Anthropologist, 33(1-3): 8-15 (2018)
DOI: 10.31901/24566802.2018/343.1-3.1918

The Effects of Consumer Preference and Purchasing Behavior on Dairy Products: Women's Inter-generation Analysis

Arzu Secer[1], Muge Kantar Davran[2] and Faruk Emeksiz[3]

Cukurova University, Faculty of Agriculture, Department of Agricultural Economics, Adana, Turkey
E-mail: [1]<asecer@cu.edu.tr>,[2]<mkantar@cu.edu.tr>,[3]<femeksiz@cu.edu.tr>

KEYWORDS Consumption. Dairy Products. Women. Adana

ABSTRACT The present study aimed to investigate women consumers' preferences and factors affecting their purchasing behaviors of dairy product.In addition,the study sought to determine whether differences exist among intergenerational factors. Data were obtained from 384 women consumers from the urban area of Adana Province and analyzed utilizing descriptive statistics and factor analysis. Analysis of intergenerational factors revealed three factors; quality and facility, health and brand, and promotion and price. Comparative analyses among these factors indicated no significant differences for the first and second intergeneration factors; however, some differences were determined in terms of the third intergeneration factor, which comes from the old generation. There is a dearth in literature on milk consumption preferences and purchasing behaviors considering differences among generations. Therefore, this study aims to contribute to the subject in terms of both consumer and dairy products producers/operations.

INTRODUCTION

Dairy products are one of the main sources of nutrients necessary for human growth and development. They contain protein, lipid, lactose, vitamin and minerals, which are required for adequate and balanced nutrition. In addition, dairy products contain basic elements that regulate body functions and development and contribute to the formation of bones and teeth (Simsek et al. 2005). Nevertheless, the production as well as the consumption of dairy products is not at desired levels. The importance of production and consumption of these products have become more pronounced with increasing disposable income, population and urbanization (Kirdar 2001).

In Turkey, data on dairy product consumption cannot be accurately defined because of informal production; however, consumption per capita is annually estimated. In 2016, consumption per capita was estimated as 34.0 kg for drinking milk, 15.6 kg for cheese, 30.0 kg for yoghurt and 1.52 kg for butter. However, in the 27 countries of the European Union (EU), dairy product consumption per capita is 288.5 kg while the world average is 108.7 kg. (Anonymous 2018).

During the last 20 years in Turkey, dairy product markets have grown and consumer preferences have changed dramatically. Consumers prefer to buy pasteurized milk (packaged milk) instead of buying raw milk (non-packaged or unpasteurized) and ready-to-eat products such as yoghurt, butter and cheese instead of making them at home; that is, there is an increasing tendency toward pasteurized and branded products. From the consumers' point of view, this tendency has resulted from some factors. For example, women prefer foods that are easy to buy and consume due to their involvement in both caring for the home and working to earn a living. Furthermore, consumers demand healthy and hygienic products in line with increasing educational level and to purchase smaller quantities as required. These changes in consumer demand have increased the number of food companies. These companies compete in product variety, quality and price to attract consumers. As a result of these improvements, product quality and variety have increased, and price difference between raw milk and pasteurized milk has decreased.

In the literature, many studies have identified the factors affecting milk consumption. Erdal and Tokgoz (2011) compared households' raw and pasteurized milk consumer behaviors in Erzincan and found that raw milk was preferred generally because of families' habits. Their results also indicated that there were relationships with different significant levels among families' milk

consumption preferences and income, education, gender and age. Seker et al. (2012) investigated milk consumption behaviors and factors effective in urban area of Elazig. According to this study, gender, education, household size and income caused differences in milk consumption preferences in various levels. Boniface et al. (2012) from Malaysia aimed to determine perceptions toward various milk types and factors affecting milk consumption. As a result, it is found that demographic variables, especially age and ethnicity, had great influence on consumers' milk preferences. Kurajdova et al. (2015) analyzed effects of selected psychological and personal factors on milk consumption to identify predictors that could be practically used segmentation criteria by marketing managers in marketing strategy development in Slovakia. In the study, it is found that there was relationship between gender, age, education, income and motives of milk purchase. Pinto et al. (2016) identified the preferences of consumers of dairy products to better understanding the dairy market in Minas Gerais State, Brazil. Consequently, they found that most of the consumers (73%, specifically) would pay more for a better quality, functional product, of which 58.48 percent attributed their answers to health concerns. Nga (2016) found the factors impact on the milk consumption behavior of Vietnamese. In the study, results showed that three factors: the average monthly income of the household, education and career had of the positive and significant influence to consumer behavior of milk consumption. Consumers had more professional career, higher education levels and higher incomes also consumed milk more often. Hosseini et al. (2017) determined associated factors of milk consumption among students by using Health Belief Model in Iran. The results indicated, of all the participants, 41 percent consumed milk daily and 59 percent did not consume milk. The perceived benefits, perceived barriers, perceived self-efficacy had statistically significant relationships with daily milk consumption.

Women constitute almost half of Turkey's population and as a large consumer group with an increasing life expectancy to around 74 years in Turkey (TYRKSTAT 2018), they should be observed by market experts. They have also emphasized the importance in considering different consumption and purchasing behaviors of women among various generations. It is known that consumption and purchasing behaviors are different among various generations. McCrindle (2014) defines a generation as a group of people born in the same era, shaped by the same times and influenced by the same social markers- in other words, a cohort united by socio-demographic characteristics and life stage, conditions and technology, events and experiences. The literature review in the field reveal very little, if not none, attention on investigating milk consumption preferences and purchasing behaviors considering differences among generations. Thus, the aim of this study is to determine differences in milk consumption preferences and factors affecting purchasing behavior among women from the intergeneration point of view in urban area of Adana province. To achieve these goals;

1. Socio-demographic characteristics were given,
2. Consumer's milk consumption preferences (consumption quantity, milk purchasing form preferences and places for milk purchasing) by intergeneration were revealed,
3. Factors affecting purchasing behavior by intergeneration were defined.

METHODOLOGY

Material

Primary data were obtained from the survey carried out among three generations of women in urban areas of Adana, which is the sixth largest city in Turkey situated in the southern part of the country. Adana is one of the most important cities with rich agricultural territories and a thriving textile industry.

Previous studies were evaluated and used in constructing the questionnaire for the study (Prescott et al. 2002; Akbay and Tiryaki 2007; Ates and Ceylan 2010; Gunduz et al. 2012; Seker et al. 2012). The items in the survey were tested in a pilot study and then necessary adjustments were effected before the study was conducted from October, 2013 to November 2013. Items in the survey were grouped into three: consumers' demographic characteristics, consumers' milk consumption preferences, and factors affecting consumer purchasing behaviors.

Methods

Method of Sampling

Women living in the urban areas of Adana constituted the study population. The main reason for conducting the study using women participants was based on their roles in planning family budget and consumption activities; as well as their active roles in society.

Three generations of women were included in the study. Different studies define generations in different age groups. In this study, the first generation is defined as old women aged 59 years and above; the second generation is defined as middle-aged women between 35-59 years of age while the third generations is defined as young women between 15-34 years of age.

The sample size was calculated using Simple Random Sampling (Malhotra 2004). This sampling method is usually preferred in consumption studies related with households. Number of samples is obtained as follows:

$$n = (z^2)\frac{(p+q)}{d}$$

n= Sample size

z=Standardized value corresponding to the confidence level

p = Estimating observed variable attribute in the community (it is accepted as 50% to obtain thehighest sample size)

q = Estimation of different objects that are not observed

d = Allowable error in the measurement range of observations

Based on the sampling method, 384 women were sampled for the study. Questionnaires were completed by 32 women in the first generation and 219 and 133 women in the second and third generations, respectively.

Method of Analysis

In this study, frequencies and ratios were calculated to determine the demographic characteristics and consumption preferences of women. Also, factor analysis was conducted to determine the features of the products that have an effect on purchasing behaviors of consumers. Factor analysis is a dimension-reduction tool that can be used to reduce a large set of variables to a small set while maintaining most of the information in the large set. It is a mathematical procedure that transforms a number of (possibly) correlated variables into a (smaller) number of uncorrelated variables called principal components (Yong and Pearce 2013). For this analysis, participants were asked to state the features they considered when buying milk. They were requested to rate the features on a Likert scale (from 1 to 5 where 1: very ineffective and 5: very effective) for each feature. The obtained data were analyzed by "Principal Component Analysis" and Varimax rotation.

The broad purpose of factor analysis is to summarize large datasets that consist of several variables, so that relationships and patterns can be easily interpreted. It is normally used to regroup variables into a limited set of clusters based on shared variance. Factor analysis uses mathematical procedures for the simplification of interrelated measures to discover patterns in a set of variables. This analysis operates on the notion that measurable and observable variables can be reduced to fewer latent variables that share a common variance and are unobservable, which is known as reducing dimensionality (Bartholomew et al. 2011). These unobservable factors are not directly measured but are essentially hypothetical constructs that are used to represent variables.

In the 'classical factor analysis' mathematical model, p denotes the number of variables ($X_1, X_2,\ldots,X_p$) and m denotes the number of underlying factors (F1, F2,…,Fm). X_j is the variable represented in latent factors. Hence, this model assumes that there are m underlying factors whereby each observed variables is a linear function of these factors together with a residual variate. This model intends to reproduce maximum correlations.

Xj= aj1F1+aj2F2+.....+ajmFm+ej

where j=1,2,.....,p.

The factor loadings aj1, aj2,…,ajm denotes that aj1 is the factor loading of the j^{th} variable on the 1^{st} factor. The specific or unique factor is denoted by ej. The factor loadings give an idea ofhow much the variable has contributed to the factor; the larger the factor loading the more the variable has contributed to that factor (Harman 1976).

The principal component method was applied on the evaluated statements. An eigenvalue greater than one was selected as the criteria for determining the number of factors to be extracted. Factor loadings higher than 0.4 were

used in order to place original variables into a specific factor (Cerjak et al. 2011). The results were also combined with the orthogonal methods of rotation Varimax.

The best factorial model was formed to take into acoount the values of KMO tests (Kaiser-Mayer-Olkin tests) and Barlett sphericity, the value of communalities and the logical sense between factors. The minimum of 0.50 was used as the acceptable limit forKMO. The values obtained atthe four stages of KMO and the communalities of each variable were assessed. In stages with two factors and communalities below 0.50, one item was removed at a time, and the result was checked for the next step. The analysis of anti-image correlation matrix and commonalities were conducted. The anti-image correlation matrix represents the partial correlations between variables after factorial analysis, which indicates the level at which factors correlate with one another. The commonality represents the proportion of variance of each variable in the analysis (Schwab 2010). The Cronbach's alpha coefficient was used to evaluate the reliability of the scale, that is, the level at which the measurement is error-free and presents consistent results (Akgul and Cevik 2003).

In the following stage, ANOVA was used to define differences among intergenerations by factor scores. Analysis of variance (ANOVA) was used to determine if the samples differed significantly ateach category. Analysis of Variance (ANOVA) is a hypothesis-testing technique used to test the equality of two or more population (or treatment) means by examining the variances of obtained samples (Beins and McCarthy 2012). Tukey's Studentized Range Test was used to determine which of the samples were different.

RESULTS AND DISCUSSION

Demographic Characteristics

Participants of 34.6 percent of were between 15-34 years, 57.0 percentwere between 34-59 years while 8.4 percent were above 59 years. Average women age was 40.2 years and average education period was10.3 years. Furthermore, the average household size was 4.1 persons and average period of residency in the province was 30.5 year. 77.1 percent of the females were married and almost half of them worked at different jobs. Average income was determined as 2,254[1] TL with one third of the sample having an income of between 1.001-2.000 TL (Table 1).

Consumer Preferences

Consumption Quantity

Average milk consumption quantity was found to be 4.8 L per week in the households. Total consumption of Pasteurized milk and raw

Table 1: Women's demographic characteristics

Variables	*f*	*(%)*	*Variables*	*f*	*(%)*
Age Groups			*Employment Status*		
15-34 years (Average: 27.1)	133	34.6	Employed	186	48.4
35-59 years (Average: 44.5)	219	57.0	Not employed	181	47.1
59+ years (Average: 64.8)	32	8.4	Retired	17	4.4
Total (General average: 40.2)	384	100.0	Total	384	100.0
Marital Status			*Occupation Status*		
Married	296	77.1	Public personnel	80	47.3
Single	88	22.9	Self employed	41	24.3
Total	384	100.0	Private sector	48	28.4
Education Status			Total	169	100.0
Literate	23	6.0	*Income Groups (TL*)*		
Primary school graduates	56	14.6	1000 and below	114	29.7
Secondary school graduates	76	19.8	1001-2000	126	32.8
High school graduates	128	33.3	2001-3000	87	22.7
College graduates	57	14.8	3001-4000	20	5.2
MSc and PhD graduates	44	11.5	4001 and above	37	9.6
Total	384	100.0	Total	384	100.0
Average Years of Living in the City			General average	2.254,0	
III. Generation	21.5		*Average Family Size (person)*		
II. Generation	34.8		III. Generation	3.7	
I. Generation	38.8		II. Generation	4.2	
Average	30.5		I. Generation	5.3	
General average	4.1				

* Central Bank exchange rate: 1 USD=3.8 Turkish Liras (TCMB 2018)

milk was 2.6 and 2.2 L, respectively. There were no significant differences in terms of total and pasteurized milk consumption quantities among the intergeneration. However, raw milk consumption quantity had statistically significant difference among the intergeneration. Raw milk consumption quantity was 3.0 L for the first generation, 2.3 L for the second generation and 1.7 L for the third generation, while pasteurized milk quantity was 1.8, 2.7 and 2.7 L respectively (Table 2).

Table 2: Average milk consumption quantity in households (lt/week)

Generations	*Raw milk*	*Pasteurized milk*	*Total*
I. Generation	3.0	1.8	4.8
II. Generation	2.3	2.7	5.0
III. Generation	1.7	2.7	4.4
Average	2.2	2.6	4.8
Sig	0.026	0.130	0.083

Note: Sig: 0.05.

Milk Purchasing Form Preferences

Woman consumers sometimes preferred only raw or pasteurized milk, but sometimes both raw and pasteurized milk. It was found that 54.4 percent of women purchased only pasteurized milk, 25.3 percent preferred only raw milk and 20.3 percent purchased both raw and pasteurized milk. Only raw or only pasteurized milk purchasing tendency were at similar levels in the first generation, however purchasing only pasteurized milk was preferred considerably at higher rates by the second and third generations (51, and 63.9%, respectively). There was statistically significant difference in milk purchasing preferences among the generations (Table 3).

Places for Milk Purchasing

Percentage of 46.3 of women purchased raw milk from milkmen, 32.0 percent from acquaintance and 21.7 percent from shops selling dairy products. 53.7 percent of pasteurized milk was bought from markets, 34.8 percent from supermarkets, groceries (9.4%) and wholesale units (2.1%) (Table 4).

Factors Affecting Milk Purchasing Behavior within Intergeneration

To define factors affecting purchasing behavior, a scale consisting of 13 statements was completed by the woman participants. The data obtained from the scale was analyzed by "Principal Component Analysis" model with Varimax rotation. As a result of factor analysis, 3 factors were determined. KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) test value was determined as 0.838, thus indicating that the sample size was sufficient for further analyses. Barlett test value, which provides information about the homogeneity of variance was calculated as 1911.228 (sig= 0.000). To measure internal consistency, Cronbach's alpha was calculated (Hair et al. 1998) and determined as 0.723 for the study.

Three factors explained 52.67 percent of total variance. The *first factor* "quality and facility" based on the variables included explained 31.33 percent of total variance. This factor included: freshness, quality, ease of use, ready to use, taste and flavor and finding in-stock. The *second factor* "health and brand" explained 13.41 percent of total variance. This factor included: pasteurization-sterilization, packing material, and brand. The *third factor* "advertising and price" explained 8.276 percent of total variance. This

Table 3: Women's milk purchasing form preferences

Purchase form	*1st generation (n/32)*		*2nd generation (n/219)*		*3rd generation (n/133)*		*Total (n/384)*	
	f	*%*	*f*	*%*	*f*	*%*	*f*	*%*
Only raw milk	12	37.5	54	24.7	31	23.3	97	25.3
Only pasteurized milk	12	37.5	112	51.1	85	63.9	209	54.4
Both raw and pasteurized milk	8	25.0	53	24.2	17	12.8	78	20.3
Total	32	100.0	219	100.0	133	100.0	384	100.0

Note: Chi-square: 0.016

Table 4: Places for milk purchasing

Places for Milk Purchasing	*1st generation (n/20)*		*2nd generation (n/107)*		*3rd generation (n/48)*		*Total (n/175)*	
	f	*%*	*f*	*%*	*f*	*%*	*f*	*%*
Milkman	11	55.0	43	40.2	27	56.2	81	46.3
Acquaintanceship	7	35.0	36	33.6	13	27.1	56	32.0
Dairy products selling unit	2	10.0	28	26.2	8	16.7	38	21.7
Total	20	100.0	107	100.0	48	100.0	175	100.0
Places for Pasteurized Purchasing Milk	*1st generation (n/20)*		*2nd generation (n/165)*		*3rd generation (n/102)*		*Total (n/287)*	
	f	*%*	*f*	*%*	*f*	*%*	*f*	*%*
Market	13	65.0	92	55.8	49	48.0	154	53.7
Supermarket	5	25.0	50	30.3	45	44.1	100	34.8
Grocery	1	5.0	20	12.1	6	5.9	27	9.4
Wholesale unit	1	5.0	3	1.8	2	2.0	6	2.1
Total	20	100.0	165	100.0	102	100.0	287	100.0

factor consisted of promotion, advertising variety and price (Table 5).

Table 5: Factors affecting women's purchasing behavior

Features	*Factors*		
	Quality and facility	*Health and brand*	*Advertising and price*
Freshness	**.841**	.269	-.033
Quality	**.817**	.214	-.080
Ease of use	**.801**	.134	.054
Ready to use	**.691**	.059	.121
Taste and flavor	**.686**	.187	-.060
Shelf life	**.572**	.261	.209
Pasteurization-sterilization	.233	**.747**	.085
Packing material	.100	**.740**	.178
Brand	.311	**.647**	.115
Promotion	-.107	.080	**.662**
Advertising	-.144	.438	**.633**
Variety	.211	.258	**.619**
Price	.516	-.294	**.543**
Explained variance	31.329	44.397	52.673

Note: Cronbach's Alpha: 0.723
KMO: 0.838
Bartlett Test Value = 1.911, 228; sig= 0.000

The average scores of the factors were calculated for each generation and shown in Table 6. The averages of each factor were similar in terms of all generations. However, the old generation had a higher average in the first factor and lower average in the second and third factors.

Differences among the three generations for each factor are presented in Table 7. The analysis indicated no significant differences between the first and the second factors among generations. However, there was a statistically significant difference for the third factor in the third generation, which existed for the old generation.

Raw milk consumption quantity has tendency to increase for first generation. Women in this group preference to prepare other milk products (yoghurt, desert or cheese) at home since raw milk price is lower than pasteurized milk price and previous consumption habits.

Woman consumers sometimes preferred only raw or pasteurized milk, but sometimes both raw and pasteurized milk. In research area, the women uses raw milk for preparation of milk products in common, especially in the first generation.

Table 6: Averages of groups based on factors

Factors	*1st generation*	*2nd generation*	*3rd generation*
Quality and facility	4.72	4.51	4.59
Health and brand	3.59	3.97	3.92
Advertising and price	2.97	3.44	3.45

Table 7: Differences among generations based on factors

Factors	*F*	*P*	*Multiple comparisons (Scheffe test) results*			*Reasons of difference*
Quality and Facility	1.001	.368		*Groups*	*Sig.*	No difference
			1.Gr	2.Gr	.426	
			3.Gr		.725	
			2.Gr	3.Gr	.718	
Health and Brand	1.961	.142		*Groups*	*Sig.*	No difference
			1.Gr	2.Gr	.142	
			3.Gr		.268	
			2.Gr	3.Gr	.884	
Advertising and Price				*Groups*	*Sig.*	Old women
	3.845	.022	1.Gr	2.Gr	.029	
			3.Gr		.032	
			2.Gr	3.Gr	.992	

Analysis of intergenerational factors revealed three factors: quality and facility, health and brand, and promotion and price. Boniface found five factors effecting dairy purchasing behavior as nutrition, external, dairy negative, milk negative, dairy packaging. As Gunduz et al. (2013) quoted that most important factors affecting the sampled consumers' choices in dairy products were hygiene, healthy, expiration date, doubt of animal borne disease, health problems of consumer and reasonable price. Celik et al. (2005) defined the factors on packaged milk purchasing as brand, price, expire date, fat content and package color. Similar to these studies, Ozel (2008) stated that low fat content, good brand image and reasonable price are significant factors on milk consumption.

CONCLUSION

This study focused on revealing differences in milk consumption preferences and determining factors affecting purchasing behavior among women of different intergeneration. The overall data obtained in the study showed that while purchasing of other food products was performed by both parents and spouses together, milk was purchased only by mothers or wives and thus should be the focus of marketing elements.

In households, the average milk consumption quantity decreased from the 1st to the 3rd generation. The main reasons for this could be that the average household size in the 3rd generation was smaller than the other two generations. On the other hand, pasteurized milk consumption quantity increased towards the 3rd generation. In this regard, it can be said that raw milk was preferred by the1st and 2nd generations because previous habits about milk consumption are still important. It is common knowledge that raw or pasteurized milk is purchased for their traditional use. That is, raw milk is used to make dairy products, while pasteurized milk is freshly consumed.

In this study, three main factors were identified to determine milk purchasing behaviors of women. These factors are: quality and facility, health and brand, advertising and price. Only one of these factors; advertising and promotion was statistically significant among the generations and this difference was significant in the old generation.

In conclusion, companies that opt to have a competing power in the market need further studies which focus on consumer preferences and purchasing behaviors. The result of such studies can provide better insights for consumer habits and shape production and consumption, accordingly. Eventually, consumers can benefit from better quality and wider variety of reliable products to meet their ever increasing needs.

REFERENCES

Akbay C, Tiryaki GY 2007. Tüketicilerin ambalajli ve açik süt tüketim aliskanliklarinin karsilastirmali olarak incelenmesi: Kahramanmaras örnesgi. *KSU Fen ve Mühendislik Dergisi*, 10(1): 89-96.

Akgul A, Cevek O 2003. Istatistiksel analiz teknikler: Spss'te isletme Yönetimi uygulamalan. Sti, Ankara: Emek ofset Ltd.

Anonymous 2018. Dünya ve Türkiye'de Süt Sektör Istatistikleri-2016, *Ulusal Süt Konseyi*, Mayis 2017, Ankara.

Ates HC, Ceylan M 2010. Effects of socio-economic factors on the consumption of milk, yoghurt, and cheese: Insights from Turkey. *British Food Journal*, 112(3): 234-250.

Bartholomew D, Knotts M, Moustaki I 2011. *Latent Variable Models and Factor Analysis: A Unified Approach.* 3rd Edition. West Sussex, UK: John Wiley & Sons.

Beins BC, McCarthy MA 2012. *Research Methods and Statistics.* United States of America: Pearson Education Inc.

Boniface B, Wendy J, Umberger WJ 2012. Factors Influencing Malaysian Consumers' Consumption of Dairy Products. *56th AARES Annual Conference*, 7-10 February, Fremantle, Western Australia.

Celik Y, Karli B, Bilgic A, Serafettin C 2005. Sanliurfa ili kentsel alanda tüketicilerin süt tüketim düzeyleri ve süt tüketim aliskanliklari. *Tarim Ekonomisi Dergisi*, 11(1): 5-12.

Cerjak M, Karolyi D, Mesic Z 2011. Consumers' attitudes towards farm animal welfare and their influence on meat consumption. *Agriculturae Conspectus Scientificus*, 76(4): 283-286.

Erdal G, Tokgoz K 2011. Tüketicilerin ambalajli ve açik süt tüketim tercihlerini etkileyen faktörler: Erzincan ili örnegi. *KMÜ Sosyal ve Ekonomik Arastirmalar Dergisi*, 13(20): 111-115.

Gunduz O, Kiliç O, Emir M, Aydin G 2012. Süt ve süt ürünleri tüketiminde tüketici tercihlerini etkileyen faktörler: Samsun Ili ornegi. *Gida Teknolojileri Elektronik Dergisi*, 8(1): 36-43.

Harman HH 1976. *Modern Factor Analysis*. Revised 3rd Edition. Chicago, IL: University of Chicago Press.

Hair JR, Anderson E, Tahtam R, Balck W 1998. *Multivariate Data Analysis*. 5th Edition. New Jersey: Prentice Hall.

Hosseini Z, Gharlipour Z, Mohebi S, Sharifirad, G, Mohammadbeigi A, Kazazloo Z 2017. Associated factors of milk consumption among students: Using health belief model (HBM). *International Journal of Pediatrics*, 5(2): 4439-4448.

Kirdar SS 2001. Sütün beslenmedeki yeri ve önemi. *S. D. U Fen Bilimleri Enstitüsü Dergisi*, 5(1): 121-131.

Kurajdova K, Petrovicova JT, Kascakova A 2015. Factors influencing milk consumption and purchase behavior – Evidence from Slovakia. *Procedia Economics and Finance*, 34: 573-580.

Malhotra NK 2004. *Marketing Research (An Applied Orientation).* 4th Edition, New Jersey: Pearson Prentice.

McCrindle M 2014. *The ABC of XYZ: Understanding the Global Generations.* Australia: McCrindle Research Pty Ltd, Bella Vista.

Nga BT 2016. Factors affecting milk consumption behavior in Vietnam: A case study in Long Bien District of Hanoi. *Journal of Scientific and Engineering Research*, 3(3): 490-496.

Ozel G 2008. Tüketicilerin süt tercihinde etkili olan faktörlerin incelenmesine yönelik bir arastirma. *Süleyman Demirel Universitesi Iktisadi ve Idari Bilimler Fakültesi Dergisi*, 13(3): 227-240.

Pinto VRA, Melol LF, Balbino DF, Novaes, HF, Ngrete MC and Sousa TD 2016. The evaluation of consumer behavior influence on the buying process of dairy products in Minas Gerais State, Brazil. *Journal of Food and Nutrition Research*, 4(1): 51-59.

Prescott J, Young O, O'Neill L, Yau NJN, Stevans R 2002. Motives for food choice: A comparison of consumers from Japan, Taiwan, Malaysia and New Zealand. *Food Quality and Preference*, 13: 489-495.

Schwab AJ 2010. Electronic Classroom. From <http://www.utexas.edu/ssw/eclassroom/schwab.html> (Retrieved on 10 October 2010).

Seker I, Seker P, Sahin M, Ozen VS, Akdeniz A, Erkmen O, Kislalioglu I, Sargin G, Dogu GB 2012. Elazig ili merkez ilçede tüketicilerin süt tüketim aliskanliklari ve bu aliskanliklari etkileyen faktörlerin belirlenmesi. *F.U. Saglik Bilimleri Veterinerlik Dergisi*, 26(3): 131-143.

Simsek O, Cetin C, Bilgin B 2005. Istanbul ilinde içme sütü tüketim aliskanliklari ve bu aliskanliklari etkileyen faktörlerin belirlenmesi üzerine bir arastirma. *Tekirdað Ziraat Fakültesi Dergisi*, 2(1): 23-35.

TURKSTAT 2018. Life Tables, 2014-2016. No: 24-640. 27 September 2017. From <www.tuikgov.tr> (Retrieved on 20 March 2018).

Yong AG, Pearce S 2013. A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2): 79-94.

Paper received for publication on April 2017
Paper accepted for publication on November 2017