut Ağırlıklarının Değerlendirmesi, Sağlık Bilimleri Dergisi (Journal of Health Sciences), 15(3):173-180.

12. Heşeminia, T., Çalışkan, D. ve Işık, A. (2002)., Ankara'da Yüksek Öğretim Öğrenci Yurtlarında Kalan Öğrencilerin Beslenme Sorunları, İbni Sina Tıp Dergisi, 7:155- 167.

13. Özdemir G., (2002), Dumlupınar Üniversitesi Beden Eğitimi ve Spor Yüksekokulunda Okuyan ve Aktif Spor Yapan Öğrencilerinin Beslenme Alışkanlıklarının Tespiti ve Değerlendirilmesi, Yüksek Lisans Tezi, Dumlupınar Üniversitesi, Sosyal Bilimler Enstitüsü. s. 142-151.

14. Baysal ve Ark. (2008)., Diyet El Kitabı, 2.Baskı, Hatipoğlu Yayıncılık, Ankara,Sf 25 288.

15. Kuter, M., Öztürk, F.(1999)., Antrenör ve Sporcu El Kitabı, Bağırgan Yayınevi, 2.Baskı, Ankara

16. Sakar E., (2013), İlköğretim Okullarında Görevli Öğretmenlerin Beslenme Alışkanlıkları ve Beslenme Bilgi Düzeyleri, Haliç Üniversitesi,Sağlık Bilimleri Enstitüsü, Beslenme ve Diyetetik Bölümü, ss:9-10, İstanbul.