

## EVALUATION OF CONSUMERS' TENDENCY TO DRY AGED BEEF MEATS

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### Abstract

*The survey was undertaken to determine the consumers' tendency to dry aged beef meats in Campus of Selcuk University at Konya between October-November 2014 with a total number of 155 consumers. As a result of the research, the followings were found out: 53,5% of participants had information on dry aging applications, 46,5% had no information on this. 20% of participants were consuming dry aged meat products, 80% had never consume these products. 54.8% of participant did not know the product, 30,8% did not find them attractive for consumption, 14,4% did not prefer these foods because of their expensive price. When the participants were taken into consideration with income levels changing from 4001 to 5000 TL (Turkish lira), the group was observed with the highest (63,6%), while 1000-2000 TL group was observed the lowest recognition rate (44,4%). When the way of getting information about the dry aged meat products were taken into consideration, post-graduate education was playing an important role on recognition of the products ( $p < 0.05$ ). Thus, social-mass media and education level, may have a significant impact on spread of this product and may become easily accessible.*

**Key words:** dry aging, beef meat, consumers' tendency, survey.

### INTRODUCTION

The changes in the socio-economic structure of society are reflected in their consumption habits. In other words, the alimentation culture of a society is ranging and developing, it is influenced by various factors such as geography, climate, agriculture, industrialization and the spread of mass media (Gift and Özdoğan 2005; Baysal, 2002; Lohr 2003; Brown et al., 2000).

Red meat consumption in Turkey can be affected by many factors such as economic reasons; the annual population growth rate and the changes in structure of the population, consumer preferences, quality of the products, distribution of the products, consumer education, hygienic characteristics of meat, religious beliefs, health problems, climate conditions,

traditions and food-related ads (Şeker et al, 2011; İçöz 2004; Stefanikova et al, 2006).

A particular age group, social class, income and education levels have effects on the consumption choice of consumer to belong to a specific rural or urban environment. In addition, the rapid increase in the number and types of foodstuffs and social-mass media are effective in consumer preferences (Kızılarşlan and Kızılarşlan 2008).

Dry aging applications are new concepts for Turkey. To become widespread of these applications, the socio-economic structure of the country, nutrition culture, the impact of social media and mass media, as well as climate and industrialization are undeniable factors. This study was conducted to identify public awareness and consumer trends related to the dry-aging treated meat products.

## MATERIALS AND METODS

The material of this study was composed of data obtained from the survey. The survey had been implemented according to the voluntary basis among people over 18, between the dates of October-November 2014 in University of Selcuk campus in Konya-TURKEY. At the first part, 5 questions were asked to determine the independent variable (age, gender, education level, marital status, income); In the second part of the survey 6 closed-ended questions were asked to the participants to determine their consumption behavior. Results and percentage frequency of the research were determined by using the SPSS 21.0 software package. Chi-square (Pearson's Chi-Square) test was applied to investigate the effect of "income" and "level of education" on consumer preferences.

## RESULTS AND DISCUSSIONS

The findings of the research consisted of demographic characteristics of the consumers, awareness of the dry aged meat products, consumers purchasing preferences of these products and future-oriented attitudes.

Data are related to the demographic characteristics of the participants are shown in Table 1. In the study, 58 women (37.4%) and 97 men ( 62.65%); totally 155 people participated. Most participants (40%) were in 19-30 age group. 40% of participants were determined that, their monthly average income level were between 2001 and 3000 TL (Turkish lira). It is found that, the 50% of participants have postgraduate education level.

**Table 1.** Characteristics of the surveyed consumers

Factors	Groups	n	%
Gender	Female	58	37.4
	Male	97	62.6
Marital Status	Married	100	64.6
	Single	55	35.4
Age	19-30	62	40
	31-40	39	25.2
	41-50	36	23.2
	51-60	17	11
	More than 60	1	0.6
Mounthly Income (TL)	1000-2000	27	17.4
	2001-3000	62	40
	3001-4000	21	13.5
	4001-5000	22	14.3
	More than 5000	23	14.8
Education Level	Postgraduate	78	50.3
	Undergraduate	28	18.1
	Secondary Education	49	31.6

TL:TurkishLira

**Table 2.** The evaluation of the survey questions.

Survey Questions		n	%
1. Are you aware of dry aging concept?	Yes	83	53.5
	No	72	46.5
2. Have you ever consumed dry aged meat products?	Yes	31	20.0
	No	124	80.0
3. Why do not you prefer eating dry aged meat products?	Not know the product	57	54.8
	Very expensive	15	14.4
	Not attractive to consumption	32	30.8
4. How did you get information about dry aged products?	Education	40	35.1
	Social media and mass media	33	28.9
	Milieu	41	36.0
5. Do you think consuming these products in the future?	Yes	76	49.0
	No	18	11.6
	I am not sure	61	39.4
6. Would you recommend these products to people around you?	Yes	70	45.2
	No	22	14.2
	I am not sure	63	40.6

The data are obtained from the survey results without taking into account gender, education level and overall evaluation, the average monthly income is given in Table 2. In the study, it was observed that, 53.5%

of participants had information about the application of dry aging and these products, but 46.5% of participants had not. Considering the prevalence of consumption the products, 20% of participants had

consumed dry aged meat products but 80% of participants had not. Evaluating the reasons of the preference for the products, results were observed that; 54.8% of the respondents had never heard of this concept, 30.8 of them did not find it attractive for consumption, 14.4% found it very expensive.

**Table 3.** Survey findings according to the participants' income levels

Are you aware of dry aging concept ?					
Mountly Income (TL)		Yes	No	Total	Chi Square
1000-2000	n	12	15	27	0.76 1.87
	%	44.4	55.6	100	
2001-3000	n	34	28	62	
	%	54.8	45.2	100	
3001-4000	n	11	10	21	
	%	52.4	47.6	100	
4001-5000	n	14	8	22	
	%	63.6	36.4	100	
More than 5000	n	12	11	23	
	%	52.2	47.8	100	
Total	n	83	72	155	
	%	53.5	46.5	100	

TL: Turkish Lira

Looking at participants; awareness of the product according to the income levels (Table 3) revealed that; the group with

**Table 4.** Survey findings according to the participants income levels

Have you ever consumed dry aged meat products?					
Mountly Income (TL)		Yes	No	Total	Chi square
1000-2000	n	3	24	27	0.24 5.50
	%	11.1	88.9	100	
2001-3000	n	11	51	62	
	%	17.7	82.3	100	
3001-4000	n	5	16	21	
	%	23.8	76.2	100	
4001-5000	n	8	14	22	
	%	36.4	63.6	100	
More than 5000	n	4	19	23	
	%	17.4	82.6	100	
Total	n	31	124	155	
	%	20	80	100	

TL: Turkish Lira

4001-5000 TL income level has the highest level (63.6%),the group with 1000-2000 TL income has the lowest level (44.4%). Differences between income levels were found statistically insignificant (Table 3;  $p>0.05$ ). This showed that, income levels were not important criteria for the recognition of the product.

The most consumption of dry aged meat products (36.4%) have been observed in the group with 4001-5000 TL income level (Table 4). But there is no statistically significant difference between consumption and income levels ( $p>0.05$ ; Table 4)

**Table 5.** Survey findings according to the participants' income levels

Why do not you prefer to dry aged meat products?						
Mountly Income (TL)		Not know the product	Very expensive	Not attractive to consumption	Total	Chi square
1000-2000	n	13	4	2	19	0.71 5.41
	%	68.4	21.1	10.5	100	
2001-3000	n	19	6	14	39	
	%	48.7	15.4	35.9	100	
3001-4000	n	10	1	5	16	
	%	62.5	6.3	31.3	100	
4001-5000	n	6	2	3	11	
	%	54.5	18.2	27.3	100	
More than 5000	n	9	2	5	16	
	%	56.3	12.5	31.3	100	
Total	n	57	15	29	101	
	%	56.4	14.9	28.7	100	

Taken into consideration to the participants' income; rate of 56.4% due to lack of knowledge, 14.9% found the products too expensive, 28,7% found them not attractive for consumption were deter-

mined. These differences were determined to be statistically insignificant (Table 5;  $p>0.05$ ). However, significant effects on consumption are assumed to be provided by increasing the product's presentation.

**Table 6.** Survey findings according to the participants' education levels

How did you get information about dry aged products?							
Education Level		Education	Social media and Mass media	Milieu	Total	P	Chi Square
Post graduate	n	28	8	7	43	0.001	18.16
	%	65.1	18.6	16.3	100		
Under graduate	n	5	5	6	16		
	%	31.3	31.3	37.5	100		
Secondary Education	n	7	4	17	28		
	%	25	14.3	60.7	100		
Total	n	40	17	30	87		
	%	46.0	19.5	34.5	100		

The way of getting information about the dry aged meat products have been assessed, postgraduate education has been found to play an important role on recognition of the product (Table 6;  $p < 0.05$ ).

Considering the way of getting information on product, the participants with the secondary education has been identified as having the most significant impact on the milieu, also the participants with undergraduate, education, social media, mass-media and social environment has the same impact degree.

## CONCLUSIONS

The research was conducted by researchers own equity and was not supported by any organization. Therefore, the study sample was limited only for Konya Selcuk University Campus. This condition may weaken the power of representation of the research and the results achieved through the research should only be considered to represent the students and the faculty members of Selcuk University. On the other hand, the survey was made with voluntary basis by the participants, there has been a cluster towards to the high education level. The results of research could be affected on favor of postgraduates as stated by Şeker et al. (2011).

Production-marketing-consumption chain are essential in a society. For the development of community, conscious,

responsible and trained producers, marketers and consumers are needed. Educated and informed consumers will affect the mold of production and the marketing sector and they will provide the change in the economy and society.

In this research, consumers' awareness, attitudes and knowledge levels to dry aged meat products were determined. The high prices of the this type of meat products and the lack of accessibility though them prevent the spread of the product and also make them less consumable by people with all levels of income. The main problem is considered inadequacy of the new products release. According to the research results, education level and social media-mass have important effects on this product to be widespread and to be easily accessible.

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