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Determining the Factors Affecting Drinking Milk Consumption Habits in Turkey: The Example of Gaziantep Province

Türkiye'de İçme Sütü Tüketim Alışkanlıklarını Etkileyen Faktörlerin Belirlenmesi: Gaziantep İli Örneği

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Determining the Factors Affecting Drinking Milk Consumption Habits in Turkey: The Example of Gaziantep Province

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Abstract

Rich in lactose, vitamins and minerals, milk provides essential protein and fat for a balanced diet. To promote preference for this nutrient-rich liquid, it is important to identify the factors that influence consumer expectations in many ways, such as economic, nutritional and others. This study aims to assess the factors influencing consumer preferences of milk consumption trends. The case study was conducted with 383 participants living in Gaziantep, Turkey. The collected data were analysed using reliability analysis and chi-square test. The survey results showed that 88.7% of the participants consumed drinking milk and 42.3% drank one glass per day. 37.5% of the consumer preferred pasteurised milk, 35.4% UHT milk and 27.1% street milk. It was found that 69.1% of consumer look at the brand when deciding which milk to buy, while 89.4% look at the expiration date of the product. In addition, 71% of consumer consider the amount of fat in dairy products to be the most important quality factor. It was clear that nutritional facts, fat content, price and brand were the key points in the participants' milk consumption preferences.

Türkiye'de İçme Sütü Tüketim Alışkanlıklarını Etkileyen Faktörlerin Belirlenmesi: Gaziantep ili Örneği

Öz

Laktoz, vitamin ve mineraller bakımından zengin olan süt, dengeli bir beslenme için gerekli protein ve yağı sağlar. Besin açısından zengin bu sıvının tercih edilmesini teşvik etmek için, tüketicilerin tercihlerini ekonomik, besinsel ve diğerleri gibi birçok yönden etkileyen faktörleri belirlemek önemlidir. Bu çalışma, tüketicilerin süt tüketim eğilimlerine ilişkin beklentilerini etkileyen faktörleri değerlendirmeyi amaçlamaktadır. Vaka çalışması Gaziantep'te yaşayan 383 katılımcı ile gerçekleştirilmiştir. Toplanan veriler güvenilirlik analizi ve ki-kare testi kullanılarak analiz edilmiştir. Anket sonuçları, katılımcıların %88.7'sinin içme sütü tükettiğini ve %42.3'ünün günde bir bardak içtiğini göstermiştir. Tüketicilerin %37.5'i pastörize sütü, %35.4'ü UHT sütü ve %27.1'i sokak sütünü tercih etmiştir. Tüketicilerin %69.1'inin süt satın almaya karar verirken markaya, %89.4'ünün ise ürünün son kullanma tarihine baktığı tespit edilmiştir. Ayrıca tüketicilerin %71'i süt ürünlerindeki yağ miktarını, en önemli kalite faktörü olarak görmektedir. Besin değerleri, yağ içeriği, fiyat ve markanın katılımcıların süt tüketim tercihlerindeki kilit noktalar olduğu açıkça görülmüştür.

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1. INTRODUCTION (GİRİŞ)

Food is an important issue because it is universal; manages human life and health [1]. Food consumption habits of a population show the cultural, social, economic and health structure of that society. It is

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imperative to understand the behaviors, thoughts and attitudes of consumer in order to better guide consumption, marketing and awareness approaches. It has been proved that some of the essential nutrients including protein, fat, calcium, phosphorus, vitamin B2 and vitamin B12 needed for life can be satisfied through consumption of milk and other dairy products [2]. Drinking milk is an indispensable source for maintaining a healthy metabolism and skeletal growth for all age groups but especially infant, toddler and young. The flexible nature of this unique material allows using it as the primal matter in dairy processing it is free of off-flavors, toxins, and pigments. One liter of milk a day meets all the calcium and phosphorus needs of the adult body, and a liter of milk meets all the B2 and B12 vitamin needs of adults and children [3]. Actually the process of considering and deciding about what the consumer is going to purchase with satisfactory matching his needs, is governed and influenced by wide variety of factors. There are some studies in the literature to analyze dairy consumption patterns and habits for different regions of Türkiye such as İzmir, Iğdır and Bingöl [4, 5, 6], but there is no similar case research for the city of Gaziantep. In 2016, 1000 participants living in İstanbul, Ankara and İzmir were surveyed to determine the factors affecting milk consumption using chi-square for data analysis, and this survey showed that 89% of the participants consumed milk and dairy products. 52% of the participants represent female consumer, while 47.1% were men. It was reported that a significant relationship was observed in terms of age, with younger participants consuming much more milk and dairy products than the oldest ones [7]. A similar study done on İzmir habitants by with 407 participants concluded that 74.9% of the participants consumed the drinking milk, and the habit of milk-drinking was higher for female participants than that of the male participants [8]. Participants with a bachelor's degree had a higher consumption rate than other participants. 87.9% of the consumer preferred the ordinary milk while 12.1% of them consumed the flavored milk [8]. Another study had been reported in Elazığ city center with a sample size of 495. They claimed that 21.4% of the participants were regularly drinking milk. However, 59.8% of the consumer preferred pasteurized and UHT milk, whereas, 10.3% of the participants consumed street milk. It was reported that most of the consumer preferred purchasing cow milk from market, with giving great importance to the factory of production and the price. Moreover, 78% of the consumer considered the brand as well. In addition, 84.6% of the participants think that there should be milk drinking programs for students in schools and 86.3% think that the society is not encouraged to consume milk [9]. According to 2020 data of the United Nations Food and Agriculture Organization (FAO), Turkey is the 10th largest producer in the world with an annual milk production of 22 million tons. Milk consumption is considered as an indicator of country development. Consumption values of milk and dairy products are quite high in countries that are adequately fed and healthy and the most efficient form of milk is to use it as "drinking milk" [5]. Therefore in order to evaluate this high potential and create a healthy society, it is necessary to reveal the consumption habits of people's dairy products [10]. In addition to the standard basic consumer characteristics (age, gender, income and education level, etc.) studied in the literature [3-10], it is important to investigate the background of the consumption habits. These backgrounds, which can be listed as milk status, purchasing behaviour, preferred packaging, place of purchase, criteria for evaluating milk quality, consumer awareness of the nutritional value of milk and sources of information, may provide some information that is crucial for understanding consumer preferences and expectations in detail. It is well known that the dynamics of supply and demand drive food manufacturers to produce in line with consumer preferences. Therefore, the more information about the consumer profile, the better the response to demand will be, thus supporting the development and consumption of milk, which is characterised as a miracle liquid and a high source of protein and minerals, in the industrial sector. In this respect, it is predicted that the data from the study will be of interest to researchers and producers.

The main objectives of this research can be summarised as follows: to determine the factors that affect the acquisition of milk drinking habits in Gaziantep, to investigate the reasons and thoughts of people regarding milk consumption, to measure the consumption levels of milk and to understand the relationship

between consumer's preferences and their awareness of the nutritional value of milk. Then, comparisons based on the different demographic characteristics of the consumer and analysis of their behaviour, which can lead to a clear understanding of the real demand of the inhabitants. This would enable the necessary measures to be taken to increase the consumer's milk consumption. In addition, the results of the research could be helpful in improving milk consumption by informing the milk and dairy product companies to organise the product specifications according to the consumer's needs. The aim of this research is to obtain the current data on milk consumption in Gaziantep and to obtain information that will be a source for methods to increase milk consumption for a healthier society, thus filling the gap in the literature.

2. MATERIAL AND METHODS (MATERYAL VE METOD)

This study was conducted in order to determine the consumption habits of milk and milk products among Gaziantep city center habitants, the factors affecting these consuming habits, and to analyze whether there is a difference between these factors in terms of demographic characteristics of the consumer. It was a survey study which included a questionnaire consisting of 31 questions. This questionnaire was used as data collection tool as data collection through questionnaires is cost-effective. The survey was conducted with 383 persons residing in different districts of Gaziantep city center using Google form survey link; as a face-to-face interview has been infeasible due to the terrible health condition occurred in 2020 as a result of COVID 19 pandemic. There were three sections in the questionnaire (Table 1) including general information about the participants, and questions about the consumption of milk and milk products. Data analysis was carried out using IBM SPSS (Statistical Package for Social Science) software.

Table 1. Sections of the questionnaire

Sections	Content of the sections
1 st section	Demographic characteristics of the participants (gender, age, marital status, education status, employment status, family members and monthly income).
2 nd section	State of milk drinking to get reasons of consuming or non-consuming it. When the milk drinking habit was acquired, and find the factors affected that. Consumption habits (modality and amount of milk consumption and type of milk consumed). The criteria for evaluating the quality of milk.
3 rd section	The awareness of the consumer about the different types of milk. The frequency of consuming dairy products namely, yogurt, cheese, butter and kefir.

The research was targeted to answer several questions. Firstly, how the different demographic characteristics of the consumer affected their consumption habit for the drinking-milk and finding out the strength of the relationship between those characteristics and the consumption rates. Secondly, what were the most effective factors helping the consumer getting into this habit. Thirdly, what were the consumption manners and purchasing behaviors of the milkconsumer. Fourthly, figuring out whether the consumer were aware about the nutritional value of the milk. Lastly, what were the consumer's quality assessment criteria for the drinking-milk. The each of the questionnaires given in Table 1 had been examined for the six demographic factors namely; gender, age, marital state, education level, occupation, and income level.

2.1. Data Collection and Analysis

A questionnaire was used as data collection tool Appendix (Table A1). Questionnaires are effective way of measuring the attitudes, behaviors, opinions, preferences and, intentions of relatively large numbers of subjects quickly and more cheaply than other methods. Questions of the questionnaire consist of classification, and ranking scales. Close structure questions were provided, as the answer can only fit into pre-decided categories. Data placed into a category is called nominal data. The category was limited to as few as two options, (e.g., 'yes' or 'no,' 'male' or 'female'), or included quite complex lists of alternatives from which the participant can choose. Closed questions also provide ordinal data (which can be ranked). This often involves using a rating scale to measure the strength of emotions or attitudes, (e.g., 'strongly

agree' / 'agree' / 'neutral' / 'disagree' / 'strongly disagree'). "Ordering the factors affecting milk consumption habits in order of importance" is an example of a ranking scale. After collecting data via survey; it was transferred to SPSS 25.0. Firstly; the frequency of the variables was calculated. Descriptive data was obtained to describe characteristics of the observed data and summary of statistic. Qui-square test was used primarily to find out the significant levels, which should be less than 0.05 to indicate whether there is a significant difference between one variable to another variable. Reliability analysis was performed as well using Cronbach alpha which provides an estimate of the internal consistency of the tests. Chi-square is a statistical test that gives information about whether there is a relationship between two classification groups, and the measured variables. If the significance value (p) is obtained from this test ($p \leq 0.05$), it is concluded that there is a relationship between the two variables. This was applied to test the relationship between demographic characteristics and consumer's milk consumption and purchasing habits. The Chi-square is a significance statistic only, and should be followed with a strength statistic. The Cramer's V is the most common strength test used to test the data when a significant Chi-square result has been obtained. The result of Cramer's V test (Table 2) gives information about the degree of relationship and this result is interpreted by considering the degree of freedom (SD). At the same time, Cronbach alpha reliability estimate was also used to measure the consistency level of the answers given to the question group consisting of a ranking scale. Cronbach alpha provides an estimate of the internal consistency of the test. It was provided the following rules of thumb of Cronbach's alpha: > 0.9 – Excellent, > 0.8 – Good, > 0.7 – Acceptable, > 0.6 – Questionable, > 0.5 – Poor, and > 0.5 – Unacceptable. The reliability test was applied to the answers given to the questions related to the reasons for drinking the milk and the reasons of purchasing the street milk, and the consumption state of milk. The Cronbach's alpha value was found to be 0.703. This calculated value shows that the survey expresses good consistency level of the questionnaire.

Table 2. Effect size for chi-squared test, Cramer's V and its interpretation.

Degree of freedom	Small	Medium	Large
1	0.10	0.30	0.50
2	0.07	0.21	0.35
3	0.06	0.17	0.29
4	0.05	0.15	0.25
5	0.04	0.13	0.22

Table 3. Distribution of the participants according to their demographic characteristics

Gender		n		Marital status		n	
Male		112 (29.2%)		Single		157 (40.99%)	
Female		271 (70.8%)		Married		226 (59.01%)	
Sum		383		Sum		383	
Education	n	Occupation	n	Family's monthly income (TL)	n	Age	n
Primary school	11 (2.87%)	Working	167(43.60%)	< 2000	65(16.97%)	18-25	151(39.42%)
Secondary school	11 (2.87%)	Not working	36 (9.39%)	2001 - 3000	83 (21.67%)	26-35	95 (24.80%)
High school	27 (7.05%)	Housewife	62 (16.18%)	3001 - 4000	55 (14.36%)	36-45	65 (16.97%)
Collage	20 (5.22%)	Student	110 (28.72%)	4001 - 5000	49 (12.79%)	46-55	53 (13.83%)
Bachelors	253 (66.05%)	Retailed	7 (1.83%)	> 5001 TL	131 (34.20%)	56+	19 (4.96%)
MSc/PhD	61 (15.92%)	Other	1 (0.26%)				
Sum	383		383		383		383

n: number of the respondents

3. RESULTS AND DISCUSSION (BULGULAR VE TARTIŞMA)

3. 1. Demographic Situation of the Participants

A total of 383 people, 112 (29.2%) male and 271 (70.8%) female, participated in the research. In literature, generally students were used as a target group for testing their habits about milk consumption while different groups of ages were considered in this research [11, 5]. Table 3 shows that women made up a larger participation than men, which is also confirmed by several studies on milk consumption [12, 7]. While the majority of consumer were in the age group of 18-25 (Table 3), in a similar study which performed in Istanbul with 410 participants, this age group was 26-35 ranked first with 29% [13].

Education level of the respondents was found as follows: 66.05% of bachelor degree, 18% had pre-university education, 15.92% MSc/PhD degree. Monthly average revenue of 16.97% of the participants was less than 2000 TL while that of 21.67% were between 2001-3000 TL. Monthly income of 14.36% of participants was between 3001-4000 TL and that of 12.79% of participants were between 4001 TL-5000 TL. The income of 34.2% of the participants was more than 5000 TL (Table 3). It was understood that 55.8% (n= 214) of the participants had a family of 3-5, 23.8% (n = 91) had a family of 6-7, 14.1% (n = 54) had a family of 1-2 people. The percentage of participants who had more than 10 family members was 1.8 (Table 3).

3. 2. Analysis of Milk Consumption According to the Demographic Characteristics

In the present study, while 88.8% (n = 340) of the participants consumed milk, 11.2% (n = 43) were not milk consumer. This section was conducted to analyze whether demographic characteristics have a statistical effect on drinking milk consumption. As shown in Table 4 most of the participants who consumed milk were women. Namely, 70.8% (n = 271) of the 383 milk-consuming participants, where male percentage was 29.2% (n = 112) of the milk consumer participants.

It was determined that 63.2% (n = 242) of the female participants consumed milk, 7.6% (n = 29) did not consume milk; whereas 25.6% (n = 98) of male participants drank milk, 4% (n = 14) did not. In terms of age groups, participants in the age group of 18-25 consumed much more milk, and those aged 56 and over were the least group in consumption. Moreover, young people were more likely to consume milk than those aged 36 and over. According to the results of the chi-square analyses based on these data, the relationship between age and drinking milk consumption was insignificant ($\chi^2 = 4.17$, $SD = 1$, $p \geq 0.05$). In another study, it was found that there was a significant relationship between age and milk consumption [7]. On the other hand, according to the analysis made by Karakaya and Akbay (2014) on street, sterilized and pasteurized milk consumption sorted by age groups; it was found that the age group of 40 and over consumed much more street milk [14]. Moreover, the consumption of UHT milk increased as the age increases. It had been reported that pasteurized milk consumption was higher for the middle age group, but the age factor did not have a statistical significance on these consumptions. However, the relationship between age and milk consumption was found to be significant in packaged milk, while it was insignificant in street milk [15]. It was found that there was no significant relationship between marital status factor and milk consumption, even though married (63%) consumed more milk than single (33.6%) (Table 4).

In this study among the 340 participants consuming milk, 18.5% of those who drank milk were with pre-university education, whereas 64.4% of the consumer were with Bachelor's education, and 17.1% of the consumer were with postgraduate education. When the consumption state of the participants was analyzed in terms of "Occupation" (Table 4), it was found that the highest rate was within the working people, among 340 participants, 115 respondents were working, this rate was followed by the students' count which was 90 respondent, noticeable margin can be seen between both counts, the next count was for the housewife 61, the rest in that group of choices were for not working and retailed participants, repetitively. According to the results of the Chi-square analysis, a statistically significant relationship was found

between education status and drinking milk consumption ($\chi^2 = 12.353$, $SD = 5$, $p \leq 0.05$, Cramer's $V = 0.149$). It was reported that there was a significant relationship between education and milk consumption, and that those with undergraduate education consumed milk at a rate of 43.3%. The authors stated that as the level of education increases, the rate of milk consumption increases proportionally [8].

In terms of household monthly income status of the participants, 120 with the highest income group out of 340 participants consumed milk, at the same time, it was determined that 52 with the lowest income group of the participants consumed milk (Table 4). Akbay and Tiryaki (2007) found a directly proportional and statistically significant relationship between income and milk consumption [16]. However in another study, while 16.7% of those with the lowest income group (less than 522 TL) were regularly consuming milk, this rate decreased to 11.9% in the income range of 522-870 TL [17].

3. 3. Drinking-Milk Consumption Amount

Milk is a valuable liquid, especially in terms of calcium and protein. In terms of health, it is recommended to consume an average of 1-2 glasses of milk per day for adults. Table 5 shows that 42.3% ($n = 138$) of the participants drank one glass of milk a day, 29.4% ($n = 96$) 2-3 glasses of milk a week, 14.7% ($n = 48$) two or more cups a day, 13.5% ($n = 44$) 3-6 cups a week. There was no significant difference between gender and amount of drinking milk consumption ($\chi^2 = 0.924$, $SD = 3$, $p \geq 0.05$).

Table 4. Analysis of milk consumption

Demographic characteristics		Milk consumption		Sum	χ^2	SD	p
		Yes	No				
Gender	Male	98	14	112	0.612	1	0.598
	Female	242	29	271			
	Sum	340	43	383			
Age	18-25	128	23	151	4.17	4	0.384
	26-35	87	8	95			
	36-45	59	6	65			
	46-55	49	4	53			
	56+	17	2	19			
	Sum	340	43	383			
Marital status	Single	130	27	157	9.516	1	0.002*
	Married	210	16	226			
	Sum	340	43	383			
Education	No school	0	0	0	12.353	5	0.03*
	Primary school	9	2	11			
	Secondary school	11	0	11			
	High school	23	4	27			
	Collage	20	0	20			
	Bachelors	219	34	253			
	MS/PhD	58	3	61			
Sum	340	43	383				
Occupation	Working	151	16	167	14.278	5	0.01*
	Not working	31	5	36			
	Housewife	61	1	62			
	Student	90	20	110			
	Retailed	6	1	7			
	Other	1	0	1			
Sum	340	43	383				
Family's montly income	< 2000 TL	52	13	65	9.242	4	0.05*
	2001 - 3000 TL	71	12	83			
	3001 - 4000 TL	52	3	55			
	4001 - 5000 TL	45	4	49			
	> 5001 TL	120	11	131			
	Sum	340	43	383			

χ^2 : Chi-square, SD: standard deviation, *: $p \leq 0.05$ significant

Table 5. Analysis of drinking-milk consumption amount

Demographic characteristics		Milk consumption frequency and amount				Sum	χ^2	SD	p
		One cup a day	2 or more cups a day	1-2 cups a week	3-6 cups a week				
Gender	Male	38	14	19	13	84	0.924	3	0.82
	Female	91	30	65	27	213			
	Sum	129	44	84	40	297			
Age	18-25	40	13	41	18	112	26.817	12	0.008
	26-35	42	17	15	6	80			
	36-45	24	6	12	7	49			
	46-55	21	7	9	5	42			
	56 +	2	1	7	4	14			
	Sum	129	44	84	40	297			
Marital status	Single	39	17	40	17	113	11.309	3	0.01*
	Married	90	27	44	23	184			
	Sum	129	44	84	40	297			
Education	No school	0	0	0	0	0	11.018	15	0.751
	Primary school	4	1	2	2	9			
	Secondary school	7	1	1	1	10			
	High school	10	2	5	2	19			
	Collage	4	4	6	2	16			
	Bachelors	83	31	54	25	193			
	MS/PhD	21	5	16	8	50			
	Sum	129	44	84	40	297			
Occupation	Working	62	21	32	14	129	19.319	12	0.081
	Not working	8	6	7	5	26			
	Housewife	29	7	14	8	58			
	Student	29	10	30	11	80			
	Retailed	1	0	1	2	4			
	Other	0	0	0	0	0			
	Sum	129	44	84	40	297			
Family's monthly income	< 2000 TL	12	11	15	6	44	15.346	12	0.223
	2001 - 3000 TL	29	8	21	7	65			
	3001 - 4000 TL	22	9	10	4	45			
	4001 - 5000 TL	21	5	8	4	38			
	> 5001 TL	45	11	30	19	105			
	Sum	129	44	84	40	297			

χ^2 : Chi-square, SD: standard deviation, *: $p \leq 0.05$ significant

It was determined that the frequency and amount of milk consumption was higher for married participants compared to the single. In terms of educational level, it was seen that there was no significant relationship between education level and the amount of milk consumption of consumer ($\chi^2 = 11.018$, $SD = 15$, $p \geq 0.05$). Likewise, there was no statistical difference between occupation status of consumer and amount of milk consumption. Many scientists, researchers and even consumer state that Turkish people do not drink enough milk [18, 8, 19]. The results confirmed that the consumption is not sufficient for Gaziantep region.

3. 4. Drinking-Milk Type: Regular Milk, Flavoured Milk

It was determined that 55.8% of the participants preferred normal milk, 25.2% preferred flavored milk, and 18.8% answered "undecided" as shown in Table 5. In another study, Erdal and Tokgöz (2011) reported that, 75.8% of consumer did not consume fruit milk [15]. In a research conducted by Kahraman (2016) in İzmir, it was reported that 87.9% of the participants preferred regular milk and 12.1% preferred flavored milk [8]. In previous studies, it was concluded that flavored milk was preferred by consumer in

much smaller proportions than regular milk. In terms of female participants, it was understood that 52.1% of women consumed regular milk, 25.2% consumed flavored milk, and 22.7% answered as "I am undecided"; 65.3% of male participants consumed regular milk, the rest preferred flavored milk, and 9.2% answered "I am undecided". When Table 6 was analyzed by marital status, 93.8% of normal milk consumer are married. According to data seen in Table 6, there was a significant relationship between the education level ($\chi^2 = 18.58$, $SD = 10$, $p \leq 0.05$, Cramer's $V = 0.172$) and consumer's choice of normal and flavored milk. Likewise, there was a statistical difference exist between the occupation ($\chi^2 = 32.966$, $SD = 10$, $p \geq 0.05$, Cramer's $V = 0.218$) and consumer's choice of normal and flavored milk.

When asked about the preferred milk type, 46.15% of the participants with the lowest income preferred regular milk and 25% preferred flavored milk, while this rate was 71.66% and 18.30% for the consumer with the highest income, respectively. Erdal and Tokgöz determined that consumer aged 50 and over do not consume flavored milk at all, while the 7-15 age group preferred it [15].

3. 5. The Drinking-Milk Sorts: Pasteurized, Street or UHT

There are different drinking milk products, such as street (raw unprocessed milk), pasteurized or sterilized, i.e. different heat treatments could be applied to drinking milk, and this could be one of the main factors influencing the choice of drinking milk. As shown in Table 7, based on the consumption preference in terms of variety of drinking milk, 37.46% of the participants who reported consuming drinking milk preferred pasteurized milk, 35.4% of them preferred UHT milk and 27.1% preferred street milk. When street milk consumer were asked why they preferred this type of milk, the answer was fresh, natural and healthy.

Table 6. Analysis of drinking milk type

Demographic characteristics		Which of the following do you prefer?			Sum	χ^2	SD	p
		Regular milk	Flavored milk	Undecided				
Gender	Male	64	25	9	98	8.988	2	0.01*
	Female	126	61	55	242			
	Sum	190	86	64	340			
Age	18-25	65	39	24	128	11.35	8	0.18
	26-35	46	21	20	87			
	36-45	33	13	13	59			
	46-55	32	12	5	49			
	56+	14	1	2	17			
	Sum	190	86	64	340			
Marital status	Single	73	32	25	130	0.06	2	0.97
	Married	117	54	39	210			
	Sum	190	86	64	340			
Education	No school	0	0	0	0	18.58	10	0.04*
	Primary school	4	1	4	9			
	Secondary school	5	2	4	11			
	High school	12	8	3	23			
	Collage	6	10	4	20			
	Bachelors	122	55	42	219			
	MS/PhD	41	10	7	58			
	Sum	190	86	64	340			
Occupation	Working	95	42	14	151	32.966	10	0*
	Not working	21	5	5	31			
	Housewife	23	14	24	61			
	Student	46	25	19	90			
	Retailed	4	0	2	6			
	Other	1	0	0	1			
	Sum	190	86	64	340			
Family's monthly income	< 2000 TL	24	13	15	52	23.329	8	0.003*
	2001 - 3000 TL	31	25	15	71			
	3001 - 4000 TL	28	12	12	52			
	4001 - 5000 TL	21	14	10	45			
	> 5001 TL	86	22	12	120			
	Sum	190	86	64	340			

χ^2 : Chi-square, SD: standard deviation, *: $p \leq 0.05$ significant

Table 7. Analysis of drinking milk sort

Demographic characteristics		Milk type			Sum	χ^2	SD	p
		Pasteurized	Street	UHT				
Gender	Male	34	22	42	98	3.566	2	0.168
	Female	93	70	78	241			
	Sum	127	92	120	339			
Age	18-25	51	27	49	127	27.895	8	0*
	26-35	38	17	32	87			
	36-45	16	30	13	59			
	46-55	14	17	18	49			
	56 +	8	1	8	17			
	Sum	127	92	120	339			
Marital status	Single	43	29	57	129	7.156	2	0.028*
	Married	84	63	63	210			
	Sum	127	92	120	339			
Education	No school	0	0	0	0	55.8	10	0*
	Primary school	0	4	5	9			
	Secondary school	0	11	0	11			
	High school	6	11	6	23			
	Collage	7	9	4	20			
	Bachelors	94	48	76	218			
	Masters/PhD	20	9	29	58			
	Sum	127	92	120	339			
Occupation	Working	56	34	61	151	19.0	10	0.04*
	Not working	12	7	12	31			
	Housewife	19	29	13	61			
	Student	36	20	33	89			
	Retailed	3	2	1	6			
	Other	1	0	0	1			
	Sum	127	92	120	339			
Family's monthly income	< 2000 TL	10	25	17	52	23.0	8	0.003*
	2001 - 3000 TL	24	23	23	70			
	3001 - 4000 TL	25	11	16	52			
	4001 - 5000 TL	21	11	13	45			
	> 5001 TL	47	22	51	120			
	Sum	127	92	120	339			

χ^2 : Chi-square, SD: standard deviation, *: $p \leq 0.05$ significant

It was also stated that street milk was preferred because it was believed to contain no preservatives and is fresher [15]. According to another study conducted in the province of Istanbul, it was reported that pasteurized milk was consumed in a rate of 49% followed by UHT milk in a rate of 40%, and lastly, street milk with a rate of 11% [20]. It was calculated that 38.6% of the female participants preferred pasteurized milk, 32.4% UHT milk and 29% street milk; while 34.7% of men preferred pasteurized milk, 42.9% of them preferred UHT milk and 22.4% of them preferred street milk (Table 7). The preference for UHT milk was slightly higher for women. It was found that no significant relationship between consumer's choice of drinking milk sort and gender characteristic ($\chi^2 = 4.908$, $SD = 2$, $p \leq 0.05$). In comparison with Şeker et al (2012) study, it was reported that women had more UHT and pasteurized milk consumption than men [17].

3. 6. The Source of Purchasing the Drinking-Milk

As part of the research, participants were asked where they bought their drinking milk. The data obtained from the responses received are tabulated in Table 8. The analysis of the responses showed that 35% of the participants bought milk from the local market, 18.8% from supermarkets in large shopping centers and a very small percentage (5.9%) from the local grocery store. Surprisingly, 137 participants (40.3%) were undecided about where they bought their milk. Many previous studies have found similar results to these. In their study with a total of 166 families, Onurlubaşet. al. (2013) found that 72.9% of the families purchased milk from supermarkets [21]. In a study conducted in Elazığ province, it was reported that 66.9% of consumer obtained milk from the market, 6.4% from the grocery store, 7.3% from the milkmen and 19.4% from their own milk. As a result of all these studies, it has been observed that those who consume drinking milk prefer to buy it first from supermarkets, then from the neighbourhood grocery store and other places. The most important factors in their choice of market were the wide range of products, the diversity of products, the comparability of prices and the ease of returning faulty goods.

Table 8. The place of purchasing the drinking-milk

Where do you get milk?	Frequency	%	Valid %
The neighborhood grocer	20	5.9	5.9
Neighborhood market where I do my usual shopping	119	35.0	35.0
The markets in big mall centers	64	18.8	18.8
Undecided	137	40.3	40.3
Total	340	100.0	100.0

Consumption Preference for Milk Products

In this part of the study, respondents were asked if they preferred dairy products to milk. Among the respondents, 31.2% (n = 106) answered yes, 55% (n = 16) answered no and 52.6% (n = 179) answered sometimes. As part of the research, consumer were asked about their preferences for the most commonly consumed dairy products other than milk. It was found that the most preferred dairy product was yoghurt (84.4%), followed by cheese (81.5%), butter (22.5%) and finally kefir (8.8%). It is clear from both old and new studies that yoghurt is the most preferred dairy product for consumption [8]. Another study reported that cheese was the other most consumed dairy product among the members of İzmir-Bornova district [22]. On the other hand, in the urban area of Van, it was found that 85% of families consumed herbed cheese, which was a high rate compared to white cheese consumption [23]. It was reported that the majority of families preferred to make yoghurt at home after buying street milk. These families thought that industrial (ready-made) yoghurt contained many more additives and was more expensive [24].

Table 9. The frequency of milk products consumption

Milk Products	Never		Rarely		Sometimes		Often		Always	
	n	%	n	%	n	%	n	%	n	%
Yoghurt	9.0	2.6	4.0	1.2	40.0	11.8	130.0	38.2	157.0	46.2
Cheese	9.0	2.6	6.0	1.8	48.0	14.1	116.0	34.1	161.0	47.4
Butter	17.0	5.0	59.0	17.4	111.0	32.6	84.0	24.7	69.0	20.3
Kefir	173.0	50.9	71.0	20.9	66.0	19.4	17.0	5.0	13.0	3.8

Factors Affecting the Drinking-Milk Consumption Habits

According to the results, The "Habitation" was first-ranked with a rate of 67.9%, the second effective factor was "Myself" with a rate of 56.8%, followed by "School learning" with a rate of 46.2%, whereas the most ineffective factors were "Advertising and marketing" with a rate of 80.9%, "TV programs" with a rate of 77.9%, and income level with a rate of 72.1% as indicated in Table 10. It was stated that the presence of health problems in the family, the presence of children in the family and doctor's advice were important reasons within the scope of the factors influencing the consumption of milk and milk products, and it was reported that television and newspaper news, insistence from family members and

recommendations from friends were among the least effective factors in influencing the consumption of milk and milk products [25].

Table 10. Factors affecting the drinking milk consumption habits

The factors affecting the acquisition of a habit of drinking milk	Yes		No	
	n	%	n	%
School learning	157	46.2	183	53.8
Myself	193	56.8	147	43.2
Friends	74	21.8	74	21.8
Income level	95	27.9	245	72.1
The milk price	89	26.2	26.2	26.2
Advertising and marketing	65	19.1	275	80.9
TV programs	75	22.1	265	77.9
Habituation	231	67.9	109	32.1

3.7. Factors Affecting the Purchasing Decision of the Drinking-Milk

When Table 11, which shows the criteria that consumer consider when purchasing drinking milk, was examined; it was determined that the first one was "Expiry date" with a high rate of 89.4%. While "Fat content" took the second place with 81.2%, it was followed by "Milk purchasing place", "Milk type" and "Milk brand" with the rates of 74.4%, 70.0%, and 69.1%, respectively. In a study conducted by Kumbasaroğlu and Erem Kaya (2020), participants bought milk by first considering the expiration date (27.89%) and secondly the brand of the product (26.32%) [5].

3.8. The Quality Evaluation Parameters of the Drinking-Milk

Table 12 shows the quality parameters that are of interest to consumer when purchasing drinking milk. It was understood that "Nutritional facts" and "Fat content" play decisive roles in quality perception (Table 11). It was seen that heat treatment of milk is an important quality parameter for 65% of the participants. "Price" had the least effect on product quality.

Table 11. Criteria taken into account in the purchase of the drinking-milk

The factors affecting your decision when you purchase milk	Yes		No	
	n	%	n	%
Price	156	45.9	184	54.1
Brand	235	69.1	105	30.9
Packaging	146	42.9	194	57.1
Date of expiry	304	89.4	36	10.6
Milk purchasing place	253	74.4	87	25.6
Nutritional information present on the label	195	57.4	145	42.6
Milk type (pasteurized/UHT/street)	238	70.0	102	30.0
Fat content	276	81.2	64	18.8

3.9. Information About the Nutritional Value of Milk

Table 13 shows consumer's information on nutritional value of milk. While the majority of the participants (93.5% (n = 318)) answered the questions about nutrient facts correctly, 6.4% (n = 22) could not. 94.6% of female participants and 90.1% of male participants had information about the nutritional value of the drinking-milk. There was no significant difference between the genders in terms of the answers given in this section ($\chi^2 = 1.932$, $SD = 1$, $p \geq 0.05$).

Table 12. Quality Evaluation Parameters of the Drinking-Milk

Quality evaluation	Yes		No	
	n	%	n	%
Fat content	242	71	98	29
Price	118	35	222	65
Heat treatment (pasteurized-UHT...)	221	65	119	35
Brand	213	63	127	37
Nutritional facts	244	72	96	28

Table 13. Information about the nutritional value of milk

Demographic characteristics		Do you have information about the nutritional value of milk?		Sum	χ^2	SD	p
		Yes	No				
Gender	Male	89	9	98	1.675	1	0.196
	Female	229	13	242			
	Sum	318	22	340			
Age	18-25	121	7	128	3.693	4	0.449
	26-35	80	7	87			
	36-45	54	5	59			
	46-55	48	1	49			
	56+	15	2	17			
	Sum	318	22	340			
Marital status	Single	123	7	130	0.41	1	0.522
	Married	195	15	210			
	Sum	318	22	340			
Education	No school	0	0	0	3.899	5	0.564
	Primary school	8	1	9			
	Secondary school	11	0	11			
	High school	22	1	23			
	Collage	17	3	20			
	Bachelors	205	14	219			
	Masters/PhD	55	3	58			
	Sum	318	22	340			
Occupation	Working	142	9	151	4.781	5	0.443
	Not working	29	2	31			
	Housewife	54	7	61			
	Student	87	3	90			
	Retailed	5	1	6			
	Other	1	0	1			
	Sum	318	22	340			
Family's monthly income	< 2000 TL	47	5	52	2.759	4	0.599
	2001 - 3000 TL	66	5	71			
	3001 - 4000 TL	48	4	52			
	4001 - 5000 TL	44	1	45			
	> 5001 TL	113	7	120			
	Sum	318	22	340			

χ^2 : Chi-square, SD: standard deviation

4. CONCLUSION (SONUÇ)

Considering that eating and drinking habits play a central role in maintaining good health, more attention should be paid to preschool and school-age children, not only because there is a close relationship between nutritious food and school performance, but also because it is in this group that it is worthwhile to introduce eating habits that promote healthy lifestyles. The cultural structure, consumption habits, education and income levels and attitudes towards healthy eating are different in each city in Turkey. In this study, it would be more accurate to conduct and evaluate studies on a provincial basis. In this way, the number of conscious consumer will increase and it will be possible to achieve the goal of sufficient milk consumption, which is the main purpose of the study. In this paper, the consumption structure of milk in Gaziantep province was analyzed in detail and the influencing socio-economic factors were examined. The results of the analysis show that a significant proportion of the participants (11.23%) do not consume drinking milk and that consumer continue to be interested in street milk at a high rate (27.14%). Consumer of street milk stated that they drank street milk for its freshness as the most important reason (78.2%), followed by its healthiness and naturalness (77.4%). The majority of consumer were women, and young people were found to consume more milk than middle-aged and older age groups. As the level of education increased, the habit of consuming milk also increased. Most consumer were informed about the nutritional value of milk and their main sources of information were personal knowledge, family education and written and visual media. It was found that 55.8% of the consumer preferred plain milk and 25.2% flavored milk. Regarding the type of milk, 37.5% of consumer preferred pasteurized milk, 35.4% UHT milk and 27.1% consumed street milk. The consumption rate of yoghurt was 84.4%, followed by cheese with a rate of 81.5%. Since a significant proportion of consumer do not consume milk for various reasons, it is recommended that relevant institutions, organizations and individuals develop policies and practices that encourage the consumption of milk and dairy products. Necessary and correct information should be provided by family-oriented experts, especially mothers, on many things that are known to be true but scientifically incorrect about drinking milk and dairy products. In particular, it is important to dispel the misconception that street milk is healthy but packaged milk contains additives. The main bacteria commonly found in raw milk that cause spoilage are *Pseudomonas*, *Acinetobacter*, *Brevundimonas*, *Flavobacterium* and some coliforms. If the milk is not sufficiently heat-treated, these micro-organisms will damage the digestive system and cause poisoning. In addition, uncontrolled heating causes loss of vitamins and minerals in milk due to high and prolonged exposure to heat. This and similar basic information should be provided to the consumer profile who believes that only street milk is healthy. In addition, consumer should be informed about "lactose-free milk", which has been developed to alleviate the symptoms of those who have digestive problems with lactose (milk sugar).

CONFLICT OF INTEREST (ÇIKAR ÇATIŞMASI)

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES (KAYNAKLAR)

- [1] J. Clapp, "The problem with growing corporate concentration and power in the global food system". *Nature Food*, 2(6): 404-408, 2021.
- [2] K. E Scholz-Ahrens, F. Ahrens and C. A. Barth, "Nutritional and health attributes of milk and milk imitations". *European Journal of Nutrition*, 59, 19-34, 2020.
- [3] A. Valdez-Fragoso, H. Mújica-Paz, J. Welti-Chanes and J. A. Torres, "Reaction kinetics at high pressure and temperature: effects on milk flavor volatiles and on chemical compounds with

- nutritional and safety importance in several foods". *Food and Bioprocess Technology*, 4, 986-995, 2011.
- [4] E. Kahraman ve H. R. Uysal, "İçme sütü tüketiminde marka seçiciliğinde etkili faktörlerin analizi: İzmir ili örneği". *Çukurova Tarım ve Gıda Bilimleri Dergisi*, 35(1): 43-56, 2020.
- [5] H. Kumbasaroğlu and E. Tuğba, "Students' Milk consumption patterns at Erzincan Binali Yıldırım University". *Journal of the Institute of Science and Technology*, 10(3): 2114-2125, 2020.
- [6] E. Karakaya ve İ. Hakan, "Bingöl ili kent merkezinde açık süt (sokak sütü) tüketim durumunun belirlenmesi". *ÇOMÜ Ziraat Fakültesi Dergisi*, 8(2): 379-389, 2020.
- [7] E. Onurlubaş ve H. Çakırlar, "Tüketicilerin süt ve süt ürünleri tüketimini etkileyen faktörlerin belirlenmesi üzerine bir araştırma". *Çankırı Karatekin Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 7(1): 217-242, 2016.
- [8] E. M. Kahraman, "İçme sütü tüketim alışkanlıkları ve marka seçiciliğinde etkili faktörlerin analizi: İzmir ili örneği". Ege Üniversitesi Fen Bilimleri Enstitüsü, Doktora Tezi, 234, 2016.
- [9] Y. Topcu, D. Baran, G. Denizli, "Tüketicilerin süt tüketim tercih modellerini temel alan pazarlama taktik ve stratejilerinin belirlenmesi". *Alinteri Ziraai Bilimler Dergisi*, 30, 18-32, 2016.
- [10] Z. Tarakci, S. Selcuk, K.Sahin and H. Coskun, "A study on the habits of fluid milk consumption of the students at the University, Yuzuncu Yil University, Faculty of Agriculture". *Journal of Agricultural Science*, 13(1): 15-21, 2002.
- [11] E. Gökçeel and A. Akoğlu, "Evaluation of university students' knowledge, attitudes, and practices on food safety in Bolu, Türkiye". *Food and Health*, 8(4): 321-333, 2022.
- [12] S. Ocak, ve H. Önder, "Süt ürünlerinde tüketici tercihini etkileyen faktörler ve gıda güvenliği bilinci". *Hayvansal Üretim*, 55(2): 9-15, 2014.
- [13] F. Kirlar, "Factors affecting purchasing decision towards private labels: A study on milk product in İstanbul". Sosyal Bilimler Enstitüsü. Bahçeşehir Üniversitesi, İstanbul, 213, 2014.
- [14] E. Karakaya ve C. Akbay, "İstanbul ili kentsel alanda tüketicilerin açık ve paket süt tüketim alışkanlıkları". *Tarım Ekonomisi Dergisi*, 20(1-2): 17-27, 2014.
- [15] G. Erdal ve K. Tokgöz, "Tüketicilerin ambalajlı ve açık süt tüketim tercihlerini etkileyen faktörler: Erzincan ili örneği". *Karamanoğlu Mehmetbey Üniversitesi Sosyal ve Ekonomik Araştırmalar Dergisi*, 2011(1): 111-115, 2011.
- [16] C. Akbay ve G. Y. Tiryaki, "Tüketicilerin ambalajlı ve açık süt tüketim alışkanlıklarının karşılaştırmalı olarak incelenmesi: Kahramanmaraş örneği". *KSÜ Fen ve Mühendislik Dergisi*, 10(1): 89-96, 2007.
- [17] İ. Şeker, P. Şeker, M. Şahin, V. S. Özen, A. Akdeniz, O. Erkmən ve G. B. Doğu, "Elazığ İli merkez ilçede tüketicilerin süt tüketim alışkanlıkları ve bu alışkanlıkları etkileyen faktörlerin belirlenmesi". *FÜ Sağlık Bilimleri Veteriner Dergisi*, 26(3): 131-143, 2012.
- [18] A. De Alwis, J. Edirisinghe and A. Athauda, "Analysis of factors affecting fresh milk consumption among the mid-country consumer". *Tropical agricultural research and extension*, 12(2): 103-109, 2011.
- [19] K. Kurajdova and J. Tábořecká-Petrovicová, "Literature review on factors influencing milk purchase behaviour". *International Review of Management and Marketing*, 5(1): 9-25, 2015.
- [20] B. Şimşek ve İ. Açıkgöz, "Süleyman Demirel Üniversitesi öğrencilerinin içme sütü tüketim alışkanlıklarının belirlenmesi". *Yuzuncu Yil University Journal of Agricultural Sciences*, 21(1): 12-18, 2011.

- [21] E. Onurlubaş and N. Yılmaz, "The factors affecting milk consumption preferences of the consumer in Edirne Keşan township". *Journal of Food, Agriculture & Environment*, 11(3-4): 516-518, 2013.
- [22] S. Engindeniz, T. Taşkın, A. A. Gbadamonsi, A. S. Ahmed, A. Seioudy, Ç. Kandemir ve N. Koşum, "Tüketicilerin süt ve süt ürünleri tercihlerinin analizi". *Tekirdağ Ziraat Fakültesi Dergisi*, 18(3): 470-481, 2021.
- [23] Ö. Demirhan ve E. Cihangir, "Van otlı peynirinin geleneksel üretim hikayesi (The story of Vanherby cheese traditional production)". *Journal of Tourism & Gastronomy Studies*, 9(3): 2286-2319, 2021.
- [24] Z. Tarakçı, M. Karaağaç ve Ö. F. Çelik, "Ordu il merkezindeki tüketicilerin fermente süt ürünleri tüketim alışkanlıkları". *Akademik Ziraat Dergisi*, 4(2): 71-80, 2015.
- [25] Y. W. Park and G. F. Haenlein, "Milk and dairy products in human nutrition: production, composition and health" John Wiley & Sons, 2013.

APPENDIX (Table A1)

QUESTIONNAIRE

1-Name (optional):

2 - Do you live in Gaziantep?

- Yes
- Other

3- Gender:

- Male
- Female

4- Age:

- 18-25
- 26-35
- 36-45
- 46-55
- 56 +

5- Marital status:

6- Education :

- Pre-university
- Bachelors
- MS/PhD

7- Are you::

- Working
- Not working
- Housewife
- Student
- Retailed
- Other
- Single
- Married

8- Number of Family members:

- 1-2
- 3-5
- 6-7
- 8-10
- +10

9- Family's monthly income?

- < 2000-TL
- 2001 TL - 3000 TL
- 3001 TL - 4000 TL
- 4001 TL - 5000 TL
- > 5001 TL

10- Do you consume the drinking-milk?

- Yes
- No

11- Reasons for not drinking the milk?

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
I don't like milk					
I don't like how it tastes/smells					
I consume dairy products instead of milk					
It is expensive					
I don't believe it is healthy					

12- Do you prefer consuming the dairy products rather than milk?

- Yes
- Sometimes
- No

13- Apart from milk, how often do you consume the dairy products below?

	Never	Rarely	Sometimes	Often	Always
Yoghurt					
Cheese					
Butter					
Kefir					

14-Reasons for drinking the milk?

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
I drink milk because it is good for health					
I like the milk					
I like how it tastes/smells					
I used to drink milk					
This is a mandatory in our family					

15- When did you get the habit of drinking the milk?

- Before I enter the school.
- After entering the school.
- When I became a teenager

16- Why do you purchase the drinking-milk

- | | | |
|------------------------------------------------------------------|-----|----|
| <input type="radio"/> For direct drinking | Yes | No |
| <input type="radio"/> For using in cooking and deserts making | Yes | No |
| <input type="radio"/> For making dairy at home | Yes | No |
| <input type="radio"/> For adding to some drinks (Nescafé-coffee) | Yes | No |
| <input type="radio"/> Other | Yes | No |

17- How much milk do you consume?

- One cup a day
- Two or more cups a day
- 1-2 cups a week
- 3-6 cups a week
- Other

18- How much money do you spend monthly for buying milk?

- 0 – 30 TL.
- 31 – 60 TL.
- 61 – 90 TL.
- >90 TL

19- The factors affecting the acquisition of a habit of drinking milk?

- | | | |
|-------------------------------------------------|-----|----|
| <input type="radio"/> Parents learning | Yes | No |
| <input type="radio"/> School learning | Yes | No |
| <input type="radio"/> Myself | Yes | No |
| <input type="radio"/> Friends | Yes | No |
| <input type="radio"/> Income level | Yes | No |
| <input type="radio"/> The milk price | Yes | No |
| <input type="radio"/> Advertising and marketing | Yes | No |
| <input type="radio"/> TV programs | Yes | No |
| <input type="radio"/> Habituation | Yes | No |

20- From where do you buy milk usually?

- From the neighbourhood grocer
- From the neighbourhood market where I do my usual shopping
- From the markets in big mall centers
- From the milk man
- Undecided

21- The factors affecting your decision when you purchase milk?

- | | | |
|--------------------------------------------------------------------|-----|----|
| <input type="radio"/> The price | Yes | No |
| <input type="radio"/> The brand | Yes | No |
| <input type="radio"/> The packaging | Yes | No |
| <input type="radio"/> The expired date | Yes | No |
| <input type="radio"/> The milk purchasing place | Yes | No |
| <input type="radio"/> Nutritional information present on the label | Yes | No |
| <input type="radio"/> Milk type (pasteurized/UHT/open) | Yes | No |
| <input type="radio"/> Fat content | Yes | No |

22- Which packaging material do you prefer for milk?

- Cartoon
- Glass
- Plastic
- Undecided

23- Which of the following do you prefer?

- Regular milk
- Flavoured milk

24- Which of the Following do you consume?

- Pasteurized milk

- Open milk
- UHT

25- Reasons for drinking the milk?

	Agree	Undecided	Disagree
It is natural and healthy			
It is delicious			
It is reliable			
It is fresh			
It is cheaper than the other types			
It is easy to be obtained			

26 - Which milk do you prefer?

- Whole milk (regular milk)
- Reduced fat milk
- Low fat milk
- Undecided

27 - Do you have information about the nutritional value of milk?

- Yes
- No

28- If the answer of the previous question was yes, what is the source of your information?

- | | | |
|----------------------------|-----|----|
| ○ Parents and family | Yes | No |
| ○ School | Yes | No |
| ○ Written and visual media | Yes | No |
| ○ Advertisement | Yes | No |
| ○ I learned by myself | Yes | No |

29 - In your opinion, which of the following is the best in terms of nutritional value?

- Pasteurized milk
- Open milk
- UHT milk
- I have no idea

30 - Do you know the reason behind the long shelf life of UHT milk?

- Yes
- No

31- How do you evaluate the quality of milk?

- | | | |
|----------------------------------------------------|-----|----|
| ○ According to fat content | Yes | No |
| ○ According to price | Yes | No |
| ○ According to heat treatment (pasteurized-UHT...) | Yes | No |
| ○ According to brand | Yes | No |
| ○ According to nutritional table | Yes | No |