ISSN:1306-3111 e-Journal of New World Sciences Academy

2007, Volume: 2, Number: 3

Article Number: C0008



SOCIAL SCIENCES

HOME ECONOMY Nurten Çekal

Received: February 2007 University of Pamukkale Accepted: July 2007 ncekal@pamukkale.edu.tr © 2007 www.newwsa.com Denizli-Turkiye

### FOOD PREPARATION AND COOKING METHODS APPLIED BY COOKS WORKING IN HOLIDAY RESORTS

#### ABSTRACT

This study has been conducted among 148 cooks in order to determine the accuracy of the food preparation and cooking methods of the cooks employed in holiday villages, star hotels and official organizations. The research was conducted in the provinces of Aydın, Antalya, Denizli and Muğla, and the holiday towns affiliated to these provinces. Of these cooks, 38 worked in holiday villages, 78 worked in star hotels and 32 worked in the kitchens of official organizations. Out of the 78 cooks in the star hotels, 16, 19 and 43 cooks worked in three-star, four-star and five-star hotels, respectively. Forty four point six percent (44.6%) of the cooks involved in the study were 30 years old or older and %40.5% of them were primary school graduates. It has been determined that certain meals are cooked by applying wrong methods, and the rates are as follows: 98% cooked rice wrongly; 66.9% cooked milky desserts wrongly; 61.5% cooked pasta wrongly and 76.4% cooked leguminous seeds wrongly.

**Keywords:** Cooks, Food preparation and Cooking Methods, Nutrition.

## TATİL BELDELERİNDE ÇALIŞAN AŞÇILARIN BESİN HAZIRLAMA VE PİSİRME YÖNTEMLERİNE İLİSKİN UYGULAMALARI

## ÖZET

Bu çalışma tatil köyü, yıldızlı otel ve resmi kurumlarda çalışan aşçıların besin hazırlama ve pişirme yöntemlerinin doğruluğunu belirlemek amacı ile 148 aşçı üzerinde yürütülmüştür. Araştırma Aydın, Antalya, Denizli ve Muğla illeri ve buralara bağlı tatil beldelerinde yürütülmüştür. Araştırma kapsamına alınan aşçıların 38'i tatil köyü, 78'i yıldızlı otel, 32'si ise resmi kurum mutfaklarında çalışmaktadır. Otellerde çalışan 78 aşçıdan 16'sı 3 yıldızlı, 19'u 4 yıldızlı ve 43'ü 5 yıldızlı otellerde çalışmaktadır. Araştırma sonuçları aşçıların %44.6'sının 30 yaş ve daha alt yaş grubunda, %40.5'inin ise ilkokul mezunu olduğunu göstermiştir. Aşçıların %98'inin pilavı, %66.9'unun sütlü tatlıları, %61.5'inin makarnayı, %76.4'ünün kuru baklagilleri yanlış yöntemlerle pişirdikleri belirlenmiştir.

**Anahtar Kelimeler:** Aşçılar, Besin Hazırlama ve Pişirme Yöntemleri, Beslenme.



### 1. INTRODUCTION (GİRİŞ)

About one tenth of the community eats collectively in Turkey. Places where collective nutrition takes place are organizations planning and managing the nutrition problems of a certain group of people from one center. Collective nutrition industry is a business branch that prepares food for people who eat outside their homes. Accomodation industry involves food preparation and presentation services at places such as hotels, motels and entertainment facilities. Organizational nutrition services are those provided by some organizations and enterprises in a non-profit manner (old people's homes, schools, hospitals and alike). Commercial nutrition services are business branches administered with the aim of profitmaking [21].

Food and beverages services are most important for the guests who will benefit from them. In the modern age, as the life standards of people change, their way of life also changes. People want the food and beverages services everywhere to be of high quality. As many social and political issues are spoken about and decided at dinner tables, the quality of the food and beverages services comfort those at the table and help people view events more optimistically. In this way, a high quality food and beverages service will please customers and affect their social relations and sometimes their family relations positively.

Food and beverages services are of importance for the providers as well. The customers who are glad with the services become a permanent customer, which, in return, helps to increase the sales of the enterprise that is to get income economically [2].

Turkey is one of the countries that have a high income from tourism. Tourism attracts tourists from other countries and allows foreign currency to flow in the country in this way. This entitles tourism to be seen as invisible exports.

A tourism product has the properties of a package product, which consists of the combination of several services such as transportation, accomodation, food and beverages and entertainment. Any defects in any one of the rings that make up the tourism product will lower the quality of the total product. For example, in a perfect beach hotel, if the food and beverages services are of low quality, the visitors cannot be expected to be pleased [15].

In hotel enterprises, the most paying department following the income from room fees is the department of food and beverages by 25-30%. Hotels will make profits as long as they perform the food and beverages services well and support them with well-qualified human resources. Otherwise, their food and beverages departments will become one which causes big losses for the hotel [18].

In organizations where collective nutrition takes place, there is a sequence of procedures such as ordering, purchasing, storing, preparing, cooking and serving the food so that many people can eat together. In order for these procedures to be carried out in the desired way, they have to be administered by an organization. This kind of organization is called the nutrition service organization. The professionals who are employed in the nutrition service organization for cooking the food at required times and quantities are cooks. Most of the cooks in Turkey today are trained through apprenticeship, as there is not adequate number of educational institutes for training cooks. In order for the service to be conducted successfully, the cooks to be employed in the nutrition services of organizations should be at least primary school graduates and should have a cooking experience of five years. One of the cooks is selected as the chief cook and the supervision of cooks is provided in this way [9].



Cooks prepare and cook foods in organizations where collective nutrition is applied. In addition to the taste and the appearance of the meal served, the methods applied during preparation and cooking are very important as the right way of doing so will prevent the loss of nutritive elements and thus provide adequate and balanced nutrition. When the basic principles of preparing, cooking and keeping foods are not known, there are considerable losses in nutritive elements. Inappropriate cooking methods cause the necessary nutritive elements in some foods to decrease in large amounts. As a result, in spite of the fact that adequate food has been taken in, as the required way of its consumption by the body is prevented, nutrition deficiency can be caused [8].

# 2. RESEARCH SIGNIFICATION AND METHOD (CALISMANIN ÖNEMİ VE YÖNTEM)

This study has been planned and conducted to determine the food preparation and cooking methods of cooks employed in holiday villages, star hotels and official organizations and to put forth the accuracy of these methods for consideration.

The research was conducted in the provinces of Aydın, Antalya, Denizli and Muğla, and the holiday towns affiliated to these provinces. One hundred and forty eight (148) cooks working in the kitchens of the holiday villages, star hotels and other organizations (old people's homes, rest homes for the police, rest homes for teachers) were included in the study. Of these cooks, 38 worked in holiday villages, 78 worked in star hotels and 32 worked in the kitchens of official organizations. Out of the 78 cooks in the star hotels, 16, 19 and 43 cooks worked in three-star, four-star and five-star hotels, respectively.

The research data were collected by the questionnaire method. The results obtained were assessed by the SPSS 11.00 Statistics software and variance analysis was applied as the statistical way of analysis.

## 3. FINDINGS (BULGULAR)

# 3.1. General Information About Cooks (Aşçılara İlişkin Genel Bilgiler)

The cooks involved in the research were between 18 and 55 years old and the mean age was  $34\pm0$ ,6. Forty four point six percent (44.6%) of them were 30 years old or younger. When their educational status is examined, it can be seen that the highest rate is 40.5%, who are primary school graduates. This is followed by middle school graduate cooks by 29.7% and high school graduates at the same rate (29.7%). The cooks were asked whether they received any professional training and it was found that 63.5% did not. Those who received training stated that they attended apprenticeship centers. The mean length of experience was found to be  $13\pm0$ ,6, and the details were as follows: 48% of the cooks had an experience of 10 years or less, 37.2% had an experience of 11 to 20 years and 14.8% had been in the profession for 21 or more years.



Table 1. General information about cooks (Tablo 1. Aşçılara ilişkin genel bilgiler)

	Enterprises The Cooks Work								
Demographic Information	Holiday Villages		Star Hotels		Official Organizations		Total		
Age	Number	%	Number	%	Number	િ	Number	%	
≤30	7	18.4	41	52.6	18	56.3	66	44.6	
31-40	14	36.8	26	33.3	8	25.0	48	32.4	
41+	17	44.7	11	14.1	6	18.7	34	23.0	
Total	38	100	78	100	32	100	148	100	
Education	Number	용	Number	용	Number	용	Number	엉	
Primary school	13	34.2	32	41.0	15	46.9	60	40.5	
Middle school	15	39.5	17	21.8	12	37.5	44	29.7	
High school and above	10	26.3	29	37.2	5	15.6	44	29.7	
Total	38	100	78	100	32	100	148	100	
Professional training	Number	용	Number	용	Number	용	Number	%	
Those trained	11	28.9	37	47.4	6	18.7	54	36.5	
Those who haven't been trained	27	71.1	41	52.6	26	81.3	94	63.5	
Total	38	100	78	100	32	100	148	100	
Length of experience	Number	앙	Number	엉	Number	ે	Number	%	
≤10	21	55.3	34	43.6	16	50.0	71	48.0	
11-20	8	21.1	34	43.6	13	40.6	55	37.2	
21+	9	23.6	10	12.8	3	9.4	22	14.8	
Total	38	100	78	100	32	100	148	100	

# 3.2. Food Preparation and Cooking Methods of the Cooks (Aşçıların Besin Hazırlama ve Pişirme Yöntemleri)

Turkish people have a way of nutrition and kitchen based on grains. The basic nutrition resource is bread and other products made from wheat. Pasta, rice and pounded wheat (bulgur) are other kinds of meals often served at tables in addition to bread. "Pilav" (the meal obtained when rice is cooked) has an important place in the Turkish cuisine with their different kinds and rich varieties. In the traditional Turkish cuisine, pilav is usually served as the mean course or sometimes as a side dish, depending on its weight. In the international cuisine, rice is always used as garniture. Wrong cooking methods applied to food ingredients such as pasta, rice and bulgur result in the loss of various vitamins. Thus, they should be cooked by first releasing them into boiled water and then cooking until they absorb it. Frying rice at high temperatures causes vitamin B to be lost [7, 8, 11, and 13].

Table 2 shows the methods applied by the cooks when preparing and cooking foods. According to the table, 54.7% of the cooks soak rice before cooking and they pour away the soaking water before cooking, and then fry it, while 43.2% directly fry rice without soaking it in water. Both methods show that 98% of the cooks use a wrong method of cooking pilav. Only 2% of the cooks use the correct cooking method, which is cooking by "releasing rice into boiling water".

Milky desserts have a special status in the Turkish cuisine. The cultural diversity can also be observed in this subject. Many varieties of traditional milky desserts have different characteristics with the original interpretation of the Turkish cuisine [13].

When they were asked about when they add sugar while making milky desserts, two-thirds (66.9%) of the cooks said that they add sugar while cooking the dessert, which is a wrong application. When foods containing reducing sugars (glucose, fructose and lactose) and proteins are cooked at high temperatures, the amino group in proteins



and the hydroxil group in sugars combine to cause the Maillard reaction, and the Maillard reaction decreases the protein quality of the diet. For this reason, sugar should be added to the milky desserts either just before removing it off the heat or after doing so [3 and 11].

The proportion of the cooks who use the correct method of cooking milky desserts is higher in holiday villages (52.6%) and this ratio is followed by the cooks in star hotels by 26.9%. Twenty-five percent (25.0%) of the cooks employed in official organizations use the correct milky dessert way of cooking. Accordingly, the cooking practices of the holiday village cooks regarding milky desserts are more accurate and this difference is statistically significant (F=4.604 p<0.05).

When milk is heated without paying attention to some points, its raw status disappears. This kind of milk is called cooked milk. The taste and the smell of cooked milk also differ. Milk heated haphazardly produces a smell of burning. This smell is brought about by the caramelization of the milk sugar and the burning of the albumin sticking in the bottom and the sides of the cooking pan because the albumin and the globulin, which are protein substances in the milk, denature when heated. Heating milk carelessly damages the distribution of the fat particles in it, i.e. its emulsion, so the cream formation strength of cooked milk changes. When milk is heated directly on heat, the heating should continue for five minutes after the milk starts boiling. Bubbling up of the milk does not mean that it is boiling. Although some vitamin B in milk is lost through boiling, the values of its main rich ingredients such as the proteins, calcium, phosphorus and vitamin A are not. However, if the boiling duration is extended, some undesired changes in milk happen. The most important of these changes is in its nutritive value, taste and smell. When the heat is above 100 degrees Celcius, because of the dissolvement of the milk sugar the colour also changes into a brownish one. If milk is heated for a long time, heat-resistant vitamins will also be lost. Moreover, essential amino acids, such as lysine, cysteine and methionine, in milk proteins will decrease [4 and 10].

When the methods of cooking milk that is bought raw from open sources are considered, the cooks who boil milk for more than 20 minutes take the first rank in order of the proportions (35.8%). This ratio is followed by those who boil milk for five minutes and ten minutes after the cream level is bubbled up (29.7% and 22.3%, respectively). The rate of the cooks who boil milk for 20 minutes is 12.2%. It has been determined that 70.3% of the cooks apply a wrong method of boiling milk.

When the difference in the length of boiling milk is examined, the rate of the cooks who use accurate methods of boiling milk is the highest in star hotels (39.7%). The rate is 34.4% for official organizations and 5.3% for holiday villages. This difference is found to be statistically significant (F=8.154 p<0.01).

The food group that loses their nutrition elements most through preparation and cooking is vegetables. Green leaf vegetables are first cleaned (off their unwanted parts), then washed and finally cut up when prepared for cooking [5]. When cooks' method of preparing green leaf vegetables for cooking was investigated, it was found that the rate of those who use the correct method (cleaning, washing, cutting up) was 39.2%. On the other hand, 45.3% of the cooks stated that they first washed the vegetables, then cleaned and cut up and washed again. The rate of those who washed, cleaned and cut up was 8.8%. Six point seven percent (6.7%) of the cooks clean, soak and then cut up. The highest rate of those applying the correct method is in holiday



villages by 55.2%, and this value is followed by the cooks employed in star hotels \$35.9 and official organizations (28.1%).

Sürücüoğlu et al. (2001) examined the preparation methods of green leaf vegetables of the women involved in their research into the nutrition practices and nutritional knowledge levels of women of two generations (mother-daughter) and found that 31.6% of the participants applied the correct method. This finding is similar to the findings of this study.

Nutrition in Turkey is based on grains. Grains are a good source of thiamin. As thiamin is a water-soluble vitamin, it dissolves into the water during the preparation and cooking of foods, and removing the cooking water will result in an increased vitamin loss. If foods containing thiamin is cooked in plenty of water, some of the thiamin will be lost due to heat and if the cooking water is removed, as thiamin has dissolved into it, a considerable amount of it will have been wasted. Not pouring away the cooking water after cooking pasta and adding enough amount of water for the pasta to absorb in will prevent vitamin losses [1, 7, 8, 12, and 16].

Looking into the pasta cooking methods of the cooks revealed that 61.5% of them poured away the water that pasta was boiled in and 22.3% cooked pasta until the water has been absorbed. Sixteen point two percent (16.2%) of the cooks, on the other hand, did not pour the boiling water away but used it in making soups and other dishes. When the organizations were taken into consideration, the highest rate of removing and pouring away the boiling water of pasta was found to be the cooks working in official organizations (84.4%). The ratio falls to 67.9% and 28.9% for the cooks employed in star hotels and holiday villages, respectively. The difference between the pasta cooking methods of the cooks employed in holiday villages and those employed in official organizations and star hotels is found to be statistically significant (F=7.141~p<0.01).

Ateş et al.(1986) established in a study they conducted to determine the food preparation and cooking methods of 300 housewives living in socio-economically different neighbourhoods that 87.5% of the women removed and poured away the boiling water of pasta. In their study on women's food preparation and cooking methods, Sürücüoğlu and Balgamış (1987) asserted that 66.5% of the participants boiled the pasta and poured away the boiling water, 28.2% cooked pasta in little water and had it absorb the water and 5.3% did not pay attention to the cooking procedure. These results are similar to our findings.

In dry leguminous plants, thiamin, one of the B group vitamins, is found. As thiamin is a water-soluble vitamin, it dissolves into the water during the preparation and cooking of foods, and removing the cooking water will result in an increased vitamin loss. Not pouring away the cooking water after cooking pasta and using this water for dishes, in which water needs to be added, will both increase its taste and also will ensure benefiting from the nutritive elements that passed into the water [3 and 8].

When cooks' methods of cooking dry leguminous seeds were taken into account, the most common method was found to be first boiling them and then pouring away the boiling water, a method applied by 76.4% of the cooks. This ratio was followed by 23.6% of the cooks who first soaked the seeds and then directly cooked. When the organizations were considered, it was determined that the highest rate of the cooks who first boiled leguminous seeds and then poured away the boiling water was in official organizations (90.6%), followed by star hotel cooks by 85.9% and holiday village cooks by 44.7%. This is a statistically significant difference (F=14.351 p< 0.01).



Ateş et al. (1986) established in a study they conducted to determine the food preparation and cooking methods of 300 housewives living in socio-economically different neighbourhoods that 83.1% of the women removed and poured away the boiling water of dry leguminous seeds. In their study on women's food preparation and cooking methods, Sürücüoğlu and Balgamış (1987) asserted that 75.5% of the participants poured away the boiling water of dry leguminous seeds. Sürücüoğlu et al. (2001) determined in their study on the differences of nutritional knowledge of women of two generations that 55.0% of the women first soaked the seeds, then boiled and poured away the boiling water, 33.5% first soaked in water and then cooked directly while 1.1% cooked without pouring away the boiling water. These results are similar to our findings.

Table 2. Distribution of the food preparation and cooking methods of cooks according to the type of organizations they work for (Tablo 2. Aşçıların besin hazırlama ve pişirme yöntemlerinin çalıştıkları işletmelere göre dağılımları)

Food Preparation and Cooking Methods		Organizations				Cooks	Work	For
		Holiday Villages		Star Hotels		Official Organiza tions.		Total
Cooking Rice Pilav	N	용	N	용	N	용	N	왕
By frying	16	42,1	35		13	40,6	64	43,2
*By releasing in boiling water	1	2,6	2	2,6	-	-	3	2,0
By soaking, pouring away soaking water, and then frying	21	55,3	41	52,6	19	59,4	81	54,7
Total	38	100	78	100	32	100	148	100
Cooking Milky Desserts								
Adding sugar while cooking	18	47,4	57	73,1	24	75,0	99	66,9
*Adding sugar just before or right after turning off the heat	20	52,6	21	26,9	8	25,0	49	33,1
Total	38	100	78	100	32	100	148	100
Length of Boiling Milk								
*5 minutes after the cream level has bubbled up	2	5,3	31	39,7	11	34,4	44	29,7
10 minutes after the cream level has bubbled up	8	21,1	18	23,1	7	21,9	33	22,3
20 minutes after the cream level has bubbled up	10	26,3	4	5,1	4	12,5	18	12,2
More than 20 minutes	18	47,3	25	32,1	10	31,2	53	35,8
Total	38	100	78	100	32	100	148	100
Preparing Green Leaf Vegetables								
*Cleaning-washing-cutting up	21	55,2	28	35,9	9	28,1	58	39,2
Washing-cleaning-cutting up-washing again	15	39,5	35	44,9	17	53,1	67	45,3
Cleaning-soaking-cutting up	-	-	6	7,7	4	12,5	10	6 <b>,</b> 7
Washing-cleaning-cutting up	2	5,3	9	11,5	2	6,3	13	8,8
Total	38	100	78	100	32	100	148	100
Cooking Pasta								
Pouring away boiling water	11	28,9	53	67,9	27	84,4	91	61,5
*Cooking until pasta absorbs water	15	39,5	17	21,8	1	3,1	33	22,3
*Using the boiling water for another meal or soup	12	31,6	8	10,3	4	12,5	24	16,2
Total	38	100	78	100	32	100	148	100
Cooking Dry Leguminous Seeds								
Soaking in water and pouring away the soaking water	17	44,7	67	85 <b>,</b> 9	29	90,6	113	76,4
*Soaking in water and cooking directly	21	55,3	11	24.1	3	9,4	35	23,6
Total	38	100	78	100	32	100	148	100

Not: \*Correct method



Table 3. "The state of cooks" applying correct methods of food preparation and cooking according to the type of the organization they work for (Oneway Anova results of the cooks)

(Tablo 3. Aşçıların çalıştıkları işletmelere göre doğru besin hazırlama ve pişirme yöntemlerini uygulama durumları

Oneway Anova sonuçları)

Food preparation and cooking methods	Sum of squares	F	P	Scheffe
Pilav cooking method	1.679	.416	.660	-
Milky dessert cooking method	1.957	4.604	.012*	1-2,1-3
Milk boiling method	3.126	8.154	.000**	1-2,1-3
Green leaf vegetables preparation method	1.458	3.126	.047	-
Pasta cooking method	2.999	7.141	.001**	1-2,1-3
Dry leguminous cooking method	4.144	14.351	.000**	1-2,1-3

P<0,01\*\* p<0,05\*

- 1. Holiday villages
- 2. Star hotels
- 3. Official organizations

### 4. RESULTS (SONUÇ)

In this study, it has been determined that 98%, 66.9%, 61.5% and 76.4% of the cooks cook pilav, milky desserts, pasta and dry leguminous seeds, respectively, using wrong methods. The rates of those who cook milk and green leaf vegetables wrongly, on the other hand, are 70.3% and 60.8%, respectively. The wrong preparation and cooking methods applied to these foods cause losses in various nutrition elements.

As a result, it has been determined that the rate of cooks who cook milky desserts, pasta and dry leguminous seeds and prepare green leaf vegetables by applying the correct method is higher in holiday villages than the rate of cooks in star hotels and official organizations. This result can be because the educational status and the ages of the cooks working in holiday villages are higher than those of the cooks employed in the kitchens of star hotels and official organizations. Yet, the impact of the educational status and age on food preparation and cooking methods was not found to be statistically significant. Although the rate of cooks who apply correct methods is higher in holiday villages than star hotels and official organizations, it was determined that in general cooks applied wrong methods of preparing and cooking food, which showed that they did not have enough knowledge of food preparation and cooking.

Today, the number of individuals eating collectively out of their homes is increasing. During the trips made for various reasons such as holidays or other, people have to eat out of their homes. In some organizations, people have to eat all three of their meals in their work places. For an adequate and well-balanced nutrition, it is important that as well as being delicious and attractive, the food must be nutritious; in other words, it should not lose its nutritive value. In this respect, a widespread training should be supplied for the cooks working in both commercial and organizational enterprises. In Turkey, there are not any studies regarding cooks, despite the fact that there is some research done on the application of correct methods of food preparation and cooking. This research is expected to shed light on the subject and be helpful to the researchers for planning some training in view of the data presented.



#### REFERENCES (KAYNAKLAR)

- 1. Aktaş, N., (1987). Besinlerin Hazırlanma ve Pişirilmesi Sırasında Oluşan Besin Ögesi Kayıpları (Food Element Losses During the Preparation and Cooking of Foods). Ankara: Ankara Üniversitesi Ziraat Fakültesi Yayınları: 1018.
- 2. Aktaş, A., (2001). Ağırlama Hizmet İşletmelerinde Yiyecek ve İçecek Yönetimi (Food And Beverages Management In Entertainment Service Enterprises). Antalya: Livane Matbaası.
- 3. Arlı, M., Şanlıer, N., Küçükkömürler, S., Ersoy, Y., Yaman, M., Özgen, L., Seren, S. ve Gümüş, H., (1981). Yiyecek Üretimi 1 (Food Production 1). İstanbul: Ya-Pa Yayın Pazarlama San. ve Tic. A.Ş.
- 4. Arlı, M., Şanlıer, N., Küçükkömürler, S., Ersoy, Y., Yaman, M., Özgen, L., Seren, S. ve Gümüş, H., (1981). Yiyecek Üretimi 2 (Food Production 2). İstanbul: Ya-Pa Yayın Pazarlama San. ve Tic. A.S.
- 5. Arslan, P., Bozkurt, N., Karaağaoğlu, N., Mercanlıgil, S. ve Erge Açık, S., (2001). Yeterli-Dengeli Beslenme ve Sağlıklı Zayıflama Rehberi (A Guide For Adequate-Balanced Nutrition And To Lose Weight Healthily). İstanbul:Özgür yayınları: 144.
- 6. Ateş, M., Ballar, E. ve Pekcan, G., (1986). "Sosyo-Ekonomik Yönden Faklı Semtlerde Yaşayan Ev Kadınlarının Besin Hazırlama, Pişirme ve Saklama Yöntemlerinin Saptanması" (Determination of Food Preparation, Cooking And Keeping Methods Of Housewives Living In Socio-economically Different Neighbourhoods). Beslenme ve Diyet Dergisi: 15: 71-83.
- 7. Baysal, A., (2002).Genel Beslenme (General Nutrition). Ankara: Hatiboğlu Yayınları, 9.Baskı.
- 8. Baysal, A., (2004). Beslenme (Nutrition). Ankara: Hatiboğlu Yayınları, 10.Baskı.
- 9. Birer, S., (1989). "Toplu beslenme yapılan kuruluşların tanımı, özellikleri ve beslenme servisi örgütünde çalışacak personelin seçimi, eğitimi ve kontrolü" (Definition And Characteristics Of Enterprises Where Collective Nutrition Is Practised And The Selection, Training And Supervising Of The Staff Working In The Nutrition Service Organization]. Toplu gıda tüketimi yapılan kuruluşlarda insan gücü ve verimliliğini artırmaya yönelik beslenme teknikleri. Ankara: MPM Yayınları, 2.Baskı.
- 10. Bulduk, S., (2004). Gıda Teknolojisi (Food Technology). Ankara: Detay Yayıncılık, 2.Baskı.
- 11. Bulduk, S., (2005). Beslenme İlkeleri ve Mönü Planlama [Principles ff Nutrition And Planning The Menu]. Ankara: Detay Yayıncılık.
- 12. Erkut, A., (1990). Vitaminler ve Biyokimyasal Olaylardaki Etkinlikleri [Vitamins And Their Efficacy İn Biochemical Events]. Samsun: Ondokuz Mayıs Üniversitesi Yayınları, No:62.
- 13. Gürman, Ü., (2002). Yemek Pişirme Teknikleri ve Uygulaması (Cooking Techniques And Applications). İstanbul: Ilıcak Matbaası.
- 14. Hasipek, S. ve Örmeci, Ö., (1988). Ankara Üniversitesi Ziraat Fakültesi İdari Kadrosunda Çalışan Evli Kadınların Beslenme Bilgi Düzeyleri İle Yiyecek Hazırlama ve Pişirme Uygulamaları [Nutritional Knowledge Level And Food Preparation And Cooking Practices Of The Married Women Working In The Administrative Jobs In Ankara University, Faculty Of Agriculture]. Ankara: Ankara Üniversitesi Ziraat Fakültesi Yayınları: 1079.
- 15. Hazar, A., (2003). Turizm (Tourism). İstanbul: Ya-Pa Yayın Pazarlama San. ve Tic. A.Ş.

### e-Journal of New World Sciences Academy Social Sciences, 2, (3), C0008, 121-130. Çekal, N.



- 16. Kavas, A., (2000). Sağlıklı Yaşam İçin Doğru Beslenme [Correct Nutrition For Healthy Living]. İstanbul: Literatür Yayınları:37, Birinci Baskı.
- 17. Kutluay, T., and Birer, S., (1980). Kurum Beslenmesi [Corporation Nutrition]. Ankara: Milli Eğitim Gençlik ve Spor Bakanlığı Yayınları: 8.
- 18. Sökmen, A., (2003). Ağırlama Endüstrisinde Yiyecek ve İçecek Yönetimi (Food And Beverages Management In The Entertainment Industry). Ankara: Detay Yayıncılık.
- 19. Sürücüoğlu, M.S., and Balgamış, F., (1986). Beslenme Eğitiminin Yiyecek Hazırlama ve Pişirme Yöntemlerine Etkisi [The Effects Of Nutrition Education On Food Preparation And Cooking Techniques]. Beslenme ve Diyet Dergisi, 16; ss:39-50.
- 20. Sürücüoğlu, M.S., Özçelik, Ö., and Çekal, N., (2001). İki Nesil Kadının (Anne-Kız) Beslenme Uygulamaları ve Beslenme Bilgi Düzeyleri Üzerinde Bir Araştırma [Research Into The Nutrition Practices And Nutritional Knowledge Levels Of Women Of Two Generations (Mother-Daughter)). I. Ulusal Yaşlılık Kongresi, ss: 60.
- 21. Yiğit, V., and Duran, T., (1997). Toplu beslenme teknolojisi 1 (Collective Nutrition Technology 1). İstanbul: Ekin Yayıncılık ve Pazarlama.