

## BAKERY PRODUCTS CONSUMPTION AND CONSUMERS' AWARENESS IN URBAN AREAS OF ISPARTA CITY, TURKEY

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### Abstract

*The purpose of this study was to determine bakery products consumption, preference, purchasing behaviour and the factors affecting the consumer. The data for this study were obtained by the survey method with 288 households in Isparta. The purchase frequency of bread was determined that daily while for biscuit products it was 15 days and for pasta, wafers and cake was monthly. Consumers have stated that they prefer bakery products as a tasty and satisfying snack. Monthly consumption of biscuits, pasta, wafers and cakes was calculated as 433.44, 913.45, 110.33 and 144.47 grams per person, respectively. Bread consumption was calculated as 188.79 grams per day. Sweet biscuits were more preferred by consumers. It was detected that the price of bakery products is related to the income of households. As of the survey date, the average monthly income of the families was calculated as 3,061.89 TRL and average income per person was calculated as 779.10 TRL. Spending of bakery products for households was found to be 27.16 TRL. When the price of bakery products associated with income of households, these products were seen as reasonable and practical products. Although the education level of consumers varied, bakery products was preferred by every age group of consumer as a conventional taste whether it is a healthy food or not. The rate of consumers who found bakery products moderately safe was 58%. One of the most influencing factors on consumers to purchase bakery products was determined as healthy production conditions and all the shopping facilities of sellers.*

**Key words:** bread, biscuit, cake, pasta, household

### INTRODUCTION

The food production-consumption chain is one of the most important issues of today, as food, which is the basic necessity of human life, is of critical importance in terms of community health [14]. Bakery products and their derivatives have an important place in the food consumption all over the world. Bread, pasta, bulgur, biscuits, cakes and breakfast cereals are the most consumed industrial cereal products. Bakery products constitute 65% of food industry in Turkey [18].

Biscuits are a shelf-stable product because of their low moisture content, were first used by sailors, soldiers, patients and travellers but today they are consumed almost by every age-group and in every meal. Because of the increasing demand, as in many countries, there have been important developments in biscuit industry in Turkey as well, a lot of biscuit types with rich composition started to

be produced [9]. Bread with its high nutritional value, a neutral aroma, availability and cheapness is the basic food source in bakery products. Another bakery product, pasta; with its properties such as nutritious, delicious, cheap, easy to prepare, long shelf life is the most consumed food after bread. Italy is the world's largest producer with 3,326,750 tons and 32% share. Italy is followed by USA with 12%, Brazil with 11% and Russian Federation with 6%. Turkey is in the 5th place in world pasta production and its share in production is 5.1% (TURKSTAT, 2015).

The overall objective of this study was to evaluate the bakery products consumption, purchasing behaviours and brand dependency levels of consumers in city centre of Isparta province, Turkey. Determination of consumer preferences and requests in bakery products is important for the bakery industry. By the aid of research results; bakery industry can be

developed, reshaped their production strategy and also they can expand their product range in the direction of consumer preferences.

## MATERIAL AND METHODS

Material of the study was established through cross-section data collected from the resident families of urban part of Isparta by surveys. Survey that was used in the study was developed by the help of other studies with similar aims as it fits the purpose of the study. In marketing researches, for different population sizes and tolerance levels in practice, assuming specific confidence limits and specific population variations, different sample sizes were being used [12]. With the assumptions of at least 75% of the urban resident families were consuming bakery products and this average 50% rate can be mistaken by  $\pm 0.05$  (that was to say 0.70 and 0.80) and with the assumption of these limits were 95% reliable, sample size for the research was calculated with the help of the formula below [13].

$$N \cdot p \cdot q$$

$$n = \frac{N \cdot p \cdot q}{(N-1) \cdot \sigma^2_{px} + p \cdot q}$$

According to this form, the sampling volume  
 $n$  : Sample size  
 $\sigma^2_{px}$  : Variance of probability (with 95% confidence interval and 5% error margin)  
 $N$  : Urban population of Isparta city  
 $p$  : The likelihood of the event being investigated (in this study it was assumed that the bakery products consumption rate at the bars was 0.75)  
 $q$  : The likelihood of the event being investigated (in this study it was assumed that the rate of bakery products was 0.25).

According to this, sample size for the city of Isparta was calculated as 288 households. This sample size was increased by approximately 5% and 288 households was interviewed. Data were collected through specially prepared surveys in personal interviews. By taking into consideration the socio-economic development levels in the city centre, survey study was conducted in 44 neighbourhoods. Sample number was divided proportionally with the population of the

neighbourhoods. Surveyed households were chosen circumstantially. Survey included 48 questions about product choices of consumers, consumption of bakery products, purchasing prices, frequency of purchasing, factors that determines the purchasing decision, channels of purchasing, reasons of preference, brand loyalty levels, frequency of habit of reading the information on the package, judgments about health-wise reliability, socio-economic features etc. Average revenues of households was based on in the division of consumers into groups, it's analysed in 3 groups as can be seen from Table 1. In income grouping, minimum wage and average of 2 employments in every household was assumed. At that point, income groups were defined as household with income less than 1,782 TRL "1<sup>st</sup> (I) group" (44.9%), households with income between 1,783-3,565 "2<sup>nd</sup> (II) group" (30.11%), households with income between 3566 TRL and more "3<sup>rd</sup> (III) group" (25%).

Table 1. Sample Distribution

Income groups	Income level (per month-TRL)	N	Rate (%)
I	1,782 TRL and less	129	44.79
II	1,783-3,565 TRL	87	30.11
III	3,666 TRL and above	72	25.00
	Total	288	100.00

## RESULTS AND DISCUSSIONS

### *Demographic characteristics of consumers*

It should be emphasized that the income levels and distribution of the consumers will create big differences in purchasing power. Household income groups were formed in this study because consumer behaviours may be different according to income groups. It was determined that the socio-economic variables related to consumers were influential on consumption and purchasing judgments and decisions related to products. For this reason, various socio-demographic characteristics of the consumer and their families in the research area were examined primarily and these values were given in Table 2. The 47.22% of the interviewed individuals were female and 52.78% were male. About 15.97% of the individuals were in the 18-24 age

group, 26.74% in the 25-34 age group, 23.96% in the 35-44 age group, 25.69% in the 45-54 age group, 6.94% in the 55-64 age group and 0.69% were 65 years of age or older. 66.31% of the interviewed individuals were married, 28.81% were single, 2.43% lost their husband/wife and 2.43% were divorced. It was found that 19.10% of the interviewed individuals worked in the public sector, 21.53% in the private sector, 13.19% of the interviewed individuals worked in their own workplace and 10.07% of the interviewed individuals were also in paid employment. It was determined that 20.83% of the interviewees were housewives, 7.64% were retired and 7.64% were unemployed.

Individuals interviewed increased in car ownership, homeownership, computer and internet ownership according to their income status.

It was determined that the household size was 3.93 persons. The 21.29% of the households were in the 18-24 age group, 20.76% were in the 45-54 age group, 13.69% were in the 35-44 age group, 13.07% were in the 25-34 age group, 7.77% were in the 15-17 age, 8.04% were in the 55-64 age group, 7.24% were in the 7-14 age group, 5.39% were in the 0-6 age group and 2.74% were over 65 years old. The period of residence in Isparta urban area was approximately 25 years.

Table 2. Some properties of interviewed individuals

Properties	I	II	III	Total/ Average
Age (year)	38.50	37.40	36.93	37.78
Educational status (year)	10.85	11.61	13.61	11.77
Gender (Woman, %)	55.91	39.08	41.67	47.22
Gender (Man, %)	44.19	60.92	58.33	52.78
Household size (person)	3.98	3.79	4.01	3.93
Number of woman in the household*	2.00	1.83	2.08	1.97
Number of man in the household*	1.98	1.97	1.93	1.96
Number of working individuals*	1.25	1.54	2.25	1.59
Number of working man individuals*	0.98	1.26	1.26	1.14
Number of working woman individuals*	0.26	0.28	0.99	0.45
Marital status				
Married (%)	65.11	67.81	66.66	66.31
Single (%)	27.13	28.73	3.94	28.81
Divorced (%)	3.87	1.14	1.38	2.43
Widow (%)	3.87	2.29	-	2.43
The distribution of population in households				
0-6 years (%)	6.04	5.15	4.50	5.39
7-14 years (%)	7.41	6.67	7.61	7.24
15-17 years (%)	8.58	6.67	7.61	7.77
18-24 years (%)	22.03	17.27	24.57	21.29
25-34 years (%)	10.92	17.58	11.76	13.07
35-44 years (%)	13.06	15.76	12.46	13.69
45-54 years (%)	20.08	18.18	24.91	20.76
55-64 years (%)	7.80	10.91	5.19	8.04
65 years (%)	4.09	1.82	1.38	2.74
House owner (%)*	58.91	71.26	76.39	67.01
Car owner (%)*	44.19	77.01	73.61	61.46
Computer owner (%)*	79.07	93.10	95.83	87.50
Internet owner (%)*	62.02	78.16	88.89	73.61
Internet hosting period (year)*	3.02	4.02	6.63	4.23

\*: There was statistical differences between income groups and variables indicated as \*.

Source: Own computation.

In the study, as of the survey date, the average monthly income of the families was calculated as 3,061.89 TRL and the average income per person was calculated as 779.10 TRL. It was found that food expenditure was

increasing in absolute terms, depending on income groups, falling proportionately. Education, income and food expenditure were directly proportional with each other. This situation was found statistically significant.

*The frequency of purchasing bakery products and brand dependency*

In the scope of the study, brand dependency level of biscuit, pasta, bread, waffle and pastry products was also investigated. Consumer preference for bakery products were evaluated in four groups according to the brand loyalty ratings as described by Kotler [11]. In bakery products; those who always choose the same brand, or those who buy a brand are "absolute", 2 or 3 brands are "strong", those who prefer certain brands for a certain period of time are "middle", those who does not prefer a particular brand or prefer frequently change brands are the "independent" defined as consumer mass [1, 11].

When brand loyalty levels of consumers were evaluated according to Table 3; biscuit brand dependency was found to be strong. As a matter of fact, the share of brands with strong brand dependency (2 and 3 brands) was 47.57%. The rate of those who always buy the same (one) brand was 36.46%. Meanwhile, 9.72% of consumers were consumers with certain brand preferences for a certain period of time. The ratio of independent consumers who do not have a particular brand was 6.25%. In the same way, it was determined that brand-dependency was strong in other bakery products. The ratio of those who always prefer the same brand in bread was 43.06%, the ratio of those who prefer two or three brands was 28.13%, the ratio of those who prefer certain brands at certain times was 10.07% and the ratio of those who do not have brand preference was 18.75%. The ratio of those who always prefer the same brand in pastry-cake products was determined as 34.38%, the ratio of those who prefer two or three brands was 22.57%, the percentage of those who prefer certain brands in certain times was 15.63% and the rate of those who do not have brand preference was determined as 27.43%. In brand dependency ratios for pasta, 39.93% of those who always prefer the same brand and 38.19% of those who prefer two or three brands. The percentage of those who preferred certain pasta brands at certain times was 11.46%. The rate of non-branded pasta was 10.42%. When purchasing wafers

and varieties, the percentage of consumers who always prefer the same brand is 38.54%. The proportion of those who prefer two or three brands was 36.46%. The percentage of those who preferred specific brands for a certain period of time was 7.64% and the percentage of consumers who did not have brand preference was 7.64%.

Table 3. Brand dependency level in purchase of bakery products (%)

	Bread	Cake	Macaroni	Wafer	Biscuits
Prefer the same brand	43.06	34.38	39.93	38.54	36.46
Prefer 2 or 3 brands	28.13	22.57	38.19	46.18	47.57
Prefer specific brands for specific periods	10.07	15.63	11.46	7.64	9.72
Brand is changing	18.75	27.43	10.42	7.64	6.25
Total	100.00	100.00	100.00	100.00	100.00

**Consumption of bakery products**

Table 4 summarizes the types and consumption of bakery products consumed by consumers in the research area. It was determined that the maximum per capita consumption was on bread with monthly 5,663.7 g (188.79 g x 30 day). Consumption of biscuit per person per month was 433.44 g, consumption of wafers was 110.33 g, consumption of pasta was 913.45 g and consumption of cake was 144.47 g According to TUSAF [20] Sector Report, it is stated that Turkey consumes 319 g of bread per person. Ünal [21] found that per capita bread consumption was 356 g in the Black Sea Region, 391.2 g in the Thrace, Marmara and Aegean regions, 407.2 g in the Central Anatolian Region, and 442.4 g in the South and South Eastern Anatolia Regions. Demircan et al. [4] found that per capita daily bread consumption amounted to 429 g in Isparta. Gül et al. [7] determined that per capita consumption by 233.46 g per person per day in Adana province, 178 g per person per day consumption in Isparta province by Gül and Gül [8], 175 g in work done by Yurdatapan [22] and Ekmekçi Bal et al. [6] found that in the central province of Tokat, bread consumption was 291.95 gr per person

per day. According to TPIA's 2014 [19] data, household consumption of pasta is 7.5 kg per month. Yurtsever [23] found that 97.7% of consumers consumed pasta and 55.3% preferred spaghetti-type pasta in the study conducted by consumers in the province center of Tekirdağ.

In this study, it was determined that the ratio of consumers' consuming biscuits was 97.17% and non-consuming biscuit families was 2.82%. The consumption rates of other bakery products were as follows; bread consumption rate was 99.65%, pasta consumption rate was 99.30%, wafer consumption rate was 95.43% and cake consumption rate was 89%. Consumers stated that products are not reliable, hygienic conditions are inadequate and health problems as reasons for not consuming bakery products.

Table 4. Bakery products consumption

Bakery types	I	II	III	Average
Biscuits (g per month per person)	355.74	507.85	482.73	433.44
Wafer (g per month per person)	115.81	114.78	95.15	110.33
Macaroni/paste (g per month per person)	925.13	848.26	971.30	913.45
Cake (g per month per person)	129.00	151.09	164.20	144.47
Breads (g per day per person)	192.50	202.67	166.30	188.79

In the questionnaire survey, it was determined that francala bread type was the first place with 44.96%. This was followed by 13.75% of Isparta bread, 7.75% of whole wheat bread, 0.78% of pita bread, 5.43% of rye bread, 15.50% of yufka and 11.63% of home bread consumption (Table 5). In the study conducted by the Tanik [16] in the central province of Tekirdag, 78% of the consumers consume francala bread, 14% eat pide, 7% eat whole wheat and 1% eat rye bread. Yurdatapan's [22] study of the central province of Edirne was also the first choice of francala bread consumers (41%). Dölekoğlu Özçiçek et al. [5] found that 87.9% of the consumers in Adana, 90.6% in Mersin and 75.7% in Antalya preferred francala bread in their work in Adana, Mersin and Antalya. Ekmekçi Bal et al. [6] found that francala bread type took the first order (70.59%) in

bread consumption in the center of Tokat province. Demircan et al. [4] determined that Isparta bread was the most consumed bread in Isparta with 46.2%.

Table 5. Consumption of bread types

	I	II	III	Total
Francala	44.96	51.72	52.78	48.96
Isparta bread	13.95	16.09	13.89	14.58
Whole wheat bread	7.75	6.90	13.89	9.03
Pita	0.78	0.00	0.00	0.35
Rye	5.43	4.60	1.39	4.17
Yufka	15.50	14.94	9.72	13.89
Home bread	11.63	5.75	8.33	9.03

Ranking of influential factors in the first place in the preference of bakery products was given at Table 6. Consumers prefer biscuits and waffle products to be delicious at the beginning, the second is a product that is practically and immediately consumable, the third is a satisfying, the fourth is a satisfying habit, the fifth is nourishing, then the price has come to be found. At the beginning of the reasons of preference of the pasta, it was determined that it is delicious, it is a habit in the second place, it is practical in the third place, it is satisfactory in the fourth place, it is nurturing in the fifth place and finally the price is reached. In the first place in the preference of the pasta products again taste, then habit, practicality, satiety, price and nutrition factor was determined. The preferred reasons for consumers for bread were to be satisfying, habit, delicious and satisfying, price and practicality.

Today, with the increase in the labour force participation rate of women, biscuits and cake products have begun to come between the preferred products. Being practical, being delicious is a factor attracting consumers. It was found that being delicious is effective in the purchase of every age group. It was determined that men consumed more pasta and waffle products in the study. This situation was also statistically significant. It was found that there was a negative correlation between education factor and consumption of bread and biscuits. This situation was statistically significant. It was determined that non-homeowner and non-computer individuals consumed pasta more. The relationship between these variables was

statistically significant.

Table 6. Ranking of influential factors in the first place in the preference of bakery products

	Biscuits*	Wafer*	Pasta*	Cake*	Breads**
Price	3.19	3.16	3.00	3.07	6.60
Being practical	3.78	3.89	3.42	3.20	0.69
Being nutritive	3.41	3.73	3.20	3.05	16.67
Being filling	3.73	4.06	3.22	3.17	45.14
Being delicious	4.13	4.14	4.24	3.95	16.67
Habit	3.44	3.42	3.69	3.24	25.69

\*Scale: 1. "Not important at all" 2. "Not important" 3. "Somewhat important" 4. "Important" 5. "Very important"

\*\* Proportional distribution

It was determined that the primary factors in the consumers' decision to purchase biscuit products were quality, price-quality, followed by brand and additive.

#### **Purchase channels**

Purchasing channels of consumers for biscuits, bread, pasta, wafer and cakes were given at Table 7. As can be seen from the Table 7 it was determined that consumers prefer to buy biscuit products from markets (88.54%). It was determined that grocery store followed this with 24.12% of consumers. The 14.11% of the pasta purchase areas preferred grocery store, 94.09% of the markets. It was determined that 19.44% of the wafers were grocery stores and 87.15% preferred markets. Baker was important in bread purchase channels (66.66%). The 25.34% of the bread purchase areas preferred grocery stores and 47.91% preferred markets. About 60.41% of those who buy cakes preferred bakery product stores. Promotional factors such as product variety, promotions, and the ability to make all purchases from the same place played an important role in the fact that baked goods such as biscuits, pasta, wafers and bread were preferential to the purchasing channel. Gül et al. [9] found that the markets were predominantly in the purchasing channel of consumers (89.75%) in the study on the consumers of Isparta province for biscuits and the most important factor was the price sensitivity of consumers. Ekmekçi Bal et al. (2013) stated that 80.51% of the consumers in the Tokat province were buying bread from the market. Tanık [16]

found that 27% of the consumers in Tekirdağ were bought from the market and 43% were bought from the baker. Demir and Kartal (2012) stated that 45% of consumers in Konya bought bread from the market. Markets are on the forefront of biscuits (91.95%), pasta (95.8%), bread (57.5%) and wafers (89%) in bakery products purchased by consumers. In the preference of cakes purchasing channels, it was determined that bakery products-pastry (68.50%) was the frontline.

Table 7. Purchasing channels (%)

	Biscuits	Bread	Pasta	Wafer	Cake
Grocer	24.12	25.34	14.11	19.44	1.04
Market	88.54	47.91	94.09	87.15	17.01
Bakery	1.04	66.66	0.69	0.69	24.30
Patisserie	0.00	14.58	0.00	0.00	60.41
Market place	0.00	0.00	1.73	0.00	0.00
Himself at home	0.00	5.20	2.08	0.00	20.13

Factors affecting purchase decision of bakery products can be seen from The Table 8. Among the factors that have the biggest impact on consumers in the preference of bakery products' purchasing channel were the fact that the conditions of the store are healthy and that all the shopping can be done. In addition, it was important that the consumer's purchasing channel was close to where he was, that he could find the desired products, and that there was a good relationship between the quality price.

It was determined that quality was the most important factor affecting purchasing behaviour of bakery products. In the second place, it was found that the price-quality level, the brand in the third place, the fourth was the product does not contain the additive and the price factor in the seventh place (Table 8).

#### **Purchasing frequency of consumers**

The average purchasing frequency of bakery products was also examined. The 3.82% of the interviewed individuals were in one week, 22.22% in fifteen days, 29.86% in one month, 20.49% in two to three months, 20.14% bought biscuits every six months. However, it was determined that 2.43% of the individuals did not consume biscuits and 1.04% did not purchased.

It was determined that 9.72% of the

respondents bought wafers a week, 26.04% every fifteen days, 21.88% monthly, 17.71% every two to three months and 13.89% every six months. 9.72% did not consume wafers. 1.04% of the interviewees did not buy wafers. Bread buying frequency was usually the daily.

Table 8. Factors affecting purchase decision of bakery products

	Biscuits	Wafer	Pasta	Cake
Quality	4.31	4.32	4.32	4.05
Level of price and quality	3.92	3.96	3.97	3.75
Brand	3.89	3.92	3.95	3.63
Additive free	3.77	3.86	3.60	3.55
Itself	3.71	3.70	3.70	3.48
The benefits	3.75	3.84	3.65	3.48
Price	3.65	3.54	3.48	3.40
Family	3.63	3.59	3.62	3.40
Organic	3.55	3.68	3.34	3.27
Income level	3.50	3.50	3.46	3.32
Suitability of the product	3.50	3.64	3.56	3.41
Odour	3.50	3.57	3.41	3.31
Packaging	3.48	3.35	3.43	3.38
Colour	3.40	3.41	3.28	3.18
Advertising, promotion	2.98	2.84	2.94	2.67
TV (audio-visual)	2.83	2.74	2.85	2.63
Friends	2.61	2.56	2.56	2.41
Properties of seller	2.64	2.74	2.55	2.58
Media	2.51	2.45	2.49	2.40
Social group	2.36	2.25	2.31	2.18
Internet	2.25	2.25	2.30	2.24

Scale: 1. "Not important at all" 2. "Not important" 3. "Somewhat important" 4. "Important" 5. "Very important"

On the other hand, 9.72% of the interviewed individuals were found not consuming bread and 1.04% said that they did not buy it.

In consumption of pasta, 3.13% of the interviewed individuals were buying one week, 8.68% of them were bought every fifteen days, 16.67% of them were monthly, 30.90% of them were every two to three months and 37.15% was buying every six months. About 2.78% of them did not consume pasta and 0.69% of them did not buy pasta.

The 19.44% of the interviewees were found to have bought one week, 3.13% to 15 days, 3.13% to monthly, 9.03% to every two to three months and 31.25% to buy cakes every six months. About 24.31% of them did not consume cakes and 9.72% did not buy cakes.

#### ***Judgments on the reliability of bakery products***

Food reliability; to protect food from biological, chemical or physical hazards and contamination that may occur during the food chain and to prevent food damage to consumer health [15]. It is estimated that foodborne illnesses cause approximately 76 million poisonings per year, 325 thousand hospital treatments and 5 thousand deaths.

However, ordinary consumers and producers do not consider foodborne illnesses to be a serious health problem and do not know what to do to prevent them or take precautions to prevent them [2]. In this context, the consumers who were interviewed were also asked about the reliability of bakery products and the findings are given in Table 11. It was judged for biscuits that 54.16% of the consumers had a "medium" and 14.23% were "very reliable". The 44.10% of the interviewed individuals were judged for breads to be "moderately reliable" and 29.51% were "very reliable". About 39.93% of the respondents said that pasta was "moderately reliable" and 41.36% were "very reliable". The 50% of the consumers had the judgment that the wafers were "medium" and 11.45% were "very reliable". And finally, 42% of the consumers in the cake products were "moderate", and 12.15% were "very reliable". Food-borne risks lead to serious health problems in all layers of the society, which leads to lower work efficiency and economic losses. This leads to a more cautious approach to food products, especially processed products. The news and the programs are affecting people. It encourages people to be wary of problems and diseases caused by food products. This is affecting the purchase and consumption of ready-made food.

Consumers' levels of knowledge about quality and food safety systems were also measured (Table 9). Turkey has met with the concept of quality after the second half of the 1980s [1]. With the dissemination of the ISO 9000 quality standards, which was published by the International Standards Organization (ISO) in 1987 and the European Union countries preferring the products of companies that implement these standards, studies on this issue have started to be carried out in Turkey

as well [10]. The aim of ISO is to promote quality and standardization all over the world, to cooperate in scientific, technological and commercial activities, to provide international circulation of products and services. ISO standards for food safety management system are called "ISO 22000" [1]. Another quality assurance system, Hazard Analysis and Critical Control Points (HACCP), is a system developed to prevent diseases that can be caused by food items and programmed controls to ensure that the production is made in full [17].

In the study, consciousness about the certificates (TSE, ISO, and HACCP) [21] that help consumers to evaluate the quality of food products was determined. According to this, it is determined that TSE is known by approximately 94.10% of the people interviewed within the scope of the survey and that the ISO standards are the most well-known standard after TSE (60.07%).

Table 9. Consumers' knowledge of some standards (%)

	I	II	III	Average
TSE *	90.70	94.25	100.00	94.10
ISO*	53.49	54.02	79.17	60.07
HACCP *	10.85	24.13	34.72	20.83
TS 2383	13.95	13.79	12.50	13.54

\*: There was a statistical difference between the income groups and the variables indicated by \*.

It was determined that the HACCP certificate and TS 2383 standard, which have an important place in terms of food safety, are least known standards by the households interviewed. It was determined that 20.83% of the households of HACCP and 13.54% of TS 2383 were recognized. It was also found that the awareness of these standards was increasing parallel to the income level (Table 9).

About 42.29% of the consumers did not know which company was controlling the bakery products sold in the market to be harmful to human health.

## CONCLUSIONS

Consumption, preferences and judgments of baked goods were investigated in the sample of Isparta city centre in the study. The data were obtained from 288 consumers using the

survey method.

According to research findings, it was determined that 2.43% of consumers did not consume biscuit products, 2.78% of pasta and varieties, 9.72% of wafers, 1.39% of bread and 24.31% of pastries and species were not consumed. It was found that 1.04% of the interviewed individuals were biscuits, wafers, bread, 0.69% pasta and 9.72% did not buy cake. The consumers surveyed found that the frequency of biscuit purchases was once a week to fifteen days, the frequency of pastry purchases was once a week, the frequency of purchasing wafers was fifteen days, and the frequency of purchasing pasta was once a month. Brand addiction can be said to be strong for such products. The nutritious, satisfying, delicious and consumer habits are highly influential on the consumption of bakery products. More grocery stores were on the front line in the purchase channels of bakery goods outside the cake and bread. Facilitated factors such as product diversity, promotions, and the ability to make all purchases played an important role in the sales channel preference. The most important criteria in choosing the purchasing channel of the consumers are; Hygiene, the environment where all the shopping can be done. The main factors affecting consumer preferences in baking goods consumption were flavour, satiety and habit. However, it was determined that consumers had a "medium confidence" judgment in bakery products. Due to developing technology and rapidly changing living conditions, there will be significant changes in consumer preferences. For this reason, firms operating in the bakery sector need to take into account consumer incomes and preference trends in creating product components.

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