

CONSUMER BEHAVIOR TO USE THE INFORMATION CONTAINED ON MEAT AND DAIRY PRODUCTS' PACKAGING

ET VE SÜT ÜRÜNLERİ AMBALAJLARI ÜZERİNDE BULUNAN BİLGİLERİ KULLANMAYA YÖNELİK TÜKETİCİ DAVRANIŞLARI

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Bu çalışmanın amacı; tüketicilerin ambalajlı et ve süt ürünlerini satın alırken, ambalaj üzerindeki bilgilere ne derece dikkat ettiklerinin ortaya çıkarılmasıdır. Çalışma kapsamında öncelikle, sıklıkla tüketilen ve kolayca ulaşılabilen ambalajlı et ve süt ürünlerinin üzerinde yer alan bilgiler market vb. yerlerde incelenerek tespit edilmiştir. Daha sonra söz konusu bilgilerden yola çıkarak yazarlar tarafından anket soruları geliştirilmiştir. Elde edilen verilere faktör analizi, bağımsız örneklem T-Testi ve ANOVA analizi yapılmıştır. Elde edilen sonuçlara göre; araştırmaya katılanlar, ürünlerin son kullanma tarihini, üretim tarihini ve tavsiye edilen tüketim tarihini yüksek oranda kontrol etmektedir. Et ve süt ürün türüne göre, içindikiler ve ürün/sertifika boyutunda araştırmaya katılanlar arasında anlamlı farklılık varken, tarih boyutunda araştırmaya katılanlar arasında anlamlı farklılık yoktur. Medeni duruma göre de, içindikiler ve ürün/sertifika boyutunda anlamlı farklılık varken, tarih boyutunda farklılık yoktur. Yaş grupları açısından değerlendirildiğinde, her üç boyutta da anlamlı bir farklılık yoktur. Aynı şekilde, eğitim durumunda da anlamlı bir farklılık yoktur.

ABSTRACT

The purpose of this study is to find out to what degree which consumers pay attention to the information given on the package when purchasing meat and dairy products. Firstly, the information on packed meat products and dairies that are frequently consumed and easily accessible in supermarkets and marketplaces were examined. Afterwards, based on the given information on packages, survey questions were developed by authors. Factor analysis, independent samples T-Test and ANOVA analysis were made to collected data. According the results; participants in the research highly checked the product's expiration, production and recommended consumption dates. As for meat products and dairies, there is a significant difference between participants in the research in terms of ingredients and product/certificate aspects. However, there is no significant difference between participants in the research as far as the date is concerned. Regarding marital status, while there is a significant difference in ingredients and product/certificate aspects, but there is no difference as far as the date is concerned. Evaluating age groups, there is no significant difference among the age groups in all three aspects. Likewise, there is no significant difference in terms of educational backgrounds.

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Introduction

The purchase of food products is the most common consumer behaviour which people do to maintain their lives. Food products are in the group of important consumer goods groups in which packaging is of great importance. Packaging is very important as it informs consumers of the information of the product as well as its protective function.

The primary function of the package is to protect products and to ease the handling, which is of great importance in the food industry. Packaging is also considered to be a significant marketing tool for food products (Silayoi and Speece, 2004). In addition to this, packaging becomes a symbol that conveys a positive or negative message for the product (Silayoi and Speece, 2007).

Consumers consider some factors such as brand, nutrition value, satiety, production and expiration date, hygiene in the manufacture and retail sites while purchasing food products (Kızılaslan and Kızılaslan, 2008). However, as the perceived quality risk of products decreases, the rate of checking the expiration date lowers (Tsiros and Heilman, 2005). The factors that consumers prioritize in food products are the expiration date, the TSE (Turkish Standards Institution) stamp, the brand of the product, individual habits of consumers and packaging, respectively (Sağlam et al., 1999). Güneş et al., who studied the attitudes and behaviours of consumers towards food packages, concluded that consumers read milk and dairy products and meat and meat products the most. Besides, they found that the most read information on the packages of milk and meat products is the expiration date whereas the least read information is health facts. The expiry date has been the most important fact on food products' labels for a long while (Özgül and Aksulu, 2006).

In packaged food consumption, factors that individuals can control are limited by the information on the package. There are some studies limited to the information on labels in packaged products. On the other hand, there are other studies investigating the existence of different substances found in the product which are not mentioned on the package label (Fierens et al., 2012). Various information on the package is written in different font sizes and shapes. The information written in small sizes may not be read. To be more precise, the information about nutrition facts are written in smaller font sizes compared to other information or facts. 27% of consumers read the nutrition facts before choosing a packaged food product (Grunert et al., 2010).

Packaging methods of milk and dairy products are changing day by day to meet the needs of consumers and other food industries. New packaging methods in the food industry use facilities not only for protection but also for extending shelf lives and/or improving the functional qualities of products. Especially recent methods can be evaluated as extremely sophisticated methods so as to evaluate the freshness of products (Ščetar et al., 2019). Packaging of milk and dairy products has less significance for consumers when compared to the taste of the product, trust for the product, product brand, healthiness, promotion and the place of purchase (Bousbia et al., 2017). While consumers purchase milk and dairy products, they pay attention to the expiration date on the package the most, which reflects the tendencies of consumers to buy and consume fresh dairies. In addition to this, while the volume/weight of the product and storing/protecting conditions have an impact on the consumer's purchase decision, ingredient facts do not have an impact on the decision (Mutsikiwa and Marumbwa, 2013).

Consumers pay attention to brand and manufacturer name, country of origin and company address information on the package. However, in milk and dairy products, the most important criterion for the purchase is the brand name. This expresses that consumers can evaluate all the other factors by the brand name (Mutsikiwa and Marumbwa, 2013).

Regarding meat and meat products there are a lot of factors that shape consumer behaviours. For this reason, consumers' perception, preferences and behaviours regarding meat and meat products differ and they not only depend on the appearance and sensorial properties of the meat but also on psychological and marketing aspects (Font-İ-Furnols and Guerrero, 2014). Nutrition facts on packaged meat and meat products are read by most of the consumers (70-80%) (Piedra et al., 1996; Schupp et al., 1998). On the other hand, one of every five consumers is unaware of the nutrition information on the packaged fresh meat products. Almost 25% of consumers state that there is no nutrition information on the package (Schupp et al., 1998).

In this study, it is aimed to reveal how much consumers use the information on the packaging, in other words, how much they read this information while purchasing packaged meat and dairy products. This study is

important because meat and dairy products are rich in content and important in terms of preparation, and the information on their packaging is information that needs attention. The fact that there are very few studies on the use of information on packaged food products in Turkey, and a detailed examination of the attention levels of consumers for all this information on the packages of meat and dairy products are the main reasons for this study. A comprehensive study was carried out for the information contained in the packages of these products, which are frequently consumed by consumers in their daily lives, and a study was conducted with a new scale that was not used before. This scale has been developed to be a study in which all the information contained in the packaging of the food products in question is used.

Materials and Methods

In this study, it is aimed to reveal how much the information on the packages of meat and dairy products that we consume frequently in our daily lives are used by consumers and whether this use differs in terms of demographic variables. Looking at the packaging of meat and dairy products, it is possible to say that the information on them consists of about twenty different elements.

The survey method was employed to gather data. To determine the question of the survey, the data on the packages of 12 different meat and dairy products are chosen from 6 market chains (2 regional and 4 national). The collection of the aforementioned information, the creation of the questionnaire and the collection of the data were carried out in Bursa and Kocaeli provinces between May and December 2021. The data which were obtained from packages contained expiration, production and recommended consumption dates, energy, nutrition, fat, sugar, salt, carbohydrate and protein values, price, brand, amount, conservation and consumption conditions and certificates. The data were recorded analysing all of the products. Almost all of the information given on the packages were the same in meat and dairy products.

Two different surveys were formed for meat and dairy products each of which contained 21 questions. The information given on the packages were changed into “attitude” statements. The questionnaires were given online. Pre-tests were given to 45 people. Besides, people who bought the packaged meat and dairy products were interviewed, which enabled verification.

The survey consisted of 2 parts. In the first part, there were demographical questions and questions about assessing whether they had read the information on the packages or not. In the second part, two different survey groups were created to determine the consumer behavior towards the information contained in the packages of meat and meat products/milk and dairy products. In this section, the participants participated in only one of the questionnaires regarding the information on the packaging of meat and meat products or milk and dairy products. (At this stage, the participants were asked a question with two options and they were directed to a survey about a product that selected the first option, and to a survey about the other product that selected the other option). In this way, it was aimed to determine whether there is a difference in the attitudes towards the information on the packaging of meat and dairy products.

Survey questions prepared online were sent to participants via social media, email and some were employed face-to-face. In the research, 5-point Likert scale was used (1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5- Strongly Agree). The data were evaluated using the SPSS program which were obtained from 462 surveys (172 online and 290 face-to-face).

Research Hypotheses

H₁: The behavior of the participants towards the information on the packaging (a-ingredients, b-date, c-product/certificate) differs according to their gender.

H₂: The behavior of the participants towards the information on the packaging (a-ingredients, b-date, c-product/certificate) differs according to meat and dairy products.

H₃: The behavior of the participants towards the information on the packaging (a-ingredients, b-date, c-product/certificate) differs according to their marital status.

H₄: The behavior of the participants towards the information on the packaging (a-ingredients, b-date, c-product/certificate) differs according to their age.

H₅: The behavior of the participants towards the information on the packaging (a-ingredients, b-date, c-product/certificate) differs according to their educational status.

H₆: The behavior of the participants towards the information on the packaging (a-ingredients, b-date, c-product/certificate) differs according to their going shopping frequency.

Findings

Demographic Findings

229 (49,6%) participants who took part in the research answered questions regarding milk and dairy products, 233 (50,4%) participants answered questions regarding meat and meat products. The demographic information about the participants is given in Table 1.

Table 1. Demographic Characteristics of Participants

| Gender | Frequency | Percentage(%) | Marital state | Frequency | Percentage(%) |
|--------------------------|------------|---------------|----------------------------|------------|---------------|
| Male | 216 | 46,8 | Single | 228 | 49,4 |
| Female | 246 | 53,2 | Married | 233 | 50,4 |
| Total | 462 | 100 | Missing value | 1 | 0,2 |
| | | | Total | 462 | 100 |
| Going Shopping frequency | Frequency | Percentage(%) | Education | Frequency | Percentage(%) |
| Once a week | 125 | 27,1 | Elementary school graduate | 34 | 7,4 |
| Twice a week | 130 | 28,1 | Middle school graduate | 58 | 12,6 |
| Thrice a week | 84 | 18,2 | High school graduate | 113 | 24,5 |
| More than thrice a week | 119 | 25,8 | College graduate | 74 | 16,0 |
| Missing value | 4 | 0,9 | Bachelor's degree | 135 | 29,2 |
| Total | 462 | 100 | Master degree | 48 | 10,4 |
| | | | Total | 462 | 100,0 |

216 participants were male whereas 246 were female. 228 were single while 233 were married. The educational level was high for most of the participants. The mean age of participants was 32,2560.

The mean of the expressions used in the research conducted on the use of the information on the packages of packaged meat and dairy products are shown in Table 2.

Table 2. Items Means

| NO | | N | Mean |
|-------|--------------------------------------------------------------------------------------------------------------|-----|--------|
| info1 | I pay attention to energy and nutrition values while purchasing packaged meat or meat/milk or dairy products | 462 | 3,3747 |
| info2 | I pay attention to fat value while purchasing packaged meat or meat/milk or dairy products | 462 | 3,4672 |
| info3 | I pay attention to saturated fat value while purchasing packaged meat or meat/milk or dairy products | 462 | 3,1538 |
| info4 | I pay attention to carbohydrate value while purchasing packaged meat or meat/milk or dairy products | 462 | 3,0786 |
| info5 | I pay attention to sugar rate while purchasing packaged meat or meat/milk or dairy products | 462 | 3,1700 |
| info6 | I pay attention to protein value while purchasing packaged meat or meat/milk or dairy products | 462 | 3,4179 |

| | | | |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------|-----|---------------|
| info7 | I pay attention to salt rate while purchasing packaged meat or meat/milk or dairy products | 462 | 3,0965 |
| info8 | I pay attention to choosing the product that doesn't contain any trans fatty while purchasing packaged meat or meat/milk or dairy products | 462 | 3,5570 |
| info9 | I pay attention to the expiration date while purchasing packaged meat or meat/milk or dairy products | 462 | 4,6529 |
| info10 | I pay attention to the production date while purchasing packaged meat or meat/milk or dairy products | 462 | 4,5404 |
| info11 | I pay attention to recommended consumption date while purchasing packaged meat or meat/milk or dairy products | 462 | 4,5812 |
| info12 | I pay attention to brand name while purchasing packaged meat or meat/milk or dairy products | 462 | 4,5213 |
| info13 | I pay attention to the price while purchasing packaged meat or meat/milk or dairy products | 462 | 4,1451 |
| info14 | I read the conservation and consumption conditions while purchasing packaged meat or meat/milk or dairy products | 462 | 3,8311 |
| info15 | I pay attention to the country of origin while purchasing packaged meat or meat/milk or dairy products | 462 | 3,6088 |
| info16 | I pay attention to the producer company while purchasing packaged meat or meat/milk or dairy products | 462 | 3,6930 |
| info17 | I pay attention to the amount (number, weight) while purchasing packaged meat or meat/milk or dairy products | 462 | 3,7765 |
| info18 | I pay attention to that it has a halal certificate while purchasing packaged meat or meat/milk or dairy products | 462 | 3,9194 |
| info19 | I pay attention that the package isn't opened, torn, ruined while purchasing packaged meat or meat/milk or dairy products | 462 | 4,7657 |
| info20 | I pay attention to the ingredients list while purchasing packaged meat or meat/milk or dairy products | 462 | 3,3982 |
| info21 | I pay attention that it has TSE certified while purchasing packaged meat or meat/milk or dairy products | 462 | 3,8695 |

In Table 2, it is clear that consumers pay attention to the date information of packaged meat and dairy products considerably. Besides, consumers are careful about whether the package is opened, torn, ruined.

Exploratory factor analysis was made for the 21 statements and data regarding meat and dairy products. KMO value was 0,928 and Barlett significance level was 0,001. Factor analysis can be applied to the data set which was obtained accordingly KMO and Barlett test (Tabachnick and Fidell, 2015). The factor analysis results are shown in Table 3.

Table 3. Exploratory Factor Analysis Results

| Items that form the scale | Factors | | | Eigenvalue* | Explained Variance* | Cronbach Alpha |
|---------------------------|-------------|---------------------|------|-------------|---------------------|----------------|
| | Ingredients | Product/Certificate | Date | | | |
| info4 | ,862 | | | 5,813 | 30,597 | 0,931 |
| info5 | ,852 | | | | | |
| info3 | ,837 | | | | | |
| info6 | ,814 | | | | | |
| info7 | ,801 | | | | | |
| info1 | ,774 | | | | | |
| info2 | ,742 | | | | | |
| info8 | ,681 | | | | | |
| info20 | ,560 | ,464 | | | | |
| info15 | | ,760 | | 3,620 | 19,055 | 0,832 |

| | | | | | |
|---------------------------------|------|---------------|--------|-------|--|
| info17 | ,730 | | | | |
| info16 | ,720 | | | | |
| info18 | ,692 | | | | |
| info14 | ,625 | | | | |
| info13 | ,548 | | | | |
| info21 | ,531 | | | | |
| info9 | ,830 | 2,221 | 11,689 | 0,765 | |
| info10 | ,795 | | | | |
| info11 | ,764 | | | | |
| Explained Total Variance | | 61,341 | | | |

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a. Rotation converged in 5 iterations.
 * Values following rotation

In the exploratory factor analysis, the 12th and the 19th items were removed from the scale since their factor loads were low. Any item with a lower factor load than 0,50 was ignored. As the result of the factor analysis, 3 aspects emerged. Then confirmatory factor analysis was made in 2 stages. The structure acquired with the exploratory factor analysis was used in the same way in the confirmatory factor analysis. However, as the model adaptive values were not at the intended level, info20 was removed from the scale. In addition, info5 and info6 were merged with info5 and info7. The factor structure obtained by these processes is presented in Table 4.

Table 4. Confirmatory Factor Analysis Results

| Items - Variables | Factor Loadings | Model Fit Indices |
|-------------------|--------------------------------|-------------------|
| info7 | INGREDIENTS ,764*** | |
| info6 | INGREDIENTS ,784*** | |
| info5 | INGREDIENTS ,810*** | |
| info4 | INGREDIENTS ,850*** | |
| info3 | INGREDIENTS ,855*** | CMIN/DF= 2,735 |
| info2 | INGREDIENTS ,759*** | |
| info1 | INGREDIENTS ,782*** | RMR= 0,079 |
| info8 | INGREDIENTS ,717*** | |
| info16 | PRODUCT/CERTIFICATE ,692*** | GFI= 0,919 |
| info15 | PRODUCT/CERTIFICATE ,758*** | |
| info14 | PRODUCT/CERTIFICATE ,732*** | AGFI= 0,893 |
| info13 | PRODUCT/CERTIFICATE ,515*** | |
| info17 | PRODUCT/CERTIFICATE ,621*** | CFI= 0,947 |
| info18 | PRODUCT/CERTIFICATE ,556*** | |
| info21 | PRODUCT/CERTIFICATE ,627*** | RMSEA= 0,067 |
| info9 | DATE ,698*** | |
| info10 | DATE ,734*** | |
| info11 | DATE ,731*** | |

Concerning the factor structure obtained as the result of the confirmatory factor analysis, some additional analyses were made for the validity of the scale. These analyses are shown in Table 5.

Table 5. Validity Analyses

| Aspects | CR | AVE | MSV | Product/Certificate | Ingredients | Date |
|---------------------|-------|-------|-------|---------------------|--------------|--------------|
| Product/Certificate | 0,833 | 0,420 | 0,320 | 0,648 | | |
| Ingredients | 0,930 | 0,626 | 0,320 | 0,566 | 0,791 | |
| Date | 0,765 | 0,520 | 0,231 | 0,481 | 0,306 | 0,721 |

It is recommended that AVE values be higher than 0,50 and CR Values, 0,70 [21]. In addition, MSV values should be lower than AVE values (Gaskin, 2021). In this case, it can be said that CR, AVE and MSV values are at the desired level. In addition to this, the AVE value of the product/certificate should be lower than 0,50. However, as long as other conditions are fulfilled and Fornell Larcker conditions fit it can be concluded that 0,420 AVE values do not pose a problem (Fornell and Larcker, 1981). When Fornell Larcker criteria values on the right side of the table are analysed, it is clear that the numbers that are bold on the diagonal part (AVE values that are out of stem) are higher than the correlation values. When all the results are analysed, it can be concluded that convergent validity and discriminant validity were provided.

To identify whether there was any difference between the groups, difference analysis were made. To determine if there was any difference between genders, an independent samples T-Test was made. Results of the independent samples T-Test between genders are shown in Table 6.

Table 6. Independent Samples T-Test Between Genders

| Variables | Independent Samples T-Test | | | | | Mean | |
|---------------------|----------------------------|------|--------|---------|------|--------|-------|
| | Levene Test | | T-Test | | | Female | Male |
| | F | Sig. | t | df | Sig. | | |
| Ingredients | ,132 | ,717 | -2,615 | 460 | ,009 | 3,413 | 3,149 |
| | | | -2,610 | 448,859 | ,009 | | |
| Date | 2,519 | ,113 | -2,103 | 460 | ,036 | 4,645 | 4,531 |
| | | | -2,088 | 435,364 | ,037 | | |
| Product/Certificate | ,439 | ,508 | -2,201 | 460 | ,028 | 3,918 | 3,740 |
| | | | -2,192 | 444,165 | ,029 | | |

According to Table 6, in all aspects, there is a significant difference between female and male consumers. According to the results obtained, in all aspects, female paid more attention when compared to male. According to T-Test results, H_{1a} , H_{1b} , and H_{1c} hypotheses accepted.

To determine whether there is a difference between participants who answered meat/meat products and milk/dairy products items independent samples T-Test was employed whose results are shown in Table 7.

Table 7. Independent Samples T-Test for Meat and Dairy Product Type

| Variables | Independent Samples T-Test | | | | | Mean | |
|---------------------|----------------------------|------|--------|---------|------|-------|-------|
| | Levene Test | | T-Test | | | MEAT | MILK |
| | F | Sig. | t | df | Sig. | | |
| Ingredients | 1,241 | ,266 | -2,397 | 460 | ,017 | 3,410 | 3,168 |
| | | | -2,398 | 459,858 | ,017 | | |
| Date | 1,132 | ,288 | -,105 | 460 | ,917 | 4,594 | 4,589 |
| | | | -,105 | 459,328 | ,917 | | |
| Product/Certificate | 2,918 | ,088 | -3,287 | 460 | ,001 | 3,965 | 3,702 |
| | | | -3,292 | 445,583 | ,001 | | |

According to Table 7, whereas there was a significant difference between meat and dairy products in terms of ingredients and product/certificate, there was no significant difference regarding the date. According to T-Test results, H_{2a} , and H_{2c} hypotheses accepted, and H_{2b} hypothesis rejected.

Independent Samples T-Test to see if there is any difference regarding marital status results are shown in Table 8.

Table 8. Marital Status-Independent Samples T-Test

| Variables | Independent Samples T-Test | | | | | Mean | |
|---------------------|----------------------------|------|--------|---------|------|---------|--------|
| | Levene Test | | T-Test | | | Married | Single |
| | F | Sig. | t | df | Sig. | | |
| Ingredients | ,474 | ,492 | -2,376 | 459 | ,018 | 3,408 | 3,167 |
| | | | -2,378 | 458,705 | ,018 | | |
| Date | 2,735 | ,099 | -1,328 | 459 | ,185 | 4,626 | 4,554 |
| | | | -1,327 | 453,418 | ,185 | | |
| Product/Certificate | ,801 | ,371 | -2,749 | 459 | ,006 | 3,944 | 3,722 |
| | | | -2,752 | 455,750 | ,006 | | |

According to Table 8, there was a significant difference between married and single consumers regarding ingredients and product/certificate aspects. Married consumers paid more attention than single consumers for both aspects. According to T-Test results, H_{3a}, and H_{3c} hypotheses accepted, and H_{3b} hypothesis rejected.

ANOVA analysis was made to see if there was any difference regarding age groups. ANOVA analysis made regarding age groups is shown in Table 9.

Table 9. Age Groups-ANOVA Analysis

| Variables | ANOVA | | | |
|---------------------|----------------------|----|-------|------|
| | Total of the Squares | SD | F | Sig. |
| Ingredients | 10,088 | 4 | 2,153 | ,073 |
| Date | ,601 | 4 | ,437 | ,782 |
| Product/Certificate | 6,270 | 4 | 2,082 | ,082 |

In Table 9, it is clear that there was no significant difference in all aspects regarding the age groups. Age groups are categorized as 18-27, 28-37, 38-47, 48-57, 58 and above. According to Anova analysis results, H_{4a}, H_{4b} and H_{4c} hypotheses rejected.

ANOVA analysis was used to see whether there was a significant difference in terms of consumers' educational status results and the results are shown in Table 10.

Table 10. Educational Status-ANOVA Analysis

| Variables | ANOVA | | | |
|---------------------|----------------------|----|-------|------|
| | Total of the Squares | SD | F | Sig. |
| Ingredients | 5,981 | 5 | 1,012 | ,410 |
| Date | 2,237 | 5 | 1,315 | ,256 |
| Product/Certificate | 2,629 | 5 | ,691 | ,630 |

When Table 10 is analysed, it can be seen that there was no significant difference between consumers regarding their educational status. The educational status was categorized as elementary school graduate, middle school graduate, high school graduate, college graduate, bachelor's degree and master degree. According to Anova analysis results, H_{5a}, H_{5b} and H_{5c} hypotheses rejected.

ANOVA analysis results to see if there is any significant difference between consumers regarding going shopping frequency are shown in Table 11.

Table 11. Going Shopping Frequency-ANOVA Analysis

| Variables | ANOVA | | | |
|---------------------|----------------------|----|-------|------|
| | Total of the Squares | SD | F | Sig. |
| Ingredients | 12,004 | 3 | 3,446 | ,017 |
| Date | 1,243 | 3 | 1,206 | ,307 |
| Product/Certificate | 4,330 | 3 | 1,934 | ,123 |

According to Table 11, there is a significant difference between consumers regarding ingredient. According to Anova analysis results, H_{6a} , hypothesis accepted, and H_{6b} and H_{6c} hypotheses rejected. To determine the difference, a Post-Hoc test was employed. Before interpreting the Post-Hoc test, it was checked whether the variances were distributed homogeneously. The test of homogeneity of variances is shown in Table 12.

Table 12. Homogeneity of Variances

| | | Test of Homogeneity of Variances | | | |
|-------------|---------------|----------------------------------|-----|-----|------|
| | | Levene Statistic | df1 | df2 | Sig. |
| Ingredients | Based on Mean | 4,111 | 3 | 454 | ,007 |

In Table 12, it is seen that the variances were not distributed homogeneously ($0,007 < 0,05$). For this very reason, Games Howel test is used as a Post-Hoc test. Games Howel Post-Hoc test results are shown in Table 13.

Table 13. Going Shopping Frequency-Games Howel Post-Hoc Test

| Going Frequency | Shopping Frequency | Mean Difference (I-J) | Std. Error | Sig. |
|-------------------------|-------------------------|-----------------------|------------|------|
| Once a week | Twice a week | -,32950* | ,12612 | ,047 |
| | Thrice a week | -,44450* | ,14797 | ,016 |
| | More than thrice a week | -,18285 | ,14684 | ,599 |
| Twice a week | Once a week | ,32950* | ,12612 | ,047 |
| | Thrice a week | -,11500 | ,14247 | ,851 |
| | More than thrice a week | ,14665 | ,14130 | ,727 |
| Thrice a week | Once a week | ,44450* | ,14797 | ,016 |
| | Twice a week | ,11500 | ,14247 | ,851 |
| | More than thrice a week | ,26165 | ,16110 | ,367 |
| More than thrice a week | Once a week | ,18285 | ,14684 | ,599 |
| | Twice a week | -,14665 | ,14130 | ,727 |
| | Thrice a week | -,26165 | ,16110 | ,367 |

*. The mean difference is significant at the 0.05 level.

In Table 13, there was a difference between people who go to the market once a week and twice a week (sig. 0,047) and a difference between people who go to the market once a week and thrice a week (sig. 0,016).

Result, Discussion and Suggestions

In this study, which aims to determine the behavior of consumers towards the use of information on the packaging of packaged meat and dairy products, it has been concluded that consumers pay attention to date information the most. The least attention paid information is the information about the content of the product. As these products are nondurable, they should be consumed in a short amount of time, which makes the date information crucial for the participants.

According to the T-Test analysis, when female and male were compared, it was found that there was significant difference in the ingredients, date and product/certificate aspects. However, in each aspect, female had a higher mean than male. According to a study, attention given to the information on food was very low in the 1990's and there was no difference between female and male, which later got higher attention and female were more careful than male (Özgül and Aksulu, 2006). In food consumption, female care more about healthy diets than male, which may be the result of female being more inclined to keep their weight under control and their strong beliefs in healthy diets (Wardle et al., 2004).

As the result of the analysis made for meat and dairy products, consumers check the date of the products while purchasing meat and dairy products. This result shows that the product's date information (expiration date, production date, recommended consumption date) is important for consumers. Because meat and dairy products are nondurable products, expired dates threaten health, so the date information is significant. The dates on packaged products are checked more often by experienced consumers (Tsiros and Heilman, 2005). The expiry date is the factor that consumers pay the most attention to in food (Özkan, 2022). Expiry dates are especially important for perishable food products, which may prevent consumers from spoiling. On the other hand, sellers attach importance to profitability (Wu et al., 2018). In terms of ingredients and product/certificate aspects, however, there is a significant difference between meat and dairy products. Thus, as far as the ingredients of meat and dairy products and product/certificate aspects are concerned variables result in various interpretations, which shows that individuals distinctively emphasize various factors such as health, materiality, taste.

When individuals are analysed by their marital status, married and single consumers are alike in caring the date information of meat and dairy products. This shows that date information of meat and dairy products are important for everyone. Married individuals care more about the ingredients and product/certificate aspects than single individuals. As family members, married individuals care more about the ingredients and certificates. According to a study, there is a significant difference between married individuals and single individuals in terms of eating out habits (Çalmaşur and Daştan, 2020). In another study, it is shown that married individuals tend to eat out than single individuals (Bitrak and Hatırlı, 2009).

All individuals, regardless of age, care about 3 aspects of meat and dairy products. All consumers who can shop for themselves or their families regard the information on meat and dairy products, which is an indicator that any individual from every age group is responsive to this.

No matter what the education status is, individuals' approaches to packaged meat and dairy products are alike. This shows that education status is not a factor in caring about product information. In the same way, checking information on packages doesn't require education.

When consumers are analysed in terms of frequency of going shopping, it shows that there is a difference only in ingredients variable information in packaged meat and dairy products. No matter how many times a week individuals go to the market, they equally care about the date and product/certificate information. Going to the market more or less often can be seen as the reason for the difference in the facts of the ingredient. Individuals who go to the market more often have more information about the ingredients of the product and do not feel the need to check whereas people who go to the market less often feel the need to check the information of the products.

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GENİŞLETİLMİŞ ÖZET

Bu çalışmanın amacı, günlük hayatımızda sıklıkla tükettiğimiz ambalajlı et ve süt ürünlerini satın alırken tüketicilerin ambalajların üzerinde bulunan bilgilere ne derece dikkat ettiklerinin belirlenmesi ve bu durumun demografik değişkenler açısından farklılık gösterip göstermediğinin ortaya çıkarılmasıdır.

Bu çalışma, ambalajlı et ve süt ürünleri satın alırken ambalaj üzerinde bulunan bilgilere yönelik dikkat edilen unsurların neler olduğunu sorgulamaktadır. Bu doğrultuda, et ve süt ürünlerinin ambalajlı olanlarının üzerinde bulunan bilgilerin tüketiciler tarafından ne kadar bilindiğinin, en çok hangi unsurlara dikkat edildiğinin belirlenmesi araştırmanın ana sorularındandır. Bununla birlikte, araştırmada bu bilgilere ne ölçüde dikkat edildiğinin demografik değişkenler açısından değişip değişmediği de sorgulanmaktadır.

Ambalajın birincil fonksiyonu ürünlerin korunmasını sağlamak ve ürünleri taşıma kolaylığı sağlamasıdır. Bu fonksiyonlar özellikle gıda ürünlerinde daha önemli hale gelmektedir. Ambalajlama, gıda ürünleri için önemli bir pazarlama aracı olarak değerlendirilmektedir (Silayoi ve Speece, 2004). Bununla birlikte, ambalaj; ürün ile ilgili olumlu veya olumsuz bir mesaj içeren bir sembol haline gelmektedir (Silayoi ve Speece, 2007). Tüketiciler gıda ürünü satın alırken ambalajın yanı sıra marka, besin değeri, besleyicilik, doyuruculuk, üretim ve son kullanma tarihi, üretim ve satış yeri hijyeni, gıdanın sağlıklı olma faktörlerini göz önünde bulundurmaktadırlar (Kızılaslan ve Kızılaslan, 2008). Ancak, ürünlerin algılan kalite riski azaldıkça son kullanma tarihini kontrol etme oranı da düşmektedir (Tsiros ve Heilman, 2005). Tüketicilerin gıda ürünleriyle ilgili en çok önem verdikleri unsurlar sırasıyla; ürünün son kullanma tarihi, TSE damgasına sahip olması, ürünün markası, tüketicilerin kendi alışkanlıkları ve ambalajlamadır (Sağlam vd., 1999).

Araştırma kapsamında verileri toplamak için anket yöntemi kullanılmıştır. Anket sorularını oluşturmak için, 2 tanesi bölgesel, 4 tanesi ulusal olmak üzere toplam 6 tane zincir markette, 12 farklı markanın et ve süt ürünlerinin ambalajlarında bulunan bilgiler tespit edilmiştir. Bu bilgiler arasında ürünlerin son kullanma tarihi, üretim tarihi, tavsiye edilen tüketim tarihi, enerji ve besin değerleri, yağ oranları, şeker ve tuz oranları, karbonhidrat değeri, protein değeri gibi bilgiler, fiyat, marka, miktar, muhafaza ve kullanım koşulları ve ürünün sahip olduğu sertifika bilgileri yer almaktadır. Söz konusu bilgiler bütün ürünler incelenerek kayıt edilmiştir. Bu bilgilerin hemen hemen hepsi et ve süt ürünlerinde aynıdır. Ambalajlar üzerinde yer alan bilgiler ve ambalajlar ile ilgili genel sorular olmak üzere et ve süt ürünleri için ayrı ayrı olmak üzere 21 sorudan oluşan iki ayrı anket formu hazırlanmıştır.

Ambalajlı et ve süt ürünleri üzerinde yer alan bilgilere yönelik tüketicilerin davranışlarını belirlemeyi amaçlayan bu çalışmada, tüketicilerin en çok tarih bilgilerine dikkat ettiği sonucuna ulaşılmıştır. En az dikkat edilen bilgiler ise ürünün içeriği ile ilgili bilgilerdir. Bu ürünlerin kısa sürede tüketilen ürünler olması ve dayanıksız olması tarih bilgilerinin en yüksek ortalamaya sahip olmasının sebebi olarak görülmektedir. Yapılan faktör analizleri sonucunda elde edilen içindekiler, tarih ve ürün/sertifika boyutları için cinsiyetler arasında yapılan analizde, kadın ve erkekler arasında anlamlı bir farklılık olmadığı sonucuna ulaşılmıştır. Ancak, her üç boyutta da kadınların ortalaması erkeklerden daha fazladır. Et ve süt ürünleri için yapılan analiz sonucunda, tüketiciler et ve süt ürünlerini satın alırken tarihlerini kontrol etmektedir. Bu sonuç, et ve süt ürünlerinin tarih bilgilerinin (son kullanma tarihi, üretim tarihi, tavsiye edilen tüketim tarihi) tüketiciler için önemli olduğunu göstermektedir. Et ve süt ürünleri bozulabilen, dayanıksız tüketim ürünleri olduğu için ve günü geçmiş bu tür ürünler sağlık açısından bir tehdit unsuru olduğu için tarih bilgileri her iki ürün grubu içinde dikkate değerdir. İçindekiler ve ürün/sertifika değişkenlerinde ise, et ve süt ürünleri arasında anlamlı farklılık bulunmaktadır. Buradan hareketle, tüketiciler için et ve süt içeriğinde bulunan bilgiler ve ürün/sertifika boyutu değişkenleri farklı şekillerde anlamlar ifade etmektedir. Bu durum, bireylerin; sağlık, maddiyat, beğeni vs. unsurlar açısından ürünlere farklı derecelerde önem verdiklerini göstermektedir.

Bireyler medeni durumlarına göre değerlendirildiğinde evli ve bekâr tüketicilerin her ikisi içinde et ve süt ürünlerinin tarih bilgileri aynı şekilde önem arz etmektedir. Bu durum, et ve süt ürünlerinin tarih bilgilerinin evli ve bekâr farkı gözetmeksizin her birey için önemli olduğunu göstermektedir. İçindekiler ve ürün/sertifika değişkenlerine evli bireyler bekâr bireylerden daha fazla dikkat etmektedir. Bir aile yapısının olması, aile ortamında bulunmak bu değişkenlere verilen önemin bir göstergesidir.

Et ve süt ürünlerinin her üç boyutuna da yaş farkı gözetmeksizin tüm bireyler aynı şekilde önem vermektedirler. Kendisi veya ailesi için alışveriş yapma yeteneğine sahip bütün tüketiciler et ve süt ürünlerinin üzerinde bulunan

bilgilere aynı derecede dikkat etmektedir. Bu durum, her yaştan bireyin konuyla ilgili duyarlılık sahibi olduğunun göstergesidir.

Eğitim seviyesi ne olursa olsun bireylerin ambalajlı et ve süt ürünlerine yaklaşımı aynı şekildedir. Bu durum, eğitim seviyesinin ürün bilgilerine dikkat etmek için bir kıstas olmadığını göstermektedir. Aynı şekilde bu bilgilerin kontrolü eğitilmiş olmayı da gerektirmemektedir.

Tüketiciler, markete gitme sıklığı açısından değerlendirildiğinde, ambalajlı et ve süt ürünlerinin üzerinde bulunan bilgilerden sadece içindikiler değişkeninde farklılık göstermektedir. Bireyler haftada kaç kere markete giderse gitsin tarih ve ürün/sertifika bilgilerine eşit derecede önem vermektedirler. Daha sık veya daha seyrek markete gitmek, içindikiler boyutunda bulunan bilgilerin kontrol edilmesindeki farklılığın nedeni olarak görülebilir. Markete daha sık giden bireyler ürünlerin içeriği hakkında daha fazla bilgi sahibi olarak kontrol ihtiyacı hissetmemekte veya daha az markete gidenler ürünlerin bilgilerini kontrol etme ihtiyacı hissetmektedir.