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**RESEARCH INTO THE NUTRITION HABITS OF MIDDLE-AGED AND  
OLD-AGED PEOPLE**

**ABSTRACT**

This research was planned and conducted to determine the nutrition habits of the middle-aged and elderly people living in Denizli. The research involved 225 individuals, 48.8% of whom were in the middle age group and 51.1% of whom were in the old age group. The ratio of the females was 41.8% and the ratio of the males was 58.2%. Sixty four point nine percent of the participants were primary school graduates and 35.1% were middle school graduates. The results of the study revealed that 81.8% of the middle-aged and 80.0% of the old-aged were satisfied with their nutrition habits ( $p>0.05$ ).

**Keywords:** Middle Age, Old Age, Nutrition Habit

**ORTA YAŞLI VE YAŞLI BİREYLERİN BESLENME ALIŞKANLIKLARI  
ÜZERİNE BİR ARAŞTIRMA**

**ÖZET**

Bu araştırma Denizli'de yaşayan orta yaşlı ve yaşlı bireylerin beslenme alışkanlıklarını belirlemek amacıyla planlanmış ve yürütülmüştür. Araştırma kapsamına rasgele örnekleme yöntemiyle Denizli'de yaşayan %48,8'i orta yaş grubunda, %51,1'i yaşlı, toplam 225 birey alınmıştır. Kadınlar %41,8, erkekler %58,2 oranındadır. İlköğrenimlilerin oranı %64,9 ve orta öğrenimlilerin oranı %35,1'dir. Araştırma sonucunda orta yaşlıların % 81,8'inin yaşlıların %80,0'inin beslenme alışkanlıklarından memnun oldukları belirlenmiştir ( $p>0,05$ ).

**Anahtar Kelimeler:** Orta Yaş, Yaşlılık, Beslenme Alışkanlığı



## 1. INTRODUCTION (GİRİŞ)

Old age is defined in terms of different areas as biological, chronological, psychological and social. Biological old age can be defined as the decrease in the functions of the human organism (decrease in physical and mental capacities due to progressing age) and loss of cells. Chronological age explains the stages of age from birth until death through a historical process. The World Health Organization is known to assess the chronological order of age in three categories. The first category specifies those between 45-59 as the middle aged, the second category includes those between 60-74 and classifies them as the old, the third category specifies 75-89-year-old individuals as the late old, and those above 90 are the elderly (Gürol, 1993). In general, people at the age of 65 years and above are considered old. The term 'normal ageing' is defined as the changes in the anatomical structure and physiological functions emerging with time, regardless of a disease. Ageing of the population is very important for both developing and developed countries. One of the biggest problems of the twenty first century will not only be the provision of the health, independence and motion of the elderly population, but also determining ways of protecting them from diseases. Developments and changes in economic and societal structures bring about various health problems. One of the issues arising from societal changes is the need for the increase in the living quality of the elderly. Every country solves the mental, social and nutritional problems of the elderly within the frame of their own customs and traditions. Many diseases seen in late ages are affected by nutritional factors. Important health problems are caused by not benefiting enough from the foods, due to physiological and anatomic changes as well as the physical and mental problems of this age, in addition to not being nourished well due to poor socio-economic conditions (Sürücüoğlu and Özçelik, 2003).

The advances in science and technology, and the developments in the methods of diagnosis and treatment in medicine have extended life expectancy. While such improvement has caused man to live longer, in general their health has been deteriorated, their activities have diminished, their productive capacity has been limited and, in a way, it has increased the problems of old people who are in need of care (Görgün, et al. 2005). The lifestyles and nutrition habits of today are much different from those of the previous generations. People lead different lifestyles today owing to technological innovations and the improvements in living conditions. People, especially metropolitans, usually work seated, spare more time for themselves, move less and are exposed to more stress. This way of living changes the nutrition culture and habits considerably. It has stimulated people to eat excessively, drink more alcohol, and consume more pure food, and food processed with fats and additives. Such changes in the lives of people have caused their physical structure to be deteriorated and the body weight appropriate for height to increase (Baysal 1996; Sürücüoğlu 1999).

## 2. RESEARCH SIGNIFICANCE (ARAŞTIRMANIN ÖNEMİ)

Ageing of the population is very important for both developing and developed countries. One of the biggest problems of the twenty first century will not only be the provision of the health, independence and motion of the elderly population, but also determining ways of protecting them from diseases. Developments and changes in economic and societal structures bring about various health problems. One of the issues arising from societal changes is the need for the increase in the living quality of the elderly. Every country



solves the mental, social and nutritional problems of the elderly within the frame of their own customs and traditions. Many diseases seen in late ages are affected by nutritional factors. Important health problems are caused by not benefiting enough from the foods, due to physiological and anatomic changes as well as the physical and mental problems of this age, in addition to not being nourished well due to poor socio-economic conditions. This research was planned and conducted to determine the nutrition habits of the middle-aged and elderly people living in Denizli.

### **3. MATERIAL AND METHOD (MALZEME VE YÖNTEM)**

The sampling of the research was composed of individuals who were 50 years and above and living in Denizli. The study covered 225 people, 94 of whom were females and 131 of whom were males, selected by the random sampling method. The data were collected by means of a questionnaire, which consisted of three sections: "general information about the participants", "the health condition of the participants" and "the nutrition habits of the participants". The questionnaire was conducted through face to face interviews.

In evaluating the data, individuals below 65 years old were classified as the middle aged, and those who were 65 and above were classified as the old aged. The education levels were grouped into two, including the primary school graduates in the first group, and the middle school and high school graduates in the second group as the secondary school graduates.

The data obtained were evaluated using the statistics program SPSS 11.0 For Windows and analyzed by applying the "Chi-square significance test".

### **4. FINDINGS (BULGULAR)**

#### **4.1. General Information about the Participants (Bireylere İlişkin genel bilgiler)**

The ages of the participants involved in the study varied between 50 and 90, with a mean of  $64.5 \pm 0.6$ . The rate of the middle aged was 48.8%, while that of the old aged was 51.1%. Forty one point eight of the participants were females and 58.2% were males. Sixty seven point six percent were married and 25.8% were widows while 4.8% were divorced and 1.8% never got married. The majority was composed of primary school graduates with 64.9%, and the rate of the secondary school graduates was 35.1%. Twenty eight point four of the participants lived with their spouses and children, 40.9% lived with their spouses only, and 14.2% lived alone. Sixteen point four of them stayed with their children. Nearly half of the participants were retired (49.7%). The ratios of housewives, the self employed, public officials and the unemployed were 30.2%, 12.0%, 5.4% and 2.7%, respectively. Twelve point one percent of them did not have any health security. Twenty four percent benefited from the Retirement Fund of the Government (*Emekli Sandığı*), and 57.6% were connected to the Social Security Organization for the Self Employed (*Bağkur*) and Social Security Institution (*SSK*). The rate of those who were granted a green card was 6.2%.

#### **4.2. General Information about the Health Condition of the Participants (Bireylerin Sağlık Durumlarına İlişkin Bilgiler)**

While the rate of the middle aged participants who did not have any diseases was 56.6%, this ratio was 43.4% among the old aged. The disease rate increases with progressing age. While males with no diseases constituted 68.4%, the rate was lower for females (31.6%).



Fifty five point three percent of the primary school graduates had a chronic disease, whereas this ratio was 44.7% among the secondary school graduates. The disease that ranked first in order in different age, gender and education groups was hypertension. Considering the age variable, old aged individuals had hypertension at the highest rate with 34.4%, while the rate was lower for the middle aged (17.9%). It was also determined that hypertension was more prevalent among males (32.6%) than females (29.9%). The rate of those with hypertension was higher among the primary school graduates (24.2%) than the secondary school graduates (22.2%). The second disease in order was diabetes and the ratio of the middle aged who had this disease (35.9%) was higher than that of the old aged (32.0%). Diabetes was seen more among the secondary school graduates (36.8%) than the primary school graduates (32.1%), and more among the female (34.3%) than the male (28.2%).

In their research conducted to determine the health and nutrition conditions of those staying in an old people's home, Bulduk et al.(2001) established that hypertension was the most prevalent disease among the elderly, and that 48.6% of the females and 45.4% of the males had the disease. This conclusion is similar to the findings of this study.

Bulduk and Demircioğlu (2005) carried out a survey among the elderly and found that old people who had a disease mostly had cardiovascular diseases (21.7%), followed by hypertension (16.7%). In our research, the disease that was seen in the majority of the old people with a disease was hypertension. Şanlıer and Yabancı (2005) carried out a study to determine that the most frequent disease among the old was hypertension (33.6%), which compares to our results.

#### 4.3. Participants' Doing Sports (Bireylerin Spor Yapma Durumu)

Table 1 shows whether the participants do sports. Sixty seven percent of the old people stated that they did sports. This figure declined to 64.5% in the middle age group ( $p>0.05$ ). The rate of the females doing sports (68.1%) was higher than that of the males (64.1%) ( $p>0.05$ ); and the rate of the primary school graduates (45.9%) doing sports was higher than that of the secondary school graduates (41.8%) ( $p>0.05$ ). All of the participants doing sports specified that they did walking.

Table 1. Doing sports  
 (Tablo 1. Spor yapma durumu)

Age	Whether the participants do sports or not						Analysis
	I don't do sports		I do sports		Total		
	S	%	S	%	S	%	
<65	39	35.4	71	64.5	110	100.0	P>0.05
≥65	38	33.0	77	67.0	115	100.0	
Gender	S		S		S		3.083 p>0.05
	%	%	%	%	%		
	Female	30	32.0	64	68.1	94	100.0
Male	47	35.9	84	64.1	131	100.0	
Education	S		S		S		0.145 p>0.05
	%	%	%	%	%		
	Primary school	79	54.1	67	45.9	146	100.0
Secondary school	46	58.2	33	41.8	79	100.0	



#### 4.4. Participants' Smoking (Bireylerin Sigara Kullanma Durumları)

In Table 2, when the participants' smoking habits are examined as per the age variable, it is observed that 51.3% of the old aged never smoked, the highest rate of not smoking; and the same rate for the middle aged is 46.4%. This difference is statistically significant ( $p < 0.01$ ). The proportion of females who never smoked (86.2%) is much higher than that of males (22.1%), which is a statistically meaningful difference ( $p < 0.01$ ). The percentage of the primary school graduates who never smoked (56.8%) is higher than that of the secondary school graduates (34.2%). The effect of education on smoking was found to be statistically significant ( $p < 0.01$ ).

In the research they conducted, Uzundikme and Çakıroğlu (2007) determined that the rate of smokers was higher (25.8%) in the middle age group (50-64) than that of the old age group (21.3%). The rate of smoking males (34.7%) was higher than the rate of smoking females (12.7%). These results are similar to our findings. The results of the research reveal that the rate of smoking middle aged people is higher than that of smoking old aged people (13.9%). More males smoke than females (35.1% and 8.5%, respectively).

Table 2. Participants' smoking  
 (Tablo 2. Sigara içme durumu)

Age									Analysis
	I never smoked		I used to but quit		I smoke		Total		
	S	%	S	%	S	%	S	%	
<65	51	46.4	20	18.2	39	35.4	110	100.0	16.764 $p < 0.01$
≥65	59	51.3	40	34.8	16	13.9	115	100.0	
Gender	1		2		3		Total		90.259 $p < 0.01$
	S	%	S	%	S	%	S	%	
Female	81	86.2	5	5.3	8	8.5	94	100.0	11.239 $p < 0.01$
Male	29	22.1	55	42.0	46	35.1	131	100	
Education	1		2		3		Total		11.239 $p < 0.01$
	S	%	S	%	S	%	S	%	
Primary school	83	56.8	35	24.0	28	19.2	146	100.0	11.239 $p < 0.01$
Secondary school	27	34.2	25	31.6	27	33.3	79	100.0	

#### 4.5. Participants' Drinking Alcoholic Beverages (Bireylerin Alkol Kullanma Durumu)

Table 3 indicates the state of participants' drinking alcoholic beverages. Nearly 78.3% of the participants never drank alcoholic beverages up to date. This ratio drops to 60.9% in the middle aged group, and the difference is statistically significant ( $p < 0.05$ ). The percentage of females who never had any alcoholic beverages is higher (94.7%) than that of males. (51.9%). The effect of gender on the consumption of alcoholic beverages is statistically meaningful ( $p < 0.01$ ). The rate of the primary school graduates who never drank is higher (78.8%) than that of the secondary school graduates who never drank (53.2%). This difference is also statistically significant ( $p < 0.01$ ).

Table 3. Participants' drinking alcoholic beverages  
(Tablo 3. Alkol Kullanma Durumu)

Age	Drinking alcoholic beverages								Analysis
	I never had alcoholic beverages		I rarely drink alcoholic beverages		I drink every day		Total		
	S	%	S	%	S	%	S	%	
<65	67	60.9	40	36.4	3	2.7	110	100.0	8.050 p<0.05
≥65	90	78.3	23	20.0	2	1.7	115	100.0	
Gender	Total								47.834 p<0.01
	S	%	S	%	S	%	S	%	
Female	89	94.7	4	4.3	1	1.1	94	100.0	16.426 p<0.01
Male	68	51.9	59	45.0	4	3.1	131	100.0	
Education	Total								16.426 p<0.01
	S	%	S	%	S	%	S	%	
Primary school	115	78.8	28	19.2	3	2.1	146	100.0	16.426 p<0.01
Secondary school	42	53.2	35	44.3	2	2.5	79	100.0	

#### 4.6. Nutrition Habits of Participants

##### (Bireylerin Beslenme Alışkanlıkları)

##### 4.6.1. Number of Meals a Day (Günde Yenilen Öğün Sayısı)

The number of meals that participants have a day are shown in Table 4. The participants were asked how many meals a day they had. The rate of the old aged who have three meals a day (61.7%) is very close to that of the middle-aged (60.0%). The proportion of those who skip meals is 32.2% for the elderly and 18.2% for the middle aged. In the middle aged group, the rate of those who eat 4 or more meals is much higher (21.8%) than that of the elderly group (6.1%). This difference is found statistically significant ( $p<0.01$ ). The rate of the females eating 3 meals a day was 68.1%, which is higher than that of the male (55.7%). However, this difference is not statistically significant ( $p>0.05$ ). The proportion of those who skipped meals was higher among the primary school graduates (30.1%) than the proportion of the secondary school graduates (16.5%), which is found to be statistically significant ( $p<0.05$ ). The reasons for skipping the meals was as follows: not having appetite (48.0%), not having time (28.0%), not having adequate financial resources (13.3%) and in order to lose weight (10.7%).

Soyuer (1994) determined that 68.4% of the elderly had 3 meals a day and 27.3% had 2 meals a day.

Sürücüoğlu (1997) conducted a study on the elderly and found that 98.3% of the male and 92.3% of the female ate 3 meals a day. The results of the research revealed that the rate of the females who did not skip meals was higher (68.1%) than that of the males (55.7%).

Arlı et al. (2003) established that 65.6% of the elderly females and 69.32% of the elderly males had two meals. Similarly, our results also showed that the rate of the females who have 2 meals a day was lower (21.3%) than the males (27.5%).

Uzundikme and Çakıroğlu (2007) carried out research on the consumption of vegetables and fruit in the old age. They found that the proportion of the middle and the old aged who had 3 meals a day was close (68.6% and 68.8%, respectively), which is similar to the findings of this study.

Table 4. Number of meals a day  
(Tablo 4. Günde yenilen öğün sayısı)

Age	Number of meals a day								Analysis Chi-square Sd=2
	2		3		4		Total		
	S	%	S	%	S	%	S	%	
<65	20	18.2	66	60.0	24	21.8	110	100.0	14.471 p<0.01
≥65	37	32.2	71	61.7	7	6.1	115	100.0	
Gender	S		%		S		%		3.577 p>0.05
Female	20	21.3	64	68.1	10	10.6	94	100.0	
Male	37	28.2	73	55.7	21	16.0	131	100.0	
Education	S		%		S		%		9.109 p<0.05
Primary school	44	30.1	88	60.3	14	9.6	146	100.0	
Secondary school	13	16.5	49	62.0	17	21.5	79	100.0	

#### 4.6.2. Frequency of Skipping Meals (Öğün Atlama Sıklığı)

Sixty point seven percent of the participants who skip meals do not eat noon meal, while 21.4% do not have breakfast and 17.9% skip evening meal. Of the old people, 45.2% skipped noon meal every day and the rate was 41.7% for the middle aged. Old aged people skipped noon meal more often compared to the middle aged. This difference is statistically significant ( $p<0.01$ ). The ratio of females who skipped noon meal (57.9%) was found to be higher than that of males (34.4%). Half of the secondary school graduates (50.0%) skipped noon meal every day. The ratio fell back to 40.5% among the primary school graduates.

Fifty percent of the elderly skipped the evening meal every day. In the middle aged group, there were no participants who skipped the evening meal. Thirty seven point five percent of the males and 33.3% of the females skipped the evening meal every day. Forty percent of the primary school graduates stated that they skipped evening meals every day. There were no secondary school graduates skipping the evening meal.

Breakfast was skipped by 60.0% of the old aged people every day. The ratio went down to 44.4% for the middle aged. Fifty five point six percent of the males skipped the morning meal every day. The ratio was lower for females (40.0%). It was determined that the proportion of the primary school graduates skipping the morning meal every day was higher (54.5%) than the proportion of the secondary school graduates (33.3%).

#### 4.6.3. Food and Beverages Consumed between the Meals (Öğün aralarında tüketilen yiyecek ve içecekler)

Eighty five point one percent of the participants stated that they had food between the meals. The most consumed food was fruit with 63.6%, followed by nuts (22.0%), cakes and pies (18.3%), biscuits (16.5%), 'simitT' (5.2%) and chocolate (4.4%).

The most consumed beverage was tea with 75.3%. The consumption rates of Turkish coffee (13.9%) and milk (13.0%) were nearly equal. The consumption rates of herbal teas, 'ayran', cola/fizzy drinks, and freshly squeezed fruit juice were 9.4%, 8.0%, 7.3% and 5.2%,

respectively. It is notable that the consumption of milk and fresh fruit juice, which should be more in the middle and the old age, is the lowest.

#### 4.6.4. Regularity of Meal Times (Bireylerin Yemek Saatlerinin Düzenlilik Durumu)

Table 5 shows the regularity of participants' meal times. More than half of the individuals stated that their meal times were regular. The rate was slightly higher in the old age group (56.5%) than the middle age group (54.5%) ( $p>0.05$ ). The percentage of the males (55.7%) and that of the females (55.3%) whose meal times were regular were equal ( $p>0.05$ ). Similarly, the percentage of the secondary school graduates (55.6%) and that of the primary school graduates (55.5%) whose meal times were regular were equal ( $p>0.05$ ).

Table 5. Regularity of meal times  
 (Tablo 5. Yemek saatlerinin düzenlilik durumu)

Age	Regularity of meal times						Analysis
	Regular		Irregular		Total		Chi-square Sd=1
	S	%	S	%	S	%	0.089 $p>0.05$
<65	60	54.5	50	45.5	110	100.0	
≥65	65	56.5	50	43.5	115	100.0	
Gender	Regular		Irregular		Total		0.004 $p>0.05$
	S	%	S	%	S	%	
	Female	52	55.3	42	44.7	94	
Male	73	55.7	58	44.3	131	100.0	
Education	Regular		Irregular		Total		0.352 $p>0.05$
	S	%	S	%	S	%	
	Primary school	61	55.5	49	44.5	146	
Secondary school	40	55.6	32	44.4	79	100.0	

#### 4.6.5. Satisfaction from Nutrition Habits (Beslenme Alışkanlıklarından Memnun Olma Durumları)

The participants were asked whether they were satisfied with their own nutrition habits (Table 6). The majority specified that they were. Eighty one point one percent of the middle aged and 80.0% of the elderly were content with their nutrition habits ( $p>0.05$ ). The proportions of the females and males who were satisfied with their nutrition habits are equal (80.9%) ( $p>0.05$ ). The secondary school graduates were more satisfied with their nutrition habits than the primary school graduates (88.6% and 76.7%, respectively). This difference is statistically meaningful ( $p<0.05$ ).



Table 6. Satisfaction from nutrition habits  
 (Tablo 6. Beslenme alışkanlıklarından memnun olma durumu)

Age	Satisfaction from nutrition habits						Analysis
	Satisfied		Not satisfied		Total		
	S	%	S	%	S	%	
<65	90	81.8	20	18.2	110	100.0	0.120 p>0.05
≥65	92	80.0	23	20.0	115	100.0	
Gender	S		S		S		0.000 p>0.05
Female	76	80.9	18	19.2	94	100.0	
Male	106	80.9	25	19.1	131	100.0	
Education	S		S		S		4.692 p<0.05
Primary School	112	76.7	33	22.6	146	100.0	
Secondary School	70	88.6	9	11.4	79	100.0	

#### 4.6.6. Participants' Diets

##### (Bireylerin diyet yapma durumu)

Sixty eight point four of the participants within the scope of the research did not follow any diets. The rate of those who did is 31.6%. The highest proportion is in the middle aged group with 29.4% for a diet of losing weight. The rate drops to 9.3% in the old aged group, in which the rate of those who follow a hypertension diet is high (34.9%). Among the males, the highest rate is for the hypertension diet (35.3%) and the rate falls to 20.9% in the middle aged. In the primary school group, the highest rate is for the hypertension and diabetes diets (28.2%). As for the secondary school graduates, the highest proportion is for losing weight and diabetes with 26.1%.

Table 7. Diets  
 (Tablo 7. Diyetler)

	Diets											
	Losing weight		Hypertension		Diabetes		Coronary disorders		Digestive system disorder		Total	
Age	S	%	S	%	S	%	S	%	S	%	S	%
<65	10	29.4	6	17.6	10	29.4	2	5.9	6	17.6	34	100.0
≥65	4	9.3	15	34.9	12	27.9	9	20.9	3	7.0	43	100.0
Gender	S		S		S		S		S		S	
Female	13	30.2	9	20.9	13	30.2	6	13.9	2	4.6	43	100.0
Male	1	2.9	12	35.3	8	23.5	7	20.6	6	17.6	34	100.0
Education	S		S		S		S		S		S	
Primary school	8	20.5	11	28.2	11	28.2	7	17.9	2	5.1	39	100.0
Secondary school	6	26.1	3	13.0	6	26.1	3	13.0	5	21.7	23	100.0



#### 4.6.7. Appetite (İştah Durumu)

The individuals were asked about their appetite (Table 8). While 61.8% of the middle aged specified that their appetite was good, the same ratio drops to 37.4% in the old aged ( $p < 0.01$ ). Fifty eight point eight percent of the males stated that their appetite was good. The ratio drops to 36.2 for the females, and the difference is statistically significant ( $p < 0.01$ ). Whereas 69.9% of the secondary school graduates evaluated their appetites as good, the rate falls to 38.4% among the primary school graduates, which is found to be statistically meaningful ( $p < 0.01$ ).

Table 8. Appetite (Tablo 8. İştah durumu)

Age	Appetite								Analysis Chi-square Sd=2
	good		normal		poor		Total		
	S	%	S	%	S	%	S	%	
<65	68	61.8	37	33.6	5	4.5	110	100.0	p<0.01
≥65	43	37.4	60	52.2	12	10.4	115	100.0	
Gender	good		normal		poor		Total		11.447 p<0.01
	S	%	S	%	S	%	S	%	
	Female	34	36.2	52	55.3	8	8.5	94	
Male	77	58.8	45	34.4	9	6.9	131	100.0	
Education	good		normal		poor		Total		20.148 p<0.01
	S	%	S	%	S	%	S	%	
	Primary school	56	38.4	76	52.1	14	9.6	146	
Secondary school	55	69.6	21	26.6	3	3.8	79	100.0	

#### 4.6.8. Preference for Taste (Tat Tercihi)

The participants were asked about their preferences for taste (Table 9). The rate of those who liked normal tastes is the highest with 70.0%, and the rate drops to 54.8% in the old aged ( $p > 0.05$ ). The proportion of females with normal taste preference is higher (64.9%) than the proportion of the males with the same preference (60.3%) ( $p > 0,05$ ). Sixty seven point one percent of the secondary school graduates like normal tastes. This ratio falls to 59.6% among the primary school graduates ( $p > 0.05$ ).

Table 9. Preference for taste (Tablo 9. Hoşlanılan tat)

Age	Preference for taste										Analysis Chi-square Sd=3
	Salty		Low salt		Normal		No salt		Total		
	S	%	S	%	S	%	S	%	S	%	
<65	8	7.3	16	14.5	77	70.0	9	8.2	110	100.0	6.807 p>0.05
≥65	8	7.0	31	27.0	63	54.8	13	11.3	115	100.0	
Gender	Salty		Low salt		Normal		No salt		Total		1.035 p>0.05
	S	%	S	%	S	%	S	%	S	%	
	Female	6	6.4	17	18.1	61	64.9	10	10.6	94	
Male	10	7.6	30	22.9	79	60.3	12	9.2	131	100.0	
Education	Salty		Low salt		Normal		No salt		Total		2.072 p>0.05
	S	%	S	%	S	%	S	%	S	%	
	Primary school	11	7.5	31	21.2	87	59.6	17	11.6	146	
Secondary school	5	6.3	16	20.3	53	67.1	5	6.3	79	100.0	



## 5. CONCLUSION AND RECOMMENDATIONS (SONUÇ VE ÖNERİLER)

Of the individuals within the scope of the research, while the ratio of the middle aged who do not have any disorders is 56.6%, the ratio drops to 43.4% among the old aged. As the age progresses, the rate of having disorders increases. In different age, gender and education groups, the disease mostly seen is hypertension followed by diabetes. Sixty seven percent of the old aged people have specified that they do sports. The ratio falls to 64.5% in the middle aged group ( $p>0.05$ ). The ratio of the females doing sports (68.1%) is higher than that of the males (64.1%) and the ratio of the primary school graduates doing sports (45.9%) is higher than that of the secondary school graduates (41.8%) ( $p>0.05$ ). All of the participants doing sports stated that they did walking. Walking regularly has positive effects on health at every age period.

More than half of both the elderly (61.7%) and the middle aged (60.0%) have 3 meals a day. The rate of the elderly who skip meals (32.2%) is higher than that of the middle aged (18.2%). Skipping meals is an unhealthy habit. At least three meals a day should be eaten to be healthy.

Eighty five point one percent of the individuals stated that they consumed food between the meals. Fruit is the food that is consumed most between the meals (63.6%). This is satisfactory as fruits are rich in vitamins and minerals; moreover, they are much more nourishing and much healthier than food such as chocolates, cookies and pastry, which provide high energy with low nourishing value. Among the beverages that individuals have between the meals, tea is the most commonly consumed beverage with 75.3%. Milk is consumed by 13.0% and freshly squeezed fruit juice by 5.2%. Whereas the consumption of these two should be ample in the middle and old age, such low consumption is a negative attitude for health.

More than half of the research participants have stated that their meal times are regular. The rate is slightly higher in the old aged group (56.5%) than the middle aged (54.5%) ( $p>0.05$ ). Regular meal times, or having the meals at the same hour every day, will positively affect the health of an individual.

The research results have indicated that the middle aged (35.4%), the males (35.1%) and the secondary school graduates (33.3%) smoked more than the old aged (13.9%), the females (8.5%) and the primary school graduates (19.2%), when compared respectively. Seventy eight point three percent of the elderly have never drunk alcoholic beverages up to date. This rate falls to 60.9% in the middle aged group. This difference has been found to be statistically meaningful ( $p<0.01$ ). The proportion of the females who never consumed alcoholic beverages (94.7%) is much higher than that of the males (51.9%). The effect of gender on alcohol use has been found to be statistically significant ( $p<0.01$ ). The rate of the primary school graduates who have never consumed alcoholic beverages (78.8%) is higher than the rate of the secondary school graduates who have never drunk alcoholic beverages, which is also statistically significant ( $p<0.01$ ). Similar to the situation in smoking, it can be asserted that alcohol use is higher among the middle aged, males and the secondary school graduates than the old aged, females and the primary school graduates. The participants have been asked about their satisfaction with their nutrition habits. Most of them have stated that they were. Eighty one point one percent of the middle aged and 80.0% of the elderly are content with their nutrition habits ( $p>0.05$ ). The proportions of the females and males who are satisfied with their nutrition habits are equal (80.9%) ( $p>0.05$ ). The secondary school graduates are more satisfied with their nutrition habits than the primary school

graduates (88.6% and 76.7%, respectively). This difference is statistically meaningful ( $p < 0.05$ ). It has been determined that as the education level increases, satisfaction from nutrition habits also increases.

Sixty eight point four of the participants within the scope of the research do not follow any diets. The rate of those who do so is 31.6%. The highest proportion is in the middle aged group with 29.4% for a diet of losing weight. The rate drops to 9.3% in the old aged group, in which the rate of those who follow a hypertension diet is high (34.9%). It is observed that as the age progresses, the rate of having a hypertension diet increases. Among the males, the highest rate is for the hypertension diet (35.3%) and the rate falls to 20.9% in the middle aged. In the primary school group, the highest rate is for the hypertension and diabetes diets (28.2%). As for the secondary school graduates, the highest proportion is for losing weight and diabetes with 26.1%. It has been established that the ratio of those on a hypertension diet is higher among the old aged, males, and the primary school graduates than the middle aged, females, and the secondary school graduates, respectively.

The individuals have been asked about their appetite. The middle aged, males and the secondary school graduates evaluate their appetites as better than the old aged, females and the primary school graduates, respectively.

The participants' choice of taste has been determined. The rate of those who like normal tastes is the highest with 70.0%, and the rate drops to 54.8% in the old aged. The proportion of females with normal taste preference is higher (64.9%) than the proportion of the males with the same preference (60.3%). Sixty seven point one percent of the secondary school graduates like normal tastes. This ratio falls to 59.6% among the primary school graduates.

An individual should be nourished adequately and in a balanced way in order to be mentally and physically healthy and to protect his/her health in every age period. This can only be possible by good nutrition habits which are acquired at very young ages. In later ages, it is very difficult to change adverse nutrition habits. Therefore, individuals should try to develop positive nutrition habits during their life time and if they have negative attitudes, they should try to change them.

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