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Milk and Dairy Product Consumption Habits of University Students in Turkey*

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Abstract: The present study was conducted to investigate the milk and dairy product consumption of 361 randomly selected students from Ondokuz Mayıs University (OMU) through a questionnaire form applied through face-to-face interviews in the province of Samsun in Turkey. The rate of students who were consuming milk was 86.43% (86.14% in females, 86.79% in males, P=0.980), the rate of students who were consuming one glass of milk daily was 92.35% (94.47% in females, 89.61 % in males, P=0.201) and the rate of students who were consuming milk daily was 18.28% (19.80% in females, 16.35% in males, P=0.400). Of the students who do not drink milk, 71.59% (65.77% in females, 78.69% in males, P=0.134) stated that they did not have any reason for not consuming milk, or they did "not have the habit of drinking milk. Packaged milk (UHT, sterilized, pasteurized) was being consumed more (60.23%) than non-packaged milk (39.77%) (P=0.001). Female students (80.30%) and male students (79.74%) were found to prefer dairy products to milk (P=0.896). In conclusion, it was determined that generally, OMU students had a good level of milk and dairy product consumption. However, in particular, students' regular daily milk consumption habits were insufficient. Also, gender was found to influence preferences and consumption habits.

Keywords: Dairy product, food safety, habit, health, milk consumption

Türkiye'de Üniversite Öğrencilerinin Süt ve Süt Ürünleri Tüketim Alışkanlıkları

Öz: Bu çalışma, üniversite öğrencilerinin süt ve süt ürünleri tüketim alışkanlıklarını belirlemek amacıyla, Türkiye'nin Samsun ilinde Ondokuz Mayıs Üniversitesi'nde (OMÜ) öğrenim gören ve tesadüfi olarak seçilen 361 lisans öğrenciyle yüz yüze yapılan anket uygulaması ile gerçekleştirilmiştir. Araştırmada, genel olarak süt içtiğini bildiren öğrencilerin oranı %86.43 (%86.14 kızlarda, %86.79 erkeklerde, P=0.980), her gün düzenli süt içtiğini bildiren öğrencilerin oranı %18.28 (%19.80 kızlarda, %16.35 erkeklerde, P=0.400), miktar olarak günlük 1 bardak süt içtiğini bildiren öğrencilerin oranı ise %92.35 (%94.47 kızlarda, %89.61 erkeklerde, P=0.201) olarak belirlenmiştir. Süt içmeyen öğrencilerin %71.59'u (%65.77 kızlarda, %78.69 erkeklerde, P=0.134) süt içmeme nedenini belirli bir nedeni yok ya da alışkanlığım yok şeklinde beyan etmişlerdir. Öğrenciler arasında ambalajlı süt (UHT, sterilize, pastörize) (%60.23), açık süte (%39.77) (P=0,001) göre daha fazla tercih edilmektedir. Araştırmaya göre kız öğrencilerin %80.30'u, erkek öğrencilerin ise %79.74'u süte kıyasla süt ürünlerini daha çok tercih etmektedir (P=0,896). Sonuç olarak; OMÜ öğrencilerinin süt ve süt ürünlerini tüketim alışkanlıklarının genel olarak iyi olduğu tespit edilmiştir. Ancak, öğrencilerin özellikle düzenli olarak her gün süt tüketimi alışkanlıklarının yetersiz olduğu belirlenmiştir. Ayrıca, süt ve süt ürünleri ile ilgili birçok tüketim tercihleri üzerine cinsiyetin etkisinin önemli olduğu tespit edilmiştir.

Anahtar kelimeler: Alışkanlık, gıda güvenliği, sağlık, süt tüketimi, süt ürünü

Introduction

Milk and dairy products have a very important place in a healthy diet of people. Because milk and dairy products contain all essential amino acids and also the source of many animal proteins, minerals, and

vitamins, mainly calcium, phosphorous, and riboflavin (Metin, 2001). While increasing milk consumption as part of energy-restricted diets reduces the fat-free mass, it leads to a higher loss in body weight and fat mass (Stonehouse et al., 2016). Antioxidant activity of milk and dairy products can be enhanced by phytochemicals supplementation while fermented dairy products have been reported to contain higher antioxidant capacity as compared to non-fermented dairy products (Khan et al., 2019).

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Yogurt, which is very valuable fermented milk that affects the bioavailability of nutritional substances, is also an easily digestible protein source (Marette and Picard-Deland, 2014). On the other hand, the final nutrient composition of yogurt varies depending on the type of milk used and added sugar and other substances (Aryana and Olson, 2017). Yogurt is also an important glucose source for children in many countries as it is a widely recommended and consumed food in childhood (Williams et al., 2015; Devenish et al., 2019). In the USA, 64.00% of males and 41.00% of females consume yogurt at least once a week (Wang et al., 2013). The total sugar content in fruit yogurts has been reduced compared to previous years in the UK in the framework of obesity (Moore et al., 2020). The fat content of the yogurt is also considered in healthy nutrition. Today, semi-skimmed milk is preferred to a higher extent than whole milk (Wechsler and Wernick, 1992).

Milk and dairy products, which are basic foods for human development, can be beneficial for the oxidative defense of consumers by several mechanisms. Milk and dairy products with protective properties have the potential to act as adjuvants in conventional therapies, addressing cardiovascular diseases, metabolic disorders, intestinal health, and chemopreventive properties (Khan et al., 2019).

Consumption per capita of milk, cheese, yogurt, ayran, and butter is respectively 41.50 kg, 18.40 kg, 30.60 kg, 18.40 kg, and 1.78 kg in Turkey. Milk consumption per capita is 65.00 kg in the European Union (EU) (ZMO, 2018; IDF, 2019). The amount of milk and dairy product consumption may vary according to the quality, price, and hygiene properties of these products, also the pleasure and preferences of the consumers. In addition, it is reported that the socio-economic and demographic structure of consumers, especially income, education, age, gender, household size, mother's employment status, and the presence of children in the family affect milk consumption (Şengül, 2004; Akbay and Tiryaki, 2007). Şimşek and Açıkgoz (2011) reported that 81% of students stated that milk should be consumed at all ages.

In a study conducted at Ondokuz Mayıs University (OMU), 60.00% of the students were staying in dormitories, 19.00% in student houses, 17.00% with their families of relatives, and 4.00% lived in other places (Şentürk, 2011). Therefore, the determination of the nutrition preferences of university students is valuable for the early prevention of potential disorders and creating healthy generations (Çetinkaya, 2010).

In this study, it is aimed to scientifically reveal the consumption preferences of milk and dairy products, which are important for university students in a

balanced and regular diet. Thanks to the findings and results to be obtained, the nutrition policies and practices of university youth and the strategies of commercial companies to produce milk and dairy products will be re-evaluated. In this context, the present study aimed to investigate the students' consumption habits and preferences of milk and dairy products at OMU University in Turkey. In addition, it was to determine the effect of gender on these preferences.

Material and Methods

The material of this research was composed of the data obtained from the questionnaire conducted by face-to-face interviews with 379 students at OMU between 01 March 2019 and 31 May 2019. However, some incomplete-incorrect questionnaires were excluded from the study, and data from a total of 361 questionnaires were included in the study. The questionnaire was applied to students who were chosen by random sampling method and volunteered for participation. The questionnaire was prepared based on previous work by Şeker et al. (2012). The sample size in the study was calculated as reported by Üstün (2021).

Statistical analysis

First of all, the frequencies of the answers given to the survey questions in the study were calculated. The chi-square test, one of the non-parametric tests, for the comparisons between the gender groups regarding milk consumption habits and preferences was used. Because the data obtained in this study were qualitatively specified. Statistical significance controls of the relationships between categorical variables were evaluated with Pearson chi-square test and Fisher's exact tests (Akgül, 2005). In the statistical analysis, $P < 0.05$ was accepted as the significance level. The IBM SPSS Statistics 22.0 was used for the analyses and calculations (SPSS, 2015).

Results

In this study, results on milk and dairy products consumption preferences and habits of university students in Turkey (whether they drink milk, the reasons for those who do not drink milk, the frequency of milk consumption, the time of the day they drink milk, the daily average amount of milk they drink, the type of milk they prefer according to fat amount, their milk preferences according to whether it is open or packaged, the type of milk they prefer according to the packaging type, the types of milk they prefer according to their content, the most important reasons for purchasing milk and dairy products, whether they prefer milk or dairy products for consumption, whether they find milk and dairy products safe, whether they are considering paying extra for milk or dairy products because they are

organic, how much extra they can pay for an organic milk or dairy product, which product information do they pay the most attention to when purchasing milk and dairy products, what information are most

Table 1. Milk and dairy product consumption habits of the students

		Male	Female	Total	P
Do you drink milk?					
Yes	n	138	174	312	
	%	86.79	86.14	86.43	
No	n	21	28	49	0.980
	%	13.21	13.86	13.57	
How often do you consume milk?					
Occasionally	n	133	162	295	
	%	83.65	80.20	81.72	
Every day	n	26	40	66	0.400
	%	16.35	19.80	18.28	
What is the reason for not drinking milk?					
Due to its taste and flavor	n	15	29	44	
	%	12.29	19.47	16.23	
No reason, I am not accustomed	n	96	98	194	
	%	78.69	65.77	71.59	0.134
I have been unable to separate a budget for this	n	9	13	22	
	%	7.38	8.72	8.12	
It causes discomfort (allergy, nausea, digestive disorder)	n	2	9	11	
	%	1.64	6.04	4.06	
What is your mean daily amount of milk consumption?					
250 ml (1 glass)	n	138	188	326	
	%	89.61	94.47	92.35	
500 ml (2 glasses)	n	10	8	18	
	%	6.49	4.02	5.10	0.201
>500 ml (3 glasses or more)	n	6	3	9	
	%	3.90	1.51	2.55	
Do you find your purchased dairy products safe?					
Yes	n	114	141	255	
	%	74.03	70.85	72.24	
No	n	40	58	98	0.392
	%	25.97	29.15	27.76	
What is your fat preference when consuming packaged milk?					
Whole fat	n	46	36	82	
	%	30.26	18.18	23.43	
Semi-skimmed	n	55	84	139	
	%	36.18	42.42	39.71	0.069
Low fat	n	22	36	58	
	%	14.47	18.18	16.57	
I don't care	n	29	42	71	
	%	19.08	21.21	20.29	
What type of milk do you consume?					
Non-packaged milk	n	77	63	140	
	%	49.36	32.14	39.77	0.001
Packaged milk (UHT sterilized/pasteurized)	n	79	133	212	
	%	50.64	67.86	60.23	
What type of yogurt do you consume?					
Plain yogurt	n	91	85	176	
	%	58.33	43.14	49.86	
Home-made	n	58	77	135	
	%	37.18	39.09	38.24	<0.001
Fruit	n	7	35	42	
	%	4.49	17.77	11.90	
What type of ice cream do you consume most?					
Packaged ice cream	n	37	29	66	
	%	23.87	14.72	18.75	
Cone ice cream	n	90	104	194	
	%	58.07	52.79	55.11	0.004
Stick ice cream	n	28	64	92	
	%	18.06	32.49	26.14	
What is your status of consuming dairy products?					
I prefer dairy products more	n	122	159	281	
	%	79.74	80.30	80.06	
I prefer milk more	n	31	39	70	0.896
	%	20.26	19.70	19.94	

Table 1 (Sequel). Milk and dairy product consumption habits of the students

		Male	Female	Total	P
What is your most important preference in consuming milk and dairy products?					
They are nutritious, healthy	n	131	152	283	0.084
	%	84.52	77.16	80.40	
I like them, I am accustomed	n	24	45	69	
	%	15.48	22.84	19.60	
At which meal do you consume milk most?					
Before going to bed	n	89	109	198	0.308
	%	57.79	57.07	57.39	
At any time during the day	n	29	47	76	
	%	18.83	24.61	22.03	
In the morning	n	36	35	71	20.58
	%	23.38	18.32	20.58	
What type of milk do you consume more often?					
Fruit	n	16	16	32	0.001
	%	10.39	8.33	9.25	
Cocoa	n	22	77	99	
	%	14.29	40.10	28.61	
Unsweetened	n	34	53	87	0.001
	%	22.08	27.60	25.14	
Sweetened	n	19	12	31	
	%	12.34	6.25	8.96	
It does not matter	n	63	34	97	28.03
	%	40.91	17.71	28.03	
Which package type do you prefer when purchasing milk?					
Carton box (500-1000 ml)	n	45	62	107	0.001
	%	29.80	31.31	30.66	
Plastic bottle	n	5	2	7	
	%	3.31	1.01	2.01	
Glass bottle	n	44	54	98	0.001
	%	29.14	27.27	28.08	
Carton box (200 ml)	n	6	36	42	
	%	3.97	18.18	12.03	
It does not matter	n	51	44	95	27.22
	%	33.77	22.22	27.22	
What is your most important criterion when purchasing milk and dairy products?					
Animal specie	n	59	60	119	0.036
	%	38.56	29.85	33.62	
Fat rate	n	3	5	8	
	%	1.96	2.49	2.26	
Price	n	7	2	9	0.036
	%	4.57	1.00	2.54	
Reliability (brand, label information, production type, expiry date, having the approval number obtained from the Ministry of Agriculture and Forestry, hygiene conditions, freshness)	n	63	111	174	
	%	41.18	55.22	49.15	
Other (inexpensive, packaged, organic, commercial and promotional application, salt rate, sales place)	n	21	23	44	12.43
	%	13.73	11.44	12.43	
Would you agree to overpay for organic milk and dairy products?					
Yes	n	114	165	279	0.033
	%	75.00	84.18	80.17	
No	n	38	31	69	
	%	25.00	15.82	19.83	
At what rate do you find it reasonable to pay more for organic milk and dairy products?					
Up to 10%	n	82	113	195	0.338
	%	56.16	64.20	58.74	
11-20%	n	34	34	68	
	%	23.28	19.32	20.48	
More than 20%	n	30	29	59	20.78
	%	20.56	16.48	20.78	

Table 2. Multiple preferences regarding the milk and dairy consumption habits of students

		Male	Female	Total	P
Which milk and dairy product types do you prefer?					
1.Milk	n	35	19	54	
	%	22.29	9.60	15.22	
2.Cheese	n	0	0	0	
	%	0.00	0.00	0.00	
3.Yogurt	n	2	2	4	
	%	1.27	1.00	1.13	
4.Ayran	n	0	1	1	
	%	0.00	0.50	0.28	
5.Ice cream	n	0	1	1	
	%	0.00	0.50	0.28	
1 and 3 (highest double preference)	n	6	2	8	
	%	3.82	1.00	2.25	
Sum of the other two-choice combination preferences	n	7	11	18	NA
	%	4.46	5.55	5.07	
1, 2, and 3 (highest triple choice)	n	7	13	20	
	%	4.46	6.57	5.63	
Sum of the other three-choice combination preferences	n	12	22	34	
	%	7.64	11.11	9.58	
1, 2, 3, 4 (highest quadruple preference)	n	9	10	19	
	%	5.74	5.06	5.35	
Sum of the other four-choice combination preferences	n	18	29	47	
	%	11.46	14.65	13.24	
All	n	61	88	149	
	%	38.86	44.45	41.97	
What are your reasons for choosing unpackaged milk?					
1.It is natural, delicious, the product is safe	n	34	33	67	
	%	26.98	26.19	26.59	
2.It is brought to the door and is healthy	n	4	0	4	
	%	3.17	,0	1.59	
3.Yogurt is better and is a family habit	n	2	3	5	
	%	1.59	2.39	1.98	
4.It does not contain additives	n	5	4	9	
	%	3.97	3.18	3.57	
5.It is inexpensive and fresh	n	10	5	15	
	%	7.94	3.98	5.95	
1 and 3 (highest double preference)	n	10	19	29	
	%	7.94	15.07	11.51	
Sum of the other two-choice combination preferences	n	20	12	32	0.082
	%	15.88	9.52	12.71	
1, 3 and 4 (highest triple preference)	n	12	14	26	
	%	9.52	11.11	10.32	
Sum of the other three-choice combination preferences	n	13	1	14	
	%	10.31	0.79	5.55	
1, 3, 4 and 5 (highest quadruple preference)	n	8	21	29	
	%	6.35	16.66	11.51	
Sum of the other four-choice combination preferences	n	2	9	11	
	%	1.59	7.14	4.36	
All	n	6	5	11	
	%	4.76	3.97	4.36	
Your preferences regarding cheese consumption					
1. Kashar cheese, Mozzarella	n	30	21	51	
	%	19.35	10.50	14.37	
2. Curd cheese, Tulum cheese	n	15	4	19	
	%	9.67	2.00	5.35	
3. Creme cheese	n	3	11	14	
	%	1.94	5.50	3.94	
4. White cheese	n	43	49	92	
	%	27.74	24.50	25.92	
1 and 4 (highest double preference)	n	9	27	36	
	%	5.81	13.50	10.14	0.002
Sum of the other two-choice combination preferences	n	5	23	28	
	%	3.23	11.50	7.89	
1. 3 and 4 (highest triple preference)	n	21	23	44	
	%	13.55	11.50	12.39	
Sum of the other three-choice combination preferences	n	14	18	32	
	%	9.03	9.00	9.01	
All	n	15	24	39	
	%	9.68	12.0	10.99	

NA: No Analysis (Statistical analysis was not performed because there are cells with 0 frequency in the cross table between the variable and gender and the results cannot be reliable)

Table 2 (Sequel). Multiple preferences regarding the milk and dairy consumption habits of students

		Male	Female	Total	P
What information do you pay attention to when buying milk and dairy products?					
1- Place of manufacture, expiry date, brand	n	55	69	124	
	%	35.26	35.20	35.64	
2- Compliance with food standards, Ministry of Agriculture and Forestry production permit	n	29	26	55	
	%	18.59	13.27	15.80	
3- Additive content, nutritional value table	n	18	12	30	
	%	11.54	6.12	8.62	
1 and 3 (highest double preference)	n	9	9	18	0.056
	%	5.77	4.59	5.17	
Sum of the other two-choice combination preferences	n	26	34	56	
	%	16.67	17.35	16.09	
All	n	19	46	65	
	%	12.17	23.47	18.68	
What information are you affected by when choosing milk and dairy products?					
1. Negative news about products,	n	54	49	103	
	%	36.00	25.25	30.12	
2. The product's being imported	n	12	7	19	
	%	8.00	3.61	5.56	
3. Use of additives in the product	n	31	50	81	
	%	20.67	25.78	23.68	
4. Brucella and tuberculosis	n	15	21	36	
	%	10.00	10.82	10.53	
1 and 4 (highest double preference)	n	7	5	12	0.085
	%	4.66	2.58	3.51	
Sum of the other two-choice combination preferences	n	16	30	46	
	%	10.67	15.47	13.45	
1. 3 and 4 (triple highest preference)	n	4	17	21	
	%	2.67	8.76	6.14	
Sum of the other three-choice combination preferences	n	5	6	9	
	%	3.33	3.09	2.62	
All	n	6	9	15	
	%	4.00	4.64	4.39	
Your reason for choosing the places where you can buy milk and dairy products?					
1. Staff and service quality	n	16	20	36	
	%	10.46	10.31	10.37	
2. Credit card use, chance of paying in installments, discount or promotion application, reasonable price	n	26	16	42	
	%	16.99	8.25	12.10	
3. Familiar place	n	19	22	41	
	%	12.42	11.34	11.82	
4. All shopping at the same time, abundant variety, easy accessibility	n	50	84	134	
	%	32.68	43.30	38.62	
2 and 4 (highest double preference)	n	11	20	31	0.469
	%	7.19	10.31	8.94	
Sum of the other two-choice preferences	n	13	14	27	
	%	8.50	7.22	7.78	
1.3 and 4 (highest triple preference)	n	6	6	12	
	%	3.92	3.09	3.46	
Sum of the other two-choice preferences	n	9	9	18	
	%	5.88	4.64	5.19	
All	n	3	3	6	
	%	1.96	1.54	1.72	

affected when choosing milk and dairy products, reasons to choose the place where they buy milk and dairy products) were obtained.

The results regarding the students' milk and dairy product consumption and preferences have been presented in Table 1, and the findings of multiple preferences are given in Table 2.

Discussion and Conclusion

According to the results obtained from this study, the rate of milk drinkers was 86.43% (86.14% in females, 86.79% in males, $P=0.980$), the rate of drank milk every day was 18.28% (19.80% in females, 16.35% in males, $P=0.400$), the rate of drinking milk at any time during the day 22.03% (24.61% in females, 18.83% in males, $P=0.308$), the rate of drink milk before going to bed 57.39% and also the rate of

drank 1 glass of milk every day was found 92.35 % (94.47% in females, 89.61 % in males, $P=0.201$). The most common reason for not drinking milk was stated as there is no certain reason or I don't have the habit of drinking milk (71.59%) (65.77% in females, 78.69% in males, $P=0.134$) (Table 1). Whereas, dairy products provide a package of essential nutrients that are difficult to obtain in low- or dairy-free diets. For this reason, milk is a food that must be consumed (Rozenberg et al., 2016). Many nutrition authorities recommend consuming 3 portions of milk and dairy product (eg, 1 glass of milk, 1 portion of cheese, 1 portion of yogurt) (Rozenberg et al., 2016). Milk consumed in OMU is higher from Kafkas University (KU) (33.00%) (Çetinkaya, 2010), Erciyes University Faculty of Veterinary Medicine (80.00%) (Sarıözkan et al., 2007) and Gaziosmanpaşa University (28.67%) (Uzunöz and Gülşen, 2007). While 80.00% of the male students at Gümüşhane University (GU) stated they consumed milk and dairy products daily, this rate was reported to be 85.00% in females (Şahinöz and Özdemir, 2017). A difference was determined between the two universities concerning the association between milk consumption and gender. According to genders, milk consumption in OMU is higher than that of GU.

According to this study, semi-skimmed milk is preferred mostly among OMU students (39.71%). In the USA, schools and other institutions increasingly prefer semi-skimmed milk for students and staff (Wechsler and Wernick, 1992). The fact that OMU students preferred semi-skimmed milk is similar to the situation in the USA.

According to the study conducted at OMU, packaged milk (UHT sterilized/pasteurized) (60.23%) was preferred more than unpackaged milk (39.77%) among all students, in addition, milk in 500-1000 ml cardboard boxes (30.66%) is preferred among the students. The least preferred milk was that in a plastic bottle (2.01%). Milk can act as a source of several milk-borne hazards ranging from bacteria, viruses, and protozoa (Dhanashekar et al., 2012). Lack of awareness of milk-borne infections and some traditional practices put milk and milk product consumers at high risk of milk-borne diseases (Prakashbabu et al., 2020). At OMU, the fact that there are students who prefer unpackaged milk at a considerable rate can be interpreted as the preference of students who live at home with their families or on their own. It is difficult for students to stay in the dormitory to access unpackaged milk in the university environment, and the environment required for boiling unpackaged milk may not be available. The fact that milk in carton boxes being somewhat cheaper due to the packaging difference may have been attractive for the consumer.

In the study, 80.40% of students at OMU consumed

milk and dairy products due to them being nutritional and healthy (77.16% in females, 84.52% in males). The plain yoghurt was declared the most preferred (49.86%) and fruit yoghurt the least (11.90%) preferred dairy product in OMU. It was observed that female students preferred homemade yogurt (39.09%), while male students preferred plain yogurt (58.33%) more. These findings show that university students attach importance to health and nutrition as expected from them. For people who are lactose intolerant, it is no longer necessary to avoid all dairy foods, and in particular, yogurt is well tolerated and provides the nutritional benefits of dairy products (Rozenberg et al., 2016). The students have a suitable palate to eat plain yogurt and that gender affects the choice of yogurt varieties.

According to the study, OMU students mostly consume milk, cheese, yogurt, ayran, and ice cream (whole) (41.97%). Male students mostly preferred white cheese (27.74%), female students mostly preferred white cheese (24.50%). In the study, it was determined that OMU students mostly preferred ice cream in a cone (55.11%). The least preferred was packaged ice cream (18.75%). While female students prefer ice cream with fruit more (32.49%), male students prefer ice cream in a cone (58.07%). In Balıkesir University, students consumed 22.30% yoghurt and 76.00% cheese every day (Yılmaz and Özkan, 2007) also, in Gaziosmanpaşa University, ice cream with cocoa is mostly preferred (36.00%) (Uzunöz and Gülşen, 2007). These findings confirm that the consumption of milk and dairy products might be a marker for healthier eating habits (Campmans-Kuijpers et al., 2016).

The most important criterion is reliability (brand, label information, production date, etc.) (49.15%) ($p=0.036$) for OMU students when purchasing milk and dairy products. Most of the students give importance to the place of production, expiration date, and brand when purchasing products (35.64%). In addition, those most affected by the negative news about the products (30.12%). On the other hand, the majority of students at KU give more importance to the brand (74.50%) (Çetinkaya, 2010) and the expiration date (84.67%) at Gaziosmanpaşa University (Uzunöz and Gülşen, 2007). In a study conducted in GU, it was reported that the most important factor encouraging students' milk and milk consumption was family habits (86.70%). Concerning encouraging the consumption of milk and dairy products, 71.70% of the students stated that they found the advertising and promotion activities inadequate (Şahinöz and Özdemir, 2017).

Also in the present study, Would you agree to overpay for organic milk and dairy products? the rate of students who said "yes" to the question was found to be 80.17% (84.18% in females, 75.00% in males).

At what rate do you find it reasonable to pay more for organic milk and dairy products? The rate of students who stated that they agreed to pay up to 10% more to the question was determined to be the highest with 58.74%. Although there is a difference between female students (64.20%) and male students (56.16%) in terms of this preference, it was not statistically significant. According to these findings, it is understood that females are significantly more sensitive than males in choosing to consume organic products. Likewise, female students found it reasonable to pay extra for organically produced milk and dairy products at a higher rate than male students. The fact that they find it reasonable to pay the highest rate of up to 10% overpayment for both genders can be attributed to the limited financial means of the participants due to being students.

In this study, the most consumed milk, ice cream and yogurt type, the most preferred milk type, the most preferred milk and dairy products, the answers to the most important priority questions when purchasing milk and dairy products were found to be significant. Also, statistically significant differences were found between male and female students in terms of the answers given to the questions about the package type preferred when buying milk, preferences regarding cheese consumption, to determine whether to agree to overpay for organic milk.

According to the research, it is a positive situation that university students drink milk generally and mostly because it is beneficial for health. Students prefer to consume dairy products instead of milk, but the rate of consumption of cheese, yogurt, ayran and ice cream alone or together is low. The presence of those who find the purchased dairy products unsafe may be due to the presence of bad and unsuitable products in the market. However, when purchasing milk and dairy products, factors such as place of production, expiration date, brand, compliance with food standards, production permit of the Ministry of Agriculture and Forestry, additive content, nutritional value table are taken into account at a low rate. In addition, the reliability option, which is among the most important criteria to be considered when purchasing a product, was not preferred at a high rate. It is remarkable but negative situation that the students who buy milk and dairy products consider factors such as the presence of additives in the products, the presence of diseases such as Brucella and tuberculosis at a low rate, and the negative news about the products at a high rate.

As a result, there are issues that need to be changed in the milk and dairy products consumption habits and preferences of the students. It is recommended to conduct scientific studies such as panels, seminars or conferences in order to improve the awareness and knowledge levels of students, to include elective

courses related to healthy nutrition, and to use mass media effectively.

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