# T.C.

# YEDİTEPE UNIVERSITY INSTITUTE OF HEALTH SCIENCES DEPARTMENT OF NUTRITION AND DIETETICS

# DETERMINATION OF UNIVERSITY STUDENTS' TRUST TO SPECIFIC PACKAGED FOODS, KNOWLEDGE AND USAGE LEVEL OF FOOD LABELS CONSIDERING DIFFERENT BMI LEVELS

MASTER'S THESIS

BEGÜM DEMİRCAN

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SUPERVISOR

Assist. Prof. Dr. Arzu DURUKAN

İSTANBUL - 2019

#### **TEZ ONAYI FORMU**

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Bu çalışma jurimiz tarafından kapsam ve kalite yönünden Yüksek Lisans Tezi olarak kabul edilmiştir.

	Unvanı, Adı-Soyadı (Kurumu)	İmza
Jüri Başkanı:	Dr. Jor. Gyesi Them Keye Cebilge	n Am
Tez danışmanı:	Dr. Opr. jyesi Anzu Dunkan (	Sunder
Üye:	Dr. Opr. Oyd Jak Gotak	
Üye:		
Üye:		

#### ONAY

Prof. Dr. Bayram YILMAZ Sağlık Bilimleri Enstitüsü Müdürü

#### DECLARATION

I hereby declare that this thesis is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which has been accepted for the award of any other degree except where due acknowledgment has been made in the text.



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# LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
ASBs	Artificially Sweetened Beverages
BMI	Body Mass Index
BOP	Back of Package
FOP	Front of Package
GCA	Gastronomy and Culinary Arts
NAD	Nutrition and Dietetics
PTR	Physiotherapy and Rehabilitation
SSBs	Sugar Sweetened Beverages
UHT	Ultra High Temperature
UK	United Kingdom
US	United States
WHO	World Health Organisation

#### ABSTRACT

Demircan, B. (2019). Determination of University Students' Trust to Specific Packaged Foods, Knowledge and Usage Level of Food Labels Considering Different BMI Levels. Yeditepe University, Institute of Health Science, Department of Nutrition and Dietetics, MSc Thesis. İstanbul.

The aim of this study is to evaluate consumers' perception of specific packaged foods and drinks, light / diet products, organic foods and food label usage behavior depending on distrust against food industry displays an overall increase in Turkey lately. Data was obtained by using a survey consisting of 14 multiple-choice questions and conducted with 299 university students (M/F=78/221) who were included randomly from three courses; Nutrition and Dietetic (NAD), Physiotherapy and Rehabilitation (PTR) and Gastronomy and Culinary Arts (GCA) in Spring Semester of 2017-2018 academic year. Total results were interpreted by taking Body Mass Index (BMI) as the key variable. As a result, a raising distrust against packaged foods and drinks was observed. Despite accepting UHT milk, packaged yoghurt, light milk groups as healthy based on their nutritional knowledge, most of them were found worried about additives inside packaged breads and light / diet snacks. With BMI values equal to or greater than 25, students' having lower food label reading rate and being less concerned about nutritional loss can be investigated in further research in the field of obesity.

Key words: Consumer Behavior, Consumer Trust, Packaged Foods, Food Labeling, Obesity

#### ÖZET

Demircan, B. (2019). Bir Vakıf Üniversitesindeki Öğrencilerin Belirli Paket Gıdalara Yönelik Güven Algısı ve Besin İçeriği Bilgi Düzeylerinin BKI Seviyelerine Göre Değerlendirilmesi. Yeditepe Üniversitesi, Sağlık Bilimleri Enstitüsü, Beslenme ve Diyetetik Bölümü, Master Tezi. İstanbul.

Bu çalışmada, Türkiye'de son dönemde yiyecek endüstrisine karşı azalmış güvene dayanarak, tüketicilerin belirli paket gıdalara, diyet ürünlere ve organik gıdalara yönelik tutumunun, besin etiketi okuma davranışının araştırılması hedeflenmiştir. Çalışmanın verileri, 14 coktan secmeli sorudan olusan bir anketin, Beslenme ve Diyetetik, Fizik Tedavi ve Rehabilitasyon ve Gastronomi ve Mutfak Sanatları olmak üzere üç ayrı bölümden randomize seçilmiş toplam 299 üniversite öğrencisine (E/K=78/221), 2017-2018 akademik yılının Bahar Dönemi'nde uygulanmasıyla elde edilmiştir. Çalışmanın sonuçları değerlendirilirken Beden Kütle İndeksi (BKI) ana değişken olarak alınmıştır. Sonuç olarak, paketlenmiş yiyecek ve içeceklere yönelik genel bir güven sorununun varlığı tespit edilmiştir. UHT sütü, paketlenmiş yoğurdu ve yağı azaltılmış süt gruplarını beslenme bilgilerine dayanarak sağlıklı kabul etmelerine rağmen, çoğu paketlenmiş ekmekler ve kalorisi azaltılmış / diyet atıştırmalıklar içerisindeki katkı maddeleri hakkında endişeli bulunmuştur. BKI değeri 25 veya üzeri olan öğrencilerin besin etiketi okuma oranının daha düşük ve besin değeri kaybı konusunda kaygısının daha az olması üzerine. obezite alanında yapılacak yeni araştırmalara ihtiyaç vardır. Anahtar kelimeler: Tüketici Davranışı, Tüketici Güveni, Paketlenmiş Gıdalar, Besin Etiketleme, Obezite

#### **1.INTRODUCTION**

Modern age and technology have entered in our lives with carrying substantial advantages with them. Industrial food production methods including techniques for food sterilization and preservation have wiped out bacterial diseases, especially for dairy products, and ensured longer shelf life. It has been accepted as a success to provide good quality and healthier foods by using modern production methods instead traditional ones.

In today's world, while traditional products are associated with high fiber, low sugar and no additives, industrially produced foods are linked to additives and diseases like cancer in consumers' perspective (1). With the increasing effect of naturalness movement, people's perception and preferences towards specific packaged foods and drinks has changed in late years. Consumers' carefulness about what they buy and what they eat has been increased day by day. Production methods have become an important impact on consumers' liking and accepting a product. While foods that are produced with industrialized methods create negative effect on consumers, they are prone to like traditionally produced foods. Trust level for natural products is found higher than industrial packaged products (2). Consumers' perception and trust towards foods constitute and change their buying behavior (3).

People's food choices and buying behavior are also affected by food labels and ingredients. Studies show that nutrition labels are significant tools for consumers' making healthier choices (4). Although consumers look like more health oriented than before, understanding level for food labels is not found enough to improve their food choices (5). It is already found that, consumers are in a search of simple and easy to read food labels. Clear and understandable nutrition labeling is important to increase food label usage, trust towards foods / drinks and make better choices (6).

Despite the rise in people's seeking healthier options considering foods and drinks, the rate for illnesses caused by obesity has been increasing alarmingly of late years. According to World Health Organization (WHO), overweight and obese terms are defined as abnormal fat accumulation of body that can damage health and measured by BMI, a simple index of weight-for-height. A person with a BMI level equal to or greater than 25 is considered overweight and a person with a BMI level equal to or greater than 30 is considered obese (7). In today's world, approximately 1.6 billion adults are overweight while there are also over 400 million obese people. When the possible causes of obesity are searched, consumers' food choices can be put forward easily. To evaluate the significant rise in the number of overweight and obese participants almost all over the world, understanding of consumers' purchase decisions, credence attributes and food label knowledge is necessarily required.

The present study is aimed to find out consumers' perception towards specific foods / drinks while investigating usage rate of food labels and ingredients that consumers mostly look for at shopping in comparison to different Body Mass Index (BMI) levels of participants. BMI is chosen as the key variable. Influence of gender, living place and university studying course was also analyzed.

To achieve this goal, data was collected by a survey consisting of 14 multiplechoice questions and applied to a total 299 students of Yeditepe University from three different courses; Nutrition and Dietetics (NAD), Physiotherapy and Rehabilitation (PTR) and Gastronomy and Culinary Arts (GCA) in Spring Semester of 2017-2018 academic year. Students from each course have been chosen randomly for the research.

With consideration of all results, a raising health concern was observed. A significant amount of participants was found having distrust against packaged breads, packaged yoghurts, UHT milks, light / diet products and organic foods. Most of the concerns were based on additives and nutritional loss. Participants whose BMI level is less than 25 were found more concerned about possible nutritional loss based on packaging and industrial methods of foods and drinks than overweight and obese students. The paper aims to fill a gap in the literature by arguing consumers' trust / distrust towards packaged breads, packaged milk and dairy products, light / diet products, processed meat products and organic foods considering different variables, particularly BMI levels.

#### 2. LITERATURE REVIEW

#### 2.1. Label, packaging and BMI

Food labels are important for consumers to understand products have which ingredients inside. People make their choices by reading information on food labels. In U.S. it was found that almost 60% of people use Back of Package (BOP) label and using ingredient list and serving size information (8). Lately, people were found being more interested about nutrition and healthfulness. Food labels lead consumers to find out if products they choose to buy are healthy or unhealthy. People have assumptions about particular products and they stated that they can easily detect healthier ones (5).

In Aygen's study (2012) done to investigate packaged food label usage, 53% of participants stated that they usually read the labels (9). Ali and Kapoor (2009), asked consumers about whether food label helps in deciding or not to buy a certain packaged food product, %45 of them responded often. According to the results, consumers have been increasingly getting interested in knowing the ways their food is produced, processed and marketed and the impact of food intake on their health (10). The findings of Gorton et al. (2008), van Trijp et al. (2007) and Güneş et al. (2014) supported that consumers mostly choose to read food labels (11, 12, 13).

In a different way, study of Malam and his friends done in UK (2009), Front of Package (FOP) labels were found being used for medical conditions or weight loss primarily. Being health conscious was also listed as a reason for shoppers to use food labels but some of these health conscious shoppers claimed that they do not need to read food labels because they were confident and they have already known what healthy and less healthy foods are (14).

In the study of Peters-Texeire and Badrie, 48.8% of the consumers indicated that they 'never' read food label while 12.2% of them indicated 'sometimes'. It was also stated that most of the consumers only use food labels when purchasing a new product for the first time. In their study, Peters-Texeire and Badrie (2005) found three factors affecting choices of consumers while shopping. Expiry date was found as the most significant feature on label according to the consumers. Brand name was found as a significant factor that influences consumers' choice after the importance of information on label (15).

Güneş et al. (2014) found that 42% of consumers not trusting food labels. They

stated consumers have a suspicion that the ingredients written could be changed by brands in favor of their profits and not reflecting the reality (13). And also as a reason of consumers' not reading food labels Malam et al. (2009) found that shoppers think labels are small and difficult to read, particularly for those who needed reading glasses. For many shoppers it was really important that the label's being simple, clear and easy to read (14). Van Trijp et al. (2007) supported the same reason that many consumers prefer executions that are simple, easy to interpret and use (12).

According to the study of Pelletier et al. (2004), it was found out that majority of the participants are confused about food labels and do not understand them well enough (16).

Malam et al. (2009) found that calories are used for stating the healthiness and people choose items with the lower calorie rating, but not with looking at the levels of nutrients (14).

In an Italian study, fat, calorie, fiber and sugar contents were received high interest respectively (6). In a research of Grunert et al. (2010), fat was stated as the most important ingredient according to 49% of consumers in UK. It was followed by sugar, calorie, salt and additive content (17).

#### 2.2. Beverage preference and BMI

Individuals have increasingly turned to artificially sweetened foods and beverages during the past three decades, in an attempt to lose weight, or control it. Sugar sweetened beverages (SSBs) are beverages that have added sugar such as sucrose or fructose. Sugar sweetened beverages mostly have high calories and low nutritional value. SSBs can cause unhealthy weight gain, obesity and dental caries (18). Artificial sweeteners are sweeteners that contain few or no calories and have a high-intensity. Many beverages that labeled as 'sugar free' and 'diet' are artificially sweetened beverages (ASBs) (19), (20). According to European Union, an 'energy free' product is a product that contains less than 4 kcal (17 kJ) / 100 ml. According to Turkish Ministry of Agriculture and Rural Affairs, asesulfam-k, aspartame, cyclamic acid, saccharin, neohesperidin are listed as the sweeteners that can be used in beverages (21). A USA study conducted with university students (22) showed

that 70% of participants stated that they prefer SSBs although the preference rate for ASBs was only 30%.

Individuals started to use artificially sweetened foods and beverages to lose weight or control weight gain in last years. According to San Antonio Health Study, a positive link between ASBs consumption and increase in BMI was found (23).

In the study of Park et al. (2017) 37.8% of 4163 participants stated they prefer SSBs and it was also found they have inadequate information about health effects of SSBs (24).

Van der Host et al. (2006) investigated the effects of parenting style on adolescents' sugary beverage consumption with 383 secondary school students. According to the results, more restrictive attitudes of parents were associated with less sugary drink consumption (25).

In the year of 2015, Munsell et al. (2015) conducted a survey with 982 parents. As a result, 82% of these parents stated that they provided sugary drinks for their child. Although 18% of parents rated sweetened ice tea as healthy, 42% of them stated that they provided it for their child (26).

According to the results of the study consisted of 348 children and adolescents the consumption of 4 servings and more sugar sweetened beverages (SSBs) was associated with an increase of 4.80 % in body fat mass percentage (27).

In a USA study conducted with university students (28) showed that 70% of participants stated that they prefer SSBs although the preference rate for ASBs was only 30%. In a study of Mihaela-Roxana (2010), argued marketing strategy towards sugar-free beverages for "healthy eaters", Korean women were found more tended to think like ASBs healthier than men (29).

#### 2.3. Milk and dairy product preference and BMI

According to World and Turkey Milk Industry Report, milk consumption amount was found approximately 166 kg per person every year and yoghurt consumption amount was found 30.8 kg per person every year in Turkey. While drinking milk consumption of EA and USA were found 89 kg/year and 83 kg/year for Turkey the amount was found 26 kg/year (30). In Turkey, 45% of people were found not consuming milk according to

results (31).

Pasteurization is a heat treatment process to remove pathogenic bacteria and reduce the transmission of diseases. Aim of this process is to keep chemical, physical and organoleptic changes in the milk at its minimal. Ultra High Temperature (UHT) is a heat sterilization process that aims to make product commercially sterile. This process destroys all microorganisms in milk by heat treatment (32, 33).

Karakaya (2011) investigated consumer preferences between unpacked milk and packaged milk in a survey research. 26.2% of participants were found consume pasteurized milk and most of them, 87.7%, were found consume UHT milk. In Karakaya's study, it was also mentioned, consumers prefer to purchase milk from supermarkets mostly and then from markets and local groceries (34).

According to a study Çelik and his friends (2005) conducted in Şanlıurfa, it was observed that 46.3% of the milk consumed was unpacked, while 53.7 percent of the milk consumed was packaged. This study revealed that 33.7% of unpacked milk was purchased from the street, in a different manner from our study (35).

In an another study investigated consumer preferences for milk products, 59.8% of participants stated they preferred packed milk, 40.2% of them preferred to buy raw milk from street or directly from the producer they have already known (36).

In a a cross-sectional study of Akbay and Tiryaki (2007) including 18.278 households, results indicated that the most common fluid milk alternative chosen by the sample households was unpacked milk with 56.2%, followed by sterilized milk with 34.5%, and pasteurized milk with 9.3% of the overall choice alternatives (37).

In Turkey, concerns have been raised about packaged milk, especially UHT milk of late years. Consumers started to choose organic and non-packaged milk because of their concern about additives and loss of nutrient in packaged milk groups (38).

According to the results found in the study of Onurlubaş (2013), milk consumption preferences of consumers were searched and more than half of the consumers (68.1%) were found not consuming packaged milk. 34.3% of these consumers stated their reason to not to consume packaged milk as believing there are additives inside (39).

A study Haspolat has done (2016) with some milk consumers found out that there

is a trust issue according to packed milk groups. 51.3% of consumers had an opinion that there is an additive addition to the UHT milk while 14.3% of them believed naturalness is disrupted during the post-processing of UHT and pasteurized milk. The distrust of the technology in use during process and packaging of the raw milk was declared as the main cause of the negative attitudes towards milk (40).

In a study of Bozoğlu et al. (2014), most of the consumers prefer unpacked street milk and they stated reason to buy as its being free from additives first. They also mentioned about the taste, price and freshness factors. It was found that participants have a thought of unpacked street milk's being healthier than packed milk (41). Similarly, according to Erdal and Tokgöz's study (2011), families who preferred unpacked milk stated their reasons as familiarity and like (24.8%), availability (22.3%), price (20.7%) and having a thought of its being healthier than packed milk (19.8%) (42).

Pazarlıoğlu et al. (2006) revealed the effect of education on perception towards packed milk with their research. They found that according to the increase in a household's level of importance of health and level of education, the tendency to consume packaged milk also increased (43). Yayar (2012) also mentioned about educational factors in his study and stated individuals with education higher than secondary were the most likely to consume packed fluid milk than those of less educated individuals (44).

When it comes to compare perceptions about UHT milk between genders, Pazarlıoğlu et al. (2006) found that packed milk groups were preferred by women more than men (43).

In some countries such as China, India and Pakistan consumers are more likely to choose packaged food products because of increasing population. People started to stock packaged food and drinks in their house or apartment. In China more than 60% of people choose to consume UHT milk (45).

In Karakaya's research (2011), 11% of consumers used milk for production of home-made yoghurt (34). Erdal and Tokgöz (2011) found out more than half of the participants in their study stated that they mostly used milk for making yoghurt (42). Onurlubaş (2013) also found in her study that 51.8% of milk consumers use it for making home-made yoghurt (39).

In the study of Uzundumlu and Birinci (2013), considerable amount of consumers claimed that raw milk is healthier and yoghurt made from raw milk was tasty (46).

Bayarri et al. (2009) did not find differences between men and women about their habits concerning dairy product consumption and about their purchase intention (47).

According to European Union, a low fat product should contain 1.5 g of fat per 100 ml for liquids and 1.8 g of fat per 100 ml for semi - skimmed milk. For skimmed milk, product should contain less than 0.5 g of fat per 100 ml (22). According to Turkish Ministry of Agriculture and Rural Areas, milk with 1.5 g of fat per 100 ml is listed as semi - skimmed, milk that contain 0.15 g of fat per 100 ml is listed as skimmed (48). Yoghurt with less than 1.5% of milk fat content is listed as 'low fat' with new regulation (33).

In the study of Lynam et al. (2011) 22% of consumers have trust issues towards light milk and dairy products and they do not believe these products are natural. Consumers in Lynam, McKevitt and Gibney's study also have a thought that light milk and dairy products less nutritious than regular ones (49). Dal et al. (2018) found high amounts of consumption for low fat milk in their study results. 66.7% of young consumers declared they prefer light milk and 33.3% of young consumers declared they prefer light milk (50).

More women (58%) than men (30%) were found encouraged buying low-fat milk and dairy products in Lynam, McKevitt and Gibney's study (49). Hill et al. (2002) also shown women are more likely to consume low fat milk and dairy products and their choices can affect their partners' diet (51).

#### 2.4. Organic product preference and BMI

Organic foods are foods produced by using natural sources like composted animal manure, crop rotations and mulch instead of fertilizers or pesticides. In organic agriculture, beneficial insects, birds or some naturally occurring toxins are being used. If a food is organic, it does not always mean it is natural too. Natural foods are additive free foods like refined sugar, coloring, flavoring etc. In 20th century, Europe started organic food movement against synthetic fertilizer usage in agriculture. According to U.S. Department of Agriculture, only food that is grown by certified organic producers without usage of synthetic substances can be labeled as 'organic' (52). In Turkey, according to Ministry of Agriculture and Rural Affairs, organic products should be free of GMO,

GMO based feeds, antibiotics, additives, pesticides to be labeled as 'organic' (53).

Williams (2002) searched consumer perception about organic foods. It was found that people choose to buy organic food because of its health benefits (54). Çelik (2013) found 'health' as the most important factor to determine the consumption of organic food (55). According to study of Harper and Makatouni (2002) health was found as the main motivator of consumers to purchase organic food (56). According to study of Hill et al. (2002) consisting participants from different age groups, young adults are more likely to choose organic products to avoid processed foods and preservatives (51).

All participants in Harper and Makatouni's study (2002) reported that they have high concerns about what they eat even they choose to buy organic foods or not (56). In a detailed survey research (57), consumers were found not understanding whether the product they are buying is organic or not and this insecurity towards organic products based on whether it was produced organically or not. This study claimed that it could be related to inadequate organic food knowledge. Likewise, in a study of Nuttavuthisit &Thøgersen (2015) 41% of the participants stated that they believed 'products sold organic, are not really organic' (58). Lockie et al. (2002) also supported this concern with their findings; participants stated that they were suspicious about honesty and reliability of organic labels. Many of them stated that they were not sure about the products with organic label were real organic (59).

In a research done in Turkey, (60) it was found out that the amount of money spent on organic foods was only 20-40% of monthly food expenditure. The rate of people who buy organic foods at least twice a week was only 18.8. In Leblebici's study (2009), most of the participants stated high prices as a big reason to not to buy organic foods (61). Millock et al. (2002) found that most of organic food consumers were willing to pay for organic foods but they also stated they find the prices high (62).

In a Europe study Naspetti and Zanoli done (2009) consisted of 792 participants showed that knowledge of people about how organic products are produced and processed and the quality and safety of organic food was low. They claimed organic food consumers usually connected quality to health, and their awareness about safety conditions of the food and organic food was not enough (63). Leblebici (2009) found that while academicians stated that organic foods healthier than traditional foods, students have shown negative perception towards organic food mostly. As a result, it was evaluated as their inadequate knowledge in comparison to academicians' (61). The study

of Lockie et al. (2002) highlighted that there was a positive correlation between education level and organic food consumption but people were not found entirely positive or entirely negative towards organic foods. 44% of women and 33.8% of men were found consuming organic foods (59).

According to study results of Nuttavuthisit & Thøgersen (2015), participants were found believing packaged organic foods are more reliable than those available in traditional markets/groceries (58). In the study of Lockie and his friends (2002), 42% of organic consumers stated that they prefer to buy organic foods from supermarkets and 28.9% of them preferred to buy from greengrocers and then the third place was farmers with 15.5% (59).

#### 2.5. Bread preference and BMI

In today's society, packaged breads from supermarkets are taken over beside breads from neighborhood bakeries. Bread companies are trying to keep these packaged breads fresh longer. Some concerns about possible additives inside packaged breads raised in society and people become more natural food oriented while shopping (64). People mostly stated their complaint about information regarding bread cannot be reached at supermarkets while shopping so they could not have enough (65).

Bobrow-Strain (2008) has mentioned production of bread and individual bread making shops' becoming industrialized by years in his book. All the changes in this industry, made consumers and concerned and unsure about their preferences between handmade bread, bakery bread or supermarket sliced and packaged bread (66). In a study of Ertürk et al. (2015) runned in Turkey, consumers stated that they buy their bread from mostly neighborhood bakeries and they stated supermarkets were the last choice for them. Homemade bread preference rate was found considerably high (46.2%) in this study (67). In the study of Taşçı et al. (2017), 31.8% of people were also found making their own breads (68). The findings of Gül et al. (2003), also showed that supermarkets are the last place for consumers to prefer buying bread (69). Tanık (2006) also found people prefer to purchase bread mostly from neighborhood bakeries (43%), then from groceries (29%) and as a last option, packaged breads from supermarkets (27%). In the same study, 37% of consumers stated they were concerned about additives found inside bread (70).

According to the Bread Bakers Guild of America, "locally made" has become a buzzword in so many foods included bread, cheese, wine and vegetables. In the study they also mentioned that, this approach described unique products of region (71).

Bal et al. (2013) found that, 70.6% of people in their study chose to consume unpacked bread. While 80.5% of the consumers were found buying bread from supermarket, 25.4% of consumers chose to buy bread from local bakery. Only 1.8% of consumers stated that they make their own bread (72).

In the study of Gül and his friends (2003) consumers stated that freshness, distances and prices are important factors while choosing bread. Participants mostly preferred unpacked breads and fibrous packed bread was their fourth decision (69). Taşçı and his friends (2017) also mentioned about the price of packaged breads in their study and 49% of consumers were found concerned about the price of packaged bread and finding it expensive (68).

In a study of Demir and Kartal's (2012) participants were asked about their bread preferences and 36% of them mentioned health effects of other types of breads besides unpacked loaf bread (whole wheat, rye bread etc.) were 'unknown' for them (73). In a study, Benson (2013) found out that, with industrialization of bread making, consumers are now unsure about what kind of bread they should prefer (74). Cop and Doğan's (2009) findings showed that there is a positive link between educational level and participants' preference for packaged breads (75).

#### 2.6. Processed meat product preference and BMI

Consumers started to seek for less processed and extended shelf-life foods at the same time according to Rastogi's research (2013). Some technologies used for preservation can destroy microorganisms but also can change flavor, causes nutrient and vitamin loss. It increases concerns of consumers towards preservation methods (76).

In the study of Y1lmaz et al. (2012) additives were found as one of the concerns towards packaged meat products. Families stated that they preferred processed meat products although they have already known they are unhealthy. Y1lmaz and his friends claimed that, processed meat products' being cheap and easy to eat could be a reason for people to consume (77). Results reached by the study of Akçay and Vatansever (2010) showed that 54.4% of meat products consumers are men while 45.6% of them are women (78). In another study have done with students (79), likewise, it was found that male students were more likely to consume meat and meat products.

In a research based on almost five hundred consumer questionnaires from İstanbul (80), 31% of the respondents were found to prefer packaged processed meat products although trust level of them was found very low.

#### 2.7. Light and diet snack preference and BMI

According to European Union Regulations, a product should not contain more than 3 g of fat per 100 g to be sold as 'low in fat'. Energy value should be reduced by at least 30% of total energy value to be sold as 'energy-reduced' and for claim of 'low energy', product cannot contain more than 40 kcal (170 kJ) / 100 g (22). In Turkey, energy and / or fat content of a product should be reduced by 25% to be stated on the label 'reduced' or 'light' (81).

In a study of Chan et al. (2005) participants were asked claims about fat on food labels; most of them stated that they did not believe these fat claims reflected reality. According to Chan, Patch and Williams, some claims on food packages could be seen misleading even they were legally permitted. Consumers stated 'fat free' as being a false claim, just because small amounts of fat declared in it (82). In another study, Yılmaz and Ünal has done (2007), most of the consumers stated that they do not think that light products prevent weight gain. Consumers also do not believe that light products are healthier than regular products (83). Hill and his friends (2002) supported these results with their findings; they found out that reduced-fat products are believed to be less healthy because of ingredients added to replace the fat. They gave a place some of the claims in their study; 'My daughter informs me that some of the things they put in the reduced-fat things are more harmful, preservatives and that sort of thing.' Participants in this study also stated they do not believe what is written on low-calorie products. They claimed there is no difference in fat or calorie amount between regular products (51).

In Yılmaz and Ünal's study (2007), overweight consumers were found not liking the taste of low-calorie foods and not choose to recommend them to anyone while normal weight consumers were found like the taste and recommend those more. Yılmaz and Ünal also mentioned a possible effect of lack of knowledge on perception towards light and diet snacks and they found out that consumers do not have enough information about low-calorie foods (83).

In the study of Memiş (2004) has done with university students, 50% of men claimed that diet and light products were not healthy while only 27.3% of women agreed this statement (84).

In a study, Kähkönen (2000) done almost twenty years ago with blind sensory tests on 743 subjects to search consumers' acceptance of fat-reduced foods, consumers did not showed health concerns for all foods even all fat containing ones. This study reached a result that; the effect of product information on consumer's acceptance differs according to the product. This study also mentioned that, some foods usually considered either as healthy or unhealthy, fat content information do not have any effect on acceptance (85).

#### 3. Material & Method

Ethical approval for the present study was obtained from Beykent University (04.01.2018) (See ATTACHMENT 1).

#### 3.1. Data source and study population

The study was carried out in Spring Semester of 2017-2018 academic year. The questionnaire used in this cross-sectional study, to determine the use and understanding of food labels and consumer perception towards specific foods and drinks comparing different BMI levels, was applied at Yeditepe University in Istanbul (See ATTACHMENT 2). Volunteers were asked to sign an approval form before the application of this questionnaire. (See ATTACHMENT 3). A total of 299 students with a median age of twenty-one and a median BMI of 21.2 participated in this survey, from three different university courses; Nutrition and Dietetics, Physiotherapy and Rehabilitation and Gastronomy and Culinary Arts. Sampling was random, voluntary students from Physiotherapy and Rehabilitation and 100 students from Gastronomy and Culinary Arts were women and 78 of the participants were men. 231 of these students participated were found living at home and 68 of them were found living in a dorm room.

Participants were classified by calculating Body Mass Index (BMI) as kg / m<sup>2</sup> according to World Health Organization (WHO). Underweight participants who have a BMI range of < 18.5 kg/m<sup>2</sup> and normal weight participants who have a BMI range of 18.5-24.9 kg / m<sup>2</sup> were classified in the first group as lean / normal weight students. Overweight participants who have a BMI range of 25.0-30 kg / m<sup>2</sup> and obese participants who have a BMI range of  $\geq$  30 kg/m<sup>2</sup> were classified in the second group as overweight / obese students.

#### **3.2. Data Collection**

This is a cross sectional study and the stratified random sampling method was used. The overall sample consists of some members from different courses of the University and they were chosen randomly. With this method, members from each group were represented in the study. Students participated in the study declared their approval by signing a particularly prepared consent form before the application of questionnaire. Questionnaire consists of 14 multiple-choice questions including label reading, decisive ingredients on food labels, decisive factors at shopping, perception towards; packaged milk and dairy products, packaged breads, processed meat products, sugar sweetened beverages and artificially sweetened beverages, light and diet products and organic foods. There is an initial section consists of demographic and personal information of participants including gender, living place and studying class at university and physical information of participants including age, weight and height information. It took approximately 5 min to complete the questionnaire (See ATTACHMENT 2).

#### 3.3. Statistical Analysis

Epi info statistics software was used for statistical analyses of the present study. BMI levels, studying courses at university, living places and gender represented the independent variables. Food labeling usage and knowledge and perception towards specific food groups are dependent variables. Frequency analysis of variables was used for data processing. Chi - Square Test, Kruskal - Wallis Test and Kolmogorov - Smirnov Test were used to examine the differences with categorical variables. As a significance level, p < 0.05 was used.

### 4. RESULTS

A total of 299 participants completed the survey. 73.9% of the participants were women, 26.1% of them were man. Data showed that 77.3% of the participants live at home, 22.7% of them live at a dorm room. According to three different courses at university; 33.4% of them were NAD, 33.4% of them were GCA and 33.1% of them were PTR students.

Variables		n	%
Gender	Women	221	73.9
	Men	78	26.1
Living Place	Home	231	77.3
	Dorm Room	68	22.7
Studying Course at University	Nutrition and Dietetics (NAD)	100	33.4
	Physiotherapy and Rehabilitation (PTR)	99	33.1
	Gastronomy and Culinary Arts (GCA)	100	33.4
Total		299	100.0

Table 1. Demographic and Personal	I Information of Participants
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In the study, BMI median of participants found as  $21.22 \text{ kg/m}^2$  and  $19.59 \text{ kg/m}^2$  for the first quartile (Q1),  $23.78 \text{ kg/m}^2$  for third quartile (Q3). While weight median was found 60 kg, for Q1 weight median was 54 kg and for Q3 71 kg. According to the height values, median was found as 1.69 m and for Q1 and Q3 the values were found as 1.63 and 1.75 m. According to the last variable age, median was found 21 years and for Q1 and Q3 the values were found as 20 and 22 years.

Table 2. Physical Information of Participants

	BMI (kg/m <sup>2</sup> )	Weight (kg)	Height (m)	Age (years)
n	299	299	299	299
Median	21.22	60	1.69	21
First Quartile	19.59	54	1.63	20
Third Quartile	23.78	71	1.75	22

49.5% of participants stated they always read food label information on the package of foods and drinks they buy. 16.7% of them were found not trusting the label information's reflecting the truth. 13.7% of them stated their reason for not reading labels as their being located on a hard-to-read place of the package. While 7% of participants declared they found labels to small to read, 3.3% of them stated they cannot understand the information inside. According to the study results, 9.7% of the participants stated they have no idea about food labels.

#### Table 3 Approach towards Food Labels

Variables	n	%
I always read food labels	148	49.5
Food labels are too small to read	21	7.0
I do not understand the information	10	3.3
The information is located on a hard-to-read place of the package	41	13.7
I do not trust the information written	50	16.7
I have no idea	29	9.7
Total	299	100.0

In the subject of decisive ingredients on food labels according to the participants, 50.6% of them stated they first look for calorie content. While 22.4% of them choose sugar as a decisive ingredient, 11.4% of them stated they look for protein content and 11% of them put fat content forward. 2.3% of participants stated that carbohydrate is the most noticeable ingredient for them and it was followed by fiber and salt content with 2% and 0.3%.

<b>Table 4.</b> Decisive Ingredients on Food Labels
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Variables	n	%
Calorie content	151	50.5
Fat content	33	11.0
Carbohydrate content	7	2.3
Protein content	34	11.4
Sugar content	67	22.4
Salt content	1	0.3
Fiber content	6	2.0
Total	299	100.0

Considering decisive factors for consumers to purchase packed food and drinks, 37.1% of participants stated that they look for the brand of the product first. 23.4% of them were found looking for expiry date and 22.1% of them look for nutrition information essentially. While 10.4% of them reported that advertisements and recommendations were decisive for them to buy packed food and drinks, 7% of them stated they look for packaging first.

Variables	n	%
Packaging of the product affects me	21	7.0
Brand of the product affects me	111	37.1
Advertisements and recommendations affect me	31	10.4
I look for expiry date	70	23.4
I look for nutrition information	66	22.1
Total	299	100.0

According to the results include sugar sweetened beverages (SSBs) consumption of the students participated, 48.8% of them stated they definitely do not buy these beverages to their house or dorm room while 39.8% of them stated that they prefer to buy and consume. 11.4% of students said that they buy sugar sweetened beverages for house or dorm room but they do not consume.

**Table 6.** Preference for Buying and Consuming Sugar Sweetened Beverages (SSBs)

Variables	n	%
I prefer to buy and consume SSBs	119	39.8
I buy SSBs for home or room but do not consume them	34	11.4
I definitely do not buy or consume SSBs	146	48.8
Total	299	100.0

In the study, consumers answered questions about what types of milk they prefer to consume and 62.2% of them was found prefer to buy UHT milk while 26.4% stated

they buy pasteurized milk. 4.7% of the participants answered that they prefer to buy street milk. 6.7% of them were found not consuming.

Variables	n	%
I prefer street milk	14	4.7
I prefer UHT milk	186	62.2
I prefer pasteurized milk	79	26.4
I do not consume milk	20	6.7
Total	299	100.0

 Table 7. Consumer Preferences of Milk According to the Packaging Method

When the preferred place for consumers to purchase fruits and vegetables is searched, 50.8% of the participants were found prefer to buy from supermarkets. 45.2% of them stated that they buy fruits and vegetables from farmer's market/greengrocery and preference for organic bazaar was 1.7%. 1.3% of the students mentioned that they grow their own fruits and vegetables and 1% of them were found not consuming.

Table 8. Place Preferred to Purchase Fruits and Vegetables

Variables	n	%
I buy fruits and vegetables from supermarkets	152	50.8
I buy fruits and vegetables from farmer's market/greengrocery	135	45.2
I buy fruits and vegetables from organic bazaar	5	1.7
I grow my own fruits and vegetables	4	1.3
I do not consume fruits and vegetables	3	1.0
Total	299	100.0

Students participated in the research stated their opinions about packaged breads and it was found that 54.8% of them worry about additives inside these breads because of the long shelf life. 24.1% of them stated that they find packaged breads healthy and they consume regularly. 9% of them claimed that packaged breads are expensive and 2.7% of the participants prefer to make their own bread. Not consuming group created 9.4% of all participants for breads.

Variables	n	%
I find packaged breads healthy and I consume them	72	24.1
I worry about additives inside because of the long shelf life	164	54.8
I find packaged breads expensive	27	9.0
I prefer to make my own bread	8	2.7
I do not consume bread	28	9.4
Total	299	100.0

48.5% of the participants stated they find UHT milk healthy and they stated they consume. 35.5% of them were found worried about additives because of the long shelf life. 15.4% of student participants declared they think that milk loses its nutritional value after UHT. 0.7% of them stated that they find UHT milk expensive.

### Table 10. Perception towards UHT Milk

Variables	n	%
I find UHT milk healthy and I consume it	145	48.5
I worry about additives inside because of the long shelf life	106	35.5
I think milk loses its nutritional value after UHT	46	15.4
I find UHT milk expensive	2	0.7
Total	299	100.0

Considering perception of consumers towards packaged / industrial yoghurts, 34.4% of the participants stated they find them healthy and they consume them. 26.8% of the participants were found worried about additives because of the long shelf life. 17.4% of the participants stated they make their own yoghurt at home and 11.7% of them find packaged yoghurt tasteless. 9.7% of the participants declared that they think packaged yoghurt has a loss of its nutritional value.

Variables	n	%
I find packaged yoghurt healthy and I consume it	103	34.4
I worry about additives inside because of the long shelf life	80	26.8
I think packaged yoghurt has a loss of its nutritional value	29	9.7
I find packaged yoghurt tasteless	35	11.7
I make my own yoghurt at home	52	17.4
Total	299	100.0

Table 11. Perception towards Packaged / Industrial Yoghurts

According to the perception of participants towards processed meat products, 56.2% of them stated they find these products unhealthy and 28.8% were found not trusting the ingredients inside them. 8.4% of the students stated they find them healthy. 6.7% of them declared that they find it easy to preserve processed meat products for a long time.

 Table 12. Perception towards Processed Meat Products like Salami, Sausage, Ham,

 Pastrami, Dried Meat

Variables	n	%
I find processed meat products unhealthy	168	56.2
I do not trust the ingredients inside	86	28.8
I find processed meat products healthy	25	8.4
I find it easy to preserve processed meat products for a long time	20	6.7
Total	299	100.0

Participants who were investigated about their perception towards organic foods, 36.5% of them stated that they do not believe these products' being organic. 30.8% of them declared they find them unnecessarily expensive. 27.1% of the participants stated they find organic foods healthier and 5.7% of them were found as not being sure or not having an idea.

Variables	n	%
I find organic foods healthier	81	27.1
I do not believe organic foods' being organic	109	36.5
I find organic foods unnecessarily expensive	92	30.8
I am not sure / I do not have any idea	17	5.7
Total	299	100.0

#### Table 13. Perception towards Organic Foods

43.1% of the participants included in this research stated they do not consume light milk and dairy products. 26.4% of them declared that they find them healthy and they consume. 12.7% of them were found not liking the taste and 12.4% of them were found worried about additives inside. 5.4% of the students participated stated they do not believe that light milk and dairy products have less fat.

#### **Table 14.** Perception towards Light Milk and Dairy Products

Variables	n	%
I do not consume light milk and dairy products	129	43.1
I find light milk and dairy products healthy and I consume them	79	26.4
I worry about additives inside	37	12.4
I do not believe that light milk and dairy products have less fat	16	5.4
I do not like the taste of light milk and dairy products	38	12.7
Total	299	100.0

Participants were asked about their perception towards light and diet snacks and 27.1% of them stated that they believe these products have much more additives than regular ones. 21.4% of participants were found not having an idea about light and diet snacks. While 18.1% of them stated they find light and diet snacks healthy, 17.1% of the student participants stated that they do not believe that these products have fewer calories than regular ones. 16.4% of them were found to believe that these products have loss of their nutritional value.

Table 15.	Perception	towards Light /	<sup>'</sup> Diet Snacks

Variables	n	%
I find light / diet snacks healthy	54	18.1
I think light / diet snacks have much more additives than regular ones	81	27.1
I do not believe that light / diet snacks have fewer calories than regular ones	51	17.1
I think light / diet snacks have loss of their nutritional value	49	16.4
I do not have any idea	64	21.4
Total	299	100.0

Participants who investigated about their perception towards artificially sweetened beverages (ASBs), 61.2% of them stated they find ASBs unhealthy. While 12.7% of the participants declared they do not like the taste of ASBs, 12.4% of them declared they prefer ASBs because of their low calorie content. 7% of them were found not having an idea and 6.7% of them found ASBs healthy and consume them.

Table 16. Perception towards Artificially Sweetened Beverages (ASBs)

Variables	n	%
I find ASBs healthy and consume them	20	6.7
I prefer ASBs because of their low calorie content	37	12.4
I do not like the taste of ASBs	38	12.7
I find ASBs unhealthy	183	61.2
I do not have any idea	21	7.0
Total	299	100.0

41.7% of the students who look for calorie content first, 36.4% of the students who look for fat content first, 14.3% of the students who stated they look for carbohydrate content first, 50% of the students who look for protein content first, 31.3% of the students who look for sugar content first and 83.3% of the students who stated they look for fiber content first stated they prefer to buy and consume sugar sweetened beverages.

12.6% of the students who look for calorie content first, 15.2% of the students who look for fat content first, 28.6% of the students who stated they look for carbohydrate content first, 5.9% of the students who look for protein content first, 9% of the students

who look for sugar content first stated that they buy SSBs for home/room but they do not consume them.

45.7% of the students who stated they look for calorie content first, 48.5% of the students who stated they look for fat content first, 57.1% of the students who stated they look for carbohydrate content first and 44.1% of students who look for protein content first were found definitely do not buy SSBs.

59.7% of the students who stated they look for sugar content first were also stated they definitely do not buy SSBs.

100% of the students who look for salt content first and 16.7% of students who look for fiber content first declared they definitely do not buy SSBs.

**Table 17.** The Link Between Decisive Food Label Ingredients and Preference forBuying and Consuming Sugar Sweetened Beverages

				I buy for home or		
Prefe	erence for Buying and		I prefer to buy	room but do not	I definitely do	
Consuming	Sugar Sweetened Bev	/erages	and consume	consume	not buy	Total
	Calorie	n	63	19	69	151
		%	41.7	12.6	45.7	100.0
	Fat	n	12	5	16	33
		%	36.4	15.2	48.5	100.0
Decisive Food	Carbohydrate	n	1	2	4	7
Label Ingredients		%	14.3	28.6	57.1	100.0
	Protein	n	17	2	15	34
		%	50.0	5.9	44.1	100.0
	Sugar	n	21	6	40	67
		%	31.3	9.0	59.7	100.0
	Salt	n	0	0	1	1
		%	0.0	0.0	100.0	100.0
	Fiber	n	5	0	1	6
		%	83.3	0.0	16.7	100.0

28.5% of the students who look for calorie content first, 12.1% of the students who look for fat content first, 42.9% of students who stated they look for carbohydrate content first, 26.5% of students who look for protein content first, 17.9% of students who look for sugar content first and 16.7% of students who look for fiber content first stated they find packaged breads healthy and they consume them.

53% of students who look for calorie content first, 69.7% of students who look for fat content first, 57.1% of students who stated they look for carbohydrate content first, 44.1% of students who look for protein content first, 59.7% of students who look for sugar content first and 33.3% of students look for fiber content first were found worried about additives inside packaged bread groups because of the long shelf life.

9.3% of students who look for calorie content first, 9.1% of the students who look for fat content first, 14.7% of students who look for protein content first, 4.5% of students who look for sugar content first and 33.3% of students look for fiber content first stated they find packaged breads expensive.

8.8% of students who look for protein content first, 6% of students who look for sugar content first and 100% of students who stated they look for salt content first stated they prefer to make their own bread.

9.3% of students who look for calorie content first, 9.1% of students who look for fat content first, 5.9% of students who look for protein content first, 11.9% of students who look for sugar content first and 16.7% of students look for fiber content first were found not consuming bread.

Table 18. The Link between Decisive Food Label Ingredients and Perception towards
Packaged Bread Groups

				-				
	Perception		I find packaged	I worry	I find			
	towards		breads healthy	about additives	packaged	I prefer to	I do not	
Pac	ckaged Bread		and I consume	inside because of	breads	make my	consume	
	Groups		them	the long shelf life	expensive	own bread	bread	Total
	Calorie	n	43	80	14	0	14	151
		%	28.5	53.0	9.3	0.0	9.3	100.0
	Fat	n	4	23	3	0	3	33
		%	12.1	69.7	9.1	0.0	9.1	100.0
	Carbohydrate	n	3	4	0	0	0	7
Decisive		%	42.9	57.1	0.0	0.0	0.0	100.0
Food Label	Protein	n	9	15	5	3	2	34
Ingredients		%	26.5	44.1	14.7	8.8	5.9	100.0
	Sugar	n	12	40	3	4	8	67
		%	17.9	59.7	4.5	6.0	11.9	100.0
	Salt	n	0	0	0	1	0	1
		%	0.0	0.0	0.0	100.0	0.0	100.0
	Fiber	n	1	2	2	0	1	6
		%	16.7	33.3	33.3	0.0	16.7	100.0

18.5% of students who chose calorie content as a decisive ingredient, 15.2% of students who look for fat content first, 28.6% of students who look for carbohydrate content first, 20.6% of students who look for protein content first, 17.9% of students who look for sugar content first at shopping stated they find light / diet snacks healthy.

29.1% of students who look for calorie content first, 30.3% of students who look for fat content first, 28.6% of students who look for carbohydrate content first, 31.3% of students who look for sugar content first, 100% of students who look for salt content first and 50% of students who look for fiber content first at shopping have a thought that light / diet snacks have much more additives than regular ones.

17.2% of students who look for calorie content first, 21.2% of students who look for fat content first, 14.7% of students who look for protein content first, 17.9% of students who look for sugar content first and 16.7% of students who look for fiber content first were found not believing that light / diet snacks have fewer calories than regular ones.

17.9% of students who look for calorie content first, 12.1% of students who look for fat content first, 14.3% of students who look for carbohydrate content first, 14.7% of students who look for protein content first and 17.9% of students who look for sugar content first stated they think light / diet snacks have loss of their nutritional value.

17.2% of students who chose calorie content as a decisive ingredient at shopping, 21.2% of students who look for fat content first, 28.6% of students who look for carbohydrate content first, 50% of students who look for protein content first, 14.9% of students who look for sugar content first and 33.3% of students who look for fiber content first declared they have no idea about light / diet snacks.

Table 19.	The Link	between	Decisive	Food Lab	el Ingredients	and	Perception	towards
Light / Di	et Snacks							

			I find		I do not believe			
			light /	I think light / diet	that light / diet	I think light / diet		
			diet	snacks have much	snacks have	snacks have loss	I do not	
Perce	ption towards		snacks	more additives than	fewer calories	of their	have	
Light	/ Diet Snacks		healthy	regular ones	than regular ones	nutritional value	any idea	Total
	Calorie	n	28	44	26	27	26	151
		%	18.5	29.1	17.2	17.9	17.2	100.0
	Fat	n	5	10	7	4	7	33
		%	15.2	30.3	21.2	12.1	21.2	100.0
Decisive	Carbohydrate	n	2	2	0	1	2	7
Food Label		%	28.6	28.6	0.0	14.3	28.6	100.0
Ingredients	Protein	n	7	0	5	5	17	34
8		%	20.6	0.0	14.7	14.7	50.0	100.0
	Sugar	n	12	21	12	12	10	67
		%	17.9	31.3	17.9	17.9	14.9	100.0
	Salt	n	0	1	0	0	0	1
		%	0.0	100.0	0.0	0.0	0.0	100.0
	Fiber	n	0	3	1	0	2	6
			0.0	50.0	16.7	0.0	33.3	100.0

7.3% of the students who look for calorie content first, 6.1% of students who look for fat content first, 8.8% of students who look for protein content first, 4.5% of students who look for sugar content first and 16.7% of students look for fiber content first stated they find ASBs healthy and consume them.

15.9% of the students who look for calorie content first, 6.1% of students who look for fat content first, 14.3% of students who look for carbohydrate first, 8.8% of students who look for protein content first, 7.5% of students who look for sugar content first and 33.3% of students look for fiber content first stated they prefer ASBs because of their low calorie content.

12.6% of the students who look for calorie content first, 18.2% of students who look for fat content first, 17.6% of students who look for protein content first, 9% of students who look for sugar content first and 16.7% of students look for fiber content first stated they do not like the taste of ASBs.

57.6% of the students who chose calorie content as a decisive ingredient on food label stated they find ASBs unhealthy. 63.6% of the students participated in this study who chose fat content as a decisive ingredient on food label and 71.4% of the students who declared they look for carbohydrate content first stated that they find ASBs unhealthy. 58.8% of the students who look protein content first, 71.6% of students who look sugar content first, 100% of students who look for salt content first and 16.7% of students who look for fiber content first stated they find ASBs unhealthy.

6.6% of the students who look for calorie content first, 6.1% of students who look for fat content first, 14.3% of students who look for carbohydrate first, 5.9% of students who look for protein content first, 7.5% of students who look for sugar content first and 16.7% of students look for fiber content first were found not having an idea about ASBs.

								1
	towards Artificia l Beverages (ASB		I find ASBs healthy and consume them	I prefer ASBs because of their low calorie content	I do not like the taste of ASBs	I find ASBs unhealthy	I do not have any idea	Total
	Calorie	n	11	24	19	87	10	151
		%	7.3	15.9	12.6	57.6	6.6	100.0
	Fat	n	2	2	6	21	2	33
		%	6.1	6.1	18.2	63.6	6.1	100.0
	Carbohydrate	n	0	1	0	5	1	7
Decisive		%	0.0	14.3	0.0	71.4	14.3	100.0
Food	Protein	n	3	3	6	20	2	34
Label		%	8.8	8.8	17.6	58.8	5.9	100.0
Ingredients	Sugar	n	3	5	6	48	5	67
C		%	4.5	7.5	9.0	71.6	7.5	100.0
	Salt	n	0	0	0	1	0	1
		%	0.0	0.0	0.0	100.0	0.0	100.0
	Fiber	n	1	2	1	1	1	6
		%	16.7	33.3	16.7	16.7	16.7	100.0

**Table 20.** The Link between Decisive Food Label Ingredients and Perception towards

 Artificially Sweetened Beverages (ASBs)

14.3% of participants who prefer street milk, 66.1% of participants who prefer UHT milk, 24.1% of participants who prefer pasteurized milk and 5% of participants who do not consume milk stated that they find UHT milk healthy to consume.

57.1% of participants who prefer street milk, 25.8% of participants who prefer UHT milk, 50.6% of participants who prefer pasteurized milk and 50% of participants who do not consume milk stated that they are worried about additives inside of UHT milk because of the long shelf life.

21.4% of participants who prefer street milk, 8.1% of participants who prefer UHT milk, 24.1% of participants who prefer pasteurized milk and 45% of participants who do not consume milk stated they think milk loses its nutritional value after UHT.

7.1% of participants who prefer street milk and 1.3% of participants who prefer pasteurized milk stated they find UHT milk expensive.

**Table 21.** The Link between Consumer Preferences of Milk According to the PackagingMethod and Perception towards UHT Milk

Per	rception		I find UHT milk	I worry about additives	I think milk loses	I find	
to	towards			inside because of the	its nutritional	UHT milk	
UH	UHT Milk			long shelf life	value after UHT	expensive	Total
	I prefer street	n	2	8	3	1	14
	milk	%	14.3	57.1	21.4	7.1	100.0
Consumer	I prefer UHT	n	123	48	15	0	186
Preferences of	milk	%	66.1	25.8	8.1	0.0	100.0
Milk According	I prefer	n	19	40	19	1	79
to the Packaging Method	pasteurized milk	%	24.1	50.6	24.1	1.3	100.0
	I do not	n	1	10	9	0	20
	consume milk	%	5.0	50.0	45.0	0.0	100.0

42.9% of participants who prefer street milk, 41.9% of participants who prefer UHT milk, 40.5% of participants who prefer pasteurized milk and 65% of participants who do not consume milk stated they do not consume light milk and dairy products.

7.1% of participants who prefer street milk, 29% of participants who prefer UHT milk, 25.3% of participants who prefer pasteurized milk and 20% of participants who do not consume milk stated they find light milk and dairy products healthy and I consume them.

14.3% of participants who prefer street milk, 10.8% of participants who prefer UHT milk, 16.5% of participants who prefer pasteurized milk and 10% of participants who do not consume milk were found worried about additives inside of light milk and dairy products.

14.3% of participants who prefer street milk, 3.8% of participants who prefer UHT milk, 7.6% of participants who prefer pasteurized milk and 5% of participants who do not consume milk stated they do not believe that light milk and dairy products have less fat.

21.4% of participants who prefer street milk, 14.5% of participants who prefer UHT milk and 10.1% of participants who prefer pasteurized milk stated they do not like the taste of light milk and dairy products.

**Table 22.** The Link between Consumer Preferences of Milk According to the PackagingMethod and Perception towards Light Milk and Dairy Products

tov Ligh	eption vards ıt Milk y Products		I do not consume light milk and dairy products	I find light milk and dairy products healthy and I consume them	I worry about additives inside of light milk and dairy products	I do not believe that light milk and dairy products have less fat	I do not like the taste of light milk and dairy products	Total
	I prefer street milk	n	6	1	2	2	3	14
		%	42.9	7.1	14.3	14.3	21.4	100.0
Consumer	I prefer	n	78	54	20	7	27	186
Preferences of Milk	UHT milk	%	41.9	29.0	10.8	3.8	14.5	100.0
According to the Packaging	I prefer pasteurized	n	32	20	13	6	8	79
Method	milk	%	40.5	25.3	16.5	7.6	10.1	100.0
	I do not consume	n	13	4	2	1	0	20
	milk	%	65	20	10	5	0	100.0

The difference between preference for buying and consuming sugar sweetened beverages (SSBs) and perception towards artificially sweetened beverages (ASBs) was found statistically significant (p < 0.05)

14.3% of the students prefer to buy and consume SSBs and 2.1% of students who definitely do not buy or consume SSBs stated they find ASBs healthy and consume them.17.6% of the students prefer to buy and consume SSBs, 8.8% of students who buy SSBs for home or room but do not consume them and 8.9% of students who definitely do not buy or consume SSBs stated they prefer ASBs because of their low calorie content.

18.5% of the students prefer to buy and consume SSBs, 14.7% of students who buy SSBs for home or room but do not consume them and 7.5% of students who definitely do not buy or consume SSBs declared that they do not like the taste of ASBs. 40.3% of the participants who prefer to buy and consume SSBs stated they find ASBs unhealthy. 70.6% of the participants who buy SSBs for home/room but do not consume them stated that they find ASBs unhealthy. 76% of the participants who do not buy or consume SSBs also stated that they find ASBs unhealthy.

9.2% of the students prefer to buy and consume SSBs, 5.9% of students who buy SSBs for home or room but do not consume them and 5.5% of students who definitely do not buy or consume SSBs were found not having an idea about ASBs.

Perception to	wards Artificia		healthy and	I prefer ASBs because of their low calorie	I do not like the taste of	I find ASBs	I do not have any			
Sweetened B	everages (ASE	Bs)	them	content	ASBs	unhealthy	idea	Total	□2	р
	I prefer to	n	17	21	22	48	11	119		
Preference for Buying	buy and consume SSBs	%	14.3	17.6	18.5	40.3	9.2	100.0		
and	I buy SSBs	n	0	3	5	24	2	34	43.57	0.000
Consuming Sugar Sweetened	for home or room but do not consume them	%	0.0	8.8	14.7	70.6	5.9	100.0		
Beverages	I definitely	n	3	13	11	111	8	146		
(SSBs)	do not buy or consume SSBs	%	2.1	8.9	7.5	76.0	5.5	100.0		

**Table 23.** The Link between Preference for Buying and Consuming Sugar Sweetened

 Beverages (SSBs) and Perception towards Artificially Sweetened Beverages (ASBs)

2: Chi Squared Test Value

The link between approach towards food labels and BMI levels was not found statistically significant (p > 0.05).

51% of participants who have BMI less than 25 and 42.9% of participants who have BMI equal to or greater than 25 stated they always read food labels.

6.2% of participants who have BMI less than 25 and 10.7% of participants who have BMI equal to or greater than 25 stated they found food labels too small to read.

2.9% of participants who have BMI less than 25 and 5.4% of participants who have BMI equal to or greater than 25 were found not understanding the information on food labels.

15.2% of participants who have BMI less than 25 and 7.1% of participants who have BMI equal to or greater than 25 declared that 'the information is located on a hard-to-read place of the package'.

16.9% of participants who have BMI less than 25 and 16.1% of participants who have BMI equal to or greater than 25 were found not trusting the information written on food labels.

7.8% of participants who have BMI less than 25 and 17.9% of participants who have BMI equal to or greater than 25 stated that they have no idea about food labels.

			BI	MI			
,	Variables	Normal and BMI	Underweight < 25		t and Obese ≥ 25		р
		n	%	n %			P
	I always read food labels	124	51.0	24	42.9		
	Food labels are too small to read	15	6.2	6	10.7		
	I do not understand the information	7	2.9	3	5.4		
Approach towards Food Labels	The information is located on a hard-to- read place of the package	37	15.2	4	7.1	9.700	0.084
	I do not trust the information written	41	16.9	9	16.1		
	I have no idea	19	7.8	10	17.9		
	Total	243	100.0	56	100.0		

 Table 24. Approach towards Food Labels According to BMI Levels

□2: Chi Squared Test Value

The link between decisive factors to purchase and BMI levels was not found statistically significant (p > 0.05).

6.2% of participants who have BMI less than 25 and 10.7% of participants who have BMI equal to or greater than 25 stated that they are affected by packaging of the product at shopping.

36.2% of participants who have BMI less than 25 and 41.1% of participants who have BMI equal to or greater than 25 stated that they are affected by brand of the product at shopping.

10.7% of participants who have BMI less than 25 and 8.9% of participants who have BMI equal to or greater than 25 stated that they are affected by advertisements and recommendations while purchasing a product.

24.3% of participants who have BMI less than 25 and 19.6% of participants who have BMI equal to or greater than 25 stated that they look for expiry date while purchasing a product.

22.6% of participants who have BMI less than 25 and 19.6% of participants who have BMI equal to or greater than 25 stated that they look for nutrition information while purchasing a product.

		BMI					
		Normal	and	Overv	0		
Variables		Underw	0	and O			
		BMI <		BMI		$\Box 2$	р
		n	%	n	%		
	Packaging of the product affects me	15	6.2	6	10.7		
Decisive	Brand of the product affects me	88	36.2	23	41.1		
Factors of	Advertisements and recommendations affect me	26	10.7	5	8.9	2.366	0.669
Purchasing	I look for expiry date	59	24.3	11	19.6		
	I look for nutrition information	55	22.6	11	19.6		
	Total	243	100	56	100		

Table 25. Decisive Factors to Purchase According to BMI Levels

2: Chi Squared Test Value

The link between preference for buying and consuming SSBs and BMI levels was not found statistically significant (p > 0.05).

37.9% of participants who have BMI less than 25 and 48.2% of participants who have BMI equal to or greater than 25 stated that they prefer to buy and consume SSBs.

11.9% of participants who have BMI less than 25 and 8.9% of participants who have BMI equal to or greater than 25 stated that they buy SSBs for home or room but they do not consume them.

50.2% of participants who have BMI less than 25 and 42.9% of participants who have BMI equal to or greater than 25 stated that they definitely do not buy or consume SSBs.

**Table 26.** Preference for Buying and Consuming Sugar Sweetened Beverages (SSBs)

 According to BMI Levels

			В	MI			
	Variables	Unde	nal and rweight I < 25		weight and Obese $MI \ge 25$	□2	р
		n	%	n	%		
Preference	I prefer to buy and consume SSBs	92	37.9	27	48.2		
for Buying and Consuming Sugar Sweetened Beverages	I buy SSBs for home or room but I do not consume them	29	11.9	5	8.9	2.091	0.352
(SSBs)	I definitely do not buy or consume SSBs	122	50.2	24	42.9		
	Total	243	100.0	56	100.0		

□2: Chi Squared Test Value

The link between consumer preferences of milk with different packaging methods and BMI levels was not found statistically significant (p > 0.05).

4.9% of participants who have BMI less than 25 and 3.6% of participants who have BMI equal to or greater than 25 stated that they prefer street milk.

63% of participants who have BMI less than 25 and 58.9% of participants who have BMI equal to or greater than 25 stated that they prefer UHT milk.

26.3% of participants who have BMI less than 25 and 26.8% of participants who have BMI equal to or greater than 25 stated that they prefer pasteurized milk.

5.8% of participants who have BMI less than 25 and 10.7% of participants who have BMI equal to or greater than 25 stated that they do not consume milk.

			BN				
			al and		eight and		
Va	Variables			t Obese			
		BMI	[ < 25	BM	$I \ge 25$	$\Box 2$	р
	n	%	n	%			
Consumer Preferences of	I prefer street milk	12	4.9	2	3.6		
				-			
	I prefer UHT milk	153	63.0	33	58.9		
Milk with Different Packaging Methods	I prefer pasteurized milk	64	26.3	15	26.8	1.973	0.578
	I do not consume milk	14	5.8	6	10.7		
	Toplam	243	100	56	100		

**Table 27.** Consumer Preferences of Milk with Different Packaging Methods According to BMI Levels

□2: Chi Squared Test Value

The link between perception towards packaged bread groups and BMI levels was not found statistically significant (p > 0.05).

22.6% of participants who have BMI less than 25 and 30.4% of participants who have BMI equal to or greater than 25 stated that they find packaged breads healthy and they consume them.

58% of participants who have BMI less than 25 and 41.1% of participants who have BMI equal to or greater than 25 were found worried about additives inside packaged breads because of the long shelf life.

9.1% of participants who have BMI less than 25 and 8.9% of participants who have BMI equal to or greater than 25 stated that they find packaged breads expensive.

2.9% of participants who have BMI less than 25 and 1.8% of participants who have BMI equal to or greater than 25 stated that they make their own bread.

7.4% of participants who have BMI less than 25 and 17.9% of participants who have BMI equal to or greater than 25 stated that they do not consume bread.

			BN	<b>1</b> I			
	Variables				weight Obese I≥25	□2	р
		n	%	n	%		
	I find packaged breads healthy and I consume them	55	22.6	17	30.4		
	I worry about additives inside because of the long shelf life	141	58.0	23	41.1		
Perception towards Packaged	I find packaged breads expensive		9.1	5	8.9	9.024	0.061
Bread Groups	I prefer to make my own bread	7	2.9	1	1.8		
	I do not consume bread		7.4	10	17.9		
	Total	243	100	56	100		

Table 28. Perception towards	Packaged Bread	Groups According t	o BMI Levels
1	0	1 0	

□2: Chi Squared Test Value

The link between perception towards UHT milk and BMI levels was not found statistically significant (p > 0.05).

47.3% of participants who have BMI less than 25 and 53.6% of participants who have BMI equal to or greater than 25 stated that they find UHT milk healthy and they consume it.

35% of participants who have BMI less than 25 and 37.5% of participants who have BMI equal to or greater than 25 were found worried about additives inside UHT milk because of the long shelf life.

16.9% of participants who have BMI less than 25 and 8.9% of participants who have BMI equal to or greater than 25 stated that they think milk loses its nutritional value after UHT.

0.8% of participants who have BMI less than 25 stated that they find UHT milk expensive.

			BN	<b>/</b> I			
	Variables	Under	al and weight	and	weight Obese $I \ge 25$	□2	р
		n	%	n	%		
	I find UHT milk healthy and I consume it	115	47.3	30	53.6		
Damaantian	I worry about additives inside because of the long shelf life	85	35.0	21	37.5	2.775	0.428
Perception towards UHT Milk	I think milk loses its nutritional value after UHT	41	16.9	5	8.9	2.115	0.428
	I find UHT milk expensive	2	0.8	0	0.0		
	Total	243	100	56	100		

#### **Table 29.** Perception towards UHT Milk According to BMI Levels

2: Chi Squared Test Value

The link between perception towards packaged / industrial yoghurts and BMI levels was not found statistically significant (p > 0.05).

32.9% of participants who have BMI less than 25 and 41.1% of participants who have BMI equal to or greater than 25 stated that they find packaged yoghurt healthy and they consume it.

27.6% of participants who have BMI less than 25 and 23.2% of participants who have BMI equal to or greater than 25 were found worried about additives inside packaged yoghurt because of the long shelf life.

11.1% of participants who have BMI less than 25 and 3.6% of participants who have BMI equal to or greater than 25 stated that they think packaged yoghurt has a loss of its nutritional value.

10.3% of participants who have BMI less than 25 and 17.9% of participants who have BMI equal to or greater than 25 stated that they find packaged yoghurt tasteless.

18.1% of participants who have BMI less than 25 and 14.3% of participants who have BMI equal to or greater than 25 stated that they make their own yoghurt.

			BN	/II			
	Variables	Under	al and weight	eight and Obese		□2	р
		n	%	n	%		
	I find packaged yoghurt healthy and I consume it	80	32.9	23	41.1		
	I worry about additives inside because of the long shelf life	67	27.6	13	23.2		
Perception towards Packaged /	I think packaged yoghurt has a loss of its nutritional value	27	11.1	2	3.6	6.478	0.166
Industrial Yoghurts	I find packaged yoghurt tasteless	25	10.3	10	17.9		
	I make my own yoghurt		18.1	8	14.3		
	Total	243	100	56	100		

Table 30. Perception towards Packaged / Industrial Yoghurts According to BMI Levels

2: Chi Squared Test Value

The link between perception towards processed meat products and BMI levels was not found statistically significant (p > 0.05).

58.4% of participants who have BMI less than 25 and 46.4% of participants who have BMI equal to or greater than 25 stated that they find processed meat products unhealthy.

28.8% of participants who have BMI less than 25 and 28.6% of participants who have BMI equal to or greater than 25 were found that not trusting the ingredients inside processed meat products.

6.6% of participants who have BMI less than 25 and 16.1% of participants who have BMI equal to or greater than 25 stated that they find processed meat products healthy.

6.2% of participants who have BMI less than 25 and 8.9% of participants who have BMI equal to or greater than 25 stated that they find it easy to preserve processed meat products for a long time.

**Table 31.** Perception towards Processed Meat Products like Salami, Sausage, Ham,Pastrami, Dried Meat According to BMI Levels

			BN	11			
	Variables	Under	al and weight	and	weight Obese		
		BMI < 25		$BMI \ge 25$		$\Box 2$	р
		n	%	n	%		
	I find processed meat products unhealthy	142	58.4	26	46.4		
Perception	I do not trust the ingredients inside	70	28.8	16	28.6	6.585	0.086
towards Processed	I find processed meat products healthy	16	6.6	9	16.1	0.585	0.080
Meat Products	I find it easy to preserve processed meat products for a long time	15	6.2	5	8.9		
	Total	243	100	56	100		

□2: Chi Squared Test Value

The link between perception towards organic foods and BMI levels was not found statistically significant (p > 0.05).

29.2% of participants who have BMI less than 25 and 17.9% of participants who have BMI equal to or greater than 25 stated that they find organic foods healthier than regular ones.

35.4% of participants who have BMI less than 25 and 41.1% of participants who have BMI equal to or greater than 25 were found not believing organic foods' being organic.

30.5% of participants who have BMI less than 25 and 32.1% of participants who have BMI equal to or greater than 25 stated that they find organic foods unnecessarily expensive.

4.9% of participants who have BMI less than 25 and 8.9% of participants who have BMI equal to or greater than 25 stated that they are not sure or they do not have any idea about organic foods.

				BMI					
Variables		Under	Normal and Underweight BMI < 25		reight and bese $II \ge 25$	То	plam	□2	р
		n	%	n	%	n	%		
	I find organic foods healthier	71	29.2	10	17.9	81	100.0		
Perception	I do not believe organic foods' being organic	86	35.4	23	41.1	109	100.0		
towards Organic Foods	I find organic foods unnecessarily expensive	74	30.5	18	32.1	92	100.0	3.888	0.274
	I am not sure / I do not have any idea		4.9	5	8.9	17	100.0		
	Total	243	100	56	100	299	100.0		

### Table 32. Perception towards Organic Foods According to BMI Levels

2: Chi Squared Test Value

The link between perception towards light milk and dairy products and BMI levels was not found statistically significant (p > 0.05).

43.6% of participants who have BMI less than 25 and 41.1% of participants who have BMI equal to or greater than 25 were found not consuming light milk and dairy products.

12.3% of participants who have BMI less than 25 and 19.6% of participants who have BMI equal to or greater than 25 stated that they find light milk and dairy products healthy and they consume them.

11.1% of participants who have BMI less than 25 and 17.9% of participants who have BMI equal to or greater than 25 were found worried about additives inside light milk and dairy products

4.9% of participants who have BMI less than 25 and 7.1% of participants who have BMI equal to or greater than 25 were found not believing that light milk and dairy products have less fat.

28% of participants who have BMI less than 25 and 14.3% of participants who have BMI equal to or greater than 25 stated that they do not like the taste of light milk and dairy products.

			BN	ΛI			
	Variables				weight Obese I≥25	□2	р
		n	%	n	%		
	I do not consume light milk and dairy products		43.6	23	41.1		
	I find light milk and dairy products healthy and I consume them	68	12.3	11	19.6		
Perception	I worry about additives inside	27	11.1	10	17.9	3.489	0.480
towards Light Milk and	I do not believe that light milk and dairy products have less fat	12	4.9	4	7.1	5.407	0.400
Dairy Products	I do not like the taste of light milk and dairy products	30	28.0	8	14.3		
	Total	243	100	56	100		

Table 33. Perception towards Light Milk and Dairy Products According to BMI Levels

2: Chi Squared Test Value

The link between perception towards light / diet snacks and BMI levels was not found statistically significant (p > 0.05).

18.9% of participants who have BMI less than 25 and 14.3% of participants who have BMI equal to or greater than 25 stated that they find light / diet snacks healthy.

22.2% of participants who have BMI less than 25 and 28.6% of participants who have BMI equal to or greater than 25 were found thinking light / diet snacks have much more additives than regular ones.

16.5% of participants who have BMI less than 25 and 19.6% of participants who have BMI equal to or greater than 25 were found not believing that light / diet snacks have fewer calories than regular ones.

15.6% of participants who have BMI less than 25 and 19.6% of participants who have BMI equal to or greater than 25 stated that they think light snacks have loss of their nutritional value.

26.7% of participants who have BMI less than 25 and 17.9% of participants who have BMI equal to or greater than 25 stated that they do not have any idea about light / diet snacks.

			BN	<b>1</b> I			
	Variables				rweight Obese I≥25	□2	р
		n	%	n	%		
	I find light / diet snacks healthy	46	18.9	8	14.3		
Perception	I think light / diet snacks have much more additives than regular ones	65	22.2	16	28.6		
towards Light /	I do not believe that light / diet snacks have less calories than regular ones	40	16.5	11	19.6	1.720	0.787
Diet Snacks	I think light snacks have loss of their nutritional value		15.6	11	19.6		
	I do not have any idea		26.7	10	17.9		
	Total	243	100	56	100		

### Table 34. Perception towards Light / Diet Snacks According to BMI Levels

2: Chi Squared Test Value

The link between perception towards ASBs and BMI levels was found statistically significant (p < 0.05).

7% of participants who have BMI less than 25 and 5.4% of participants who have BMI equal to or greater than 25 stated that they find ASBs healthy and consume them.

9.9% of participants who have BMI less than 25 and 23.2% of participants who have BMI equal to or greater than 25 stated that they prefer ASBs because of their low calorie content.

11.5% of participants who have BMI less than 25 and 17.9% of participants who have BMI equal to or greater than 25 were found not liking the taste of ASBs.

65.4% of participants who have BMI less than 25 and 42.9% of participants who have BMI equal to or greater than 25 stated that they find ASBs unhealthy.

6.2% of participants who have BMI less than 25 and 10.7% of participants who have BMI equal to or greater than 25 stated that they do not have any idea about ASBs.

Table 35. Perception towards	Artificially	Sweetened	Beverages	(ASBs)	According to
BMI Levels					

			BN	ЛI			
		No	rmal and	Ove	erweight		
	Variables	Underweight		and Obese			
		B	MI < 25	BN	$\Lambda I \ge 25$	$\Box 2$	р
		n	%	n	%		
	I find ASBs healthy and consume them	17	7.0	3	5.4		
Perception	I prefer ASBs because of their low calorie content	24	9.9	13	23.2		
towards Artificially Sweetened	I do not like the taste of ASBs	28	11.5	10	17.9		
Beverages	I find ASBs unhealthy	159	65.4	24	42.9	13.288	0.010
(ASBs)	I do not have any idea	15	6.2	6	10.7		
	Total	243	100.0	56	100.0		

2: Chi Squared Test Value

The difference between consumers' approach towards food labels and their studying department at university was found statistically significant (p < 0.05)

62% of the participants studying NAD, 36.4% of participants studying PTR and 50% of participants studying GCA stated that they always read food labels while shopping.

4% of NAD students, 8.1% of PTR students and 9% of GCA students claimed that food labels are too small to read.

4% of the students studying PTR, 4% of the students studying NAD and 2% of the students studying GCA stated they do not understand the information inside food labels.

13% of students who are studying NAD, 15.2% of students who are studying PTR and 13% of students who are studying GCA stated that the information is located on a hard-to-read place of the package and they cannot read food label.

14% of NAD students, 22.2% of PTR students and 14% of GCA students were found not trusting the information written on food labels.

Participants that having no idea about food labels consist of students from 3% of NAD department, 14.1% of PTR department, 12% of GCA department and respectively.

				Food		The information is	I do not				
Approa	ch	I a	lways	labels are	I do not	located on a hard-to-	trust the				
towards		rea	d food	too small	understand the	read place of the	information	I have			
Food Lat	bels	la	ibels	to read	information	package	written	no idea	Total	$\Box 2$	р
		n	62	4	4	13	14	3	100		
	NAD	%	62.0	4.0	4.0	13.0	14.0	3.0	100.0		
University Course	PTR	n	36	8	4	15	22	14	99	19.529	0.034
Course		%	36.4	8.1	4.0	15.2	22.2	14.1	100.0		
		n	50	9	2	13	14	12	100		
	GCA	%	50.0	9.0	2.0	13.0	14.0	12.0	100.0		

Table 36. Approach towards Food Labels According to Different University Courses

2: Chi Squared Test ValueNAD: Nutrition and DieteticsPTR: Physiotherapy and Rehabilitation

GCA: Gastronomy and Culinary Arts

The difference between consumers' decisive ingredients on food labels and their studying department at university was found statistically significant (p < 0.05)

55% of NAD students chose calorie content as a decisive ingredient for them at shopping. 52.5% of PTR students and 44% of GCA students also stated they look for calorie content first while shopping.

11% of NAD students, 5.1% of PTR students and 17% of GCA students stated that fat is a decisive ingredient for them at shopping.

5% of NAD students, 1% of PTR students and 1% of GCA students stated that carbohydrate is a decisive ingredient for them at shopping.

3% of NAD students, 12.1% of PTR students and 19% of GCA students chose protein as a decisive ingredient for them at shopping.

24% of students studying NAD, 26.3% of students studying PTR and 17% of students studying GCA stated that sugar is a decisive ingredient for them while buying a product.

1% of NAD students stated they look for salt content first at shopping.

1% of NAD students, 3% of PTR students and 2% of GCA students chose fiber as a decisive ingredient for them while buying a product.

**Table 37.** Decisive Ingredients on Food Labels According to Different University

 Courses

Decisive I	ngredients	on	Calorie	Fat	Carbohydrate	Protein	Sugar	Salt	Fiber			
Food	l Labels		content	content	content	content	content	content	content	Total	□2	р
	NAD	n	55	11	5	3	24	1	1	100		
		%	55.0	11.0	5.0	3.0	24.0	1.0	1.0	100.0 2	8.708	0.004
University Course		n	52	5	1	12	26	0	3	99		
Course	PTR	%	52.5	5.1	1.0	12.1	26.3	0.0	3.0	100.0		
		n	44	17	1	19	17	0	2	100		
	GCA	%	44.0	17.0	1.0	19.0	17.0	0.0	2.0	100.0		

2: Chi Squared Test ValueNAD: Nutrition and DieteticsPTR: Physiotherapy and Rehabilitation

GCA: Gastronomy and Culinary Arts

The link between consumers' decisive factors to purchase a food/drink product and their studying department at university was not found statistically significant (p > 0.05)

6% of NAD students, 7.1% of PTR students and 8% of GCA students stated that packaging of the product affects them while shopping.

34% of NAD students, 35.4% of PTR students and 42% of GCA students stated that they are affected by brand name of the product while shopping.

9% of NAD students, 8.1% of PTR students and 14% of GCA students stated that they are affected by advertisements and recommendations while buying a food or drink product.

24% of NAD students, 29.3% of PTR students and 17% of GCA students stated that they look for expiry date first while buying a product.

27% of NAD students, 20.2% of PTR students and 19% of GCA students declared that they look for nutrition information written on food label before buying a product.

Decisive F Purch		the p	iging of roduct cts me	Brand of the product affects me	Advertisements and recommendations affect me	I look for expiry date	I look for nutrition information	Total	□2	р
	NAD	n %	6 6.0	34 34.0	9 9.0	24 24.0	27 27.0	100 100.0	-	
University Course	PTR	n %	7 7.1	35 35.4	8 8.1	29 29.3	20 20.2	99 100.0	8.142	0.420
	GCA	n %	8 8.0	42 42.0	14 14.0	17 17.0	19 19.0	100 100.0		

**Table 38.** Decisive Factors to Purchase According to Different University Courses

2: Chi Squared Test Value
 NAD: Nutrition and Dietetics
 PTR: Physiotherapy and Rehabilitation
 GCA: Gastronomy and Culinary Arts

The link between consumers' preference for buying and consuming sugar sweetened beverages (SSBS) and their studying department at university was found statistically significant (p < 0.05).

32% of NAD students, 37.4% of PTR students and 50% of GCA students stated they prefer to buy and consume SSBs.

17% of NAD students, 7.1% of PTR students and 10% of GCA students stated they buy SSBs for home or room but do not consume them.

51% of NAD students, 55.6% of PTR students and 40% of GCA students stated that they definitely do not buy or consume SSBs.

# **Table 39.** Preference for Buying and Consuming Sugar Sweetened Beverages (SSBs)According to Different University Courses

				I buy SSBs				
			I prefer to	for home or	I definitely			
			buy and	room but do	do not buy			
Preference for Buyin	ng and Consuming S	ugar	consume	not consume	or consume			
Sweetened B	everages (SSBs)		SSBs	them	SSBs	Total	$\Box 2$	р
		n	32	17	51	100		
	NAD	%	32.0	17.0	51.0	100.0		
University		n	37	7	55	99		
Course	PTR	%	37.4	7.1	55.6	100.0	11.461	0.022
		n	50	10	40	100		
	GCA	%	50.0	10.0	40.0	100.0		

2: Chi Squared Test Value
 NAD: Nutrition and Dietetics
 PTR: Physiotherapy and Rehabilitation
 GCA: Gastronomy and Culinary Arts

The link between consumers' preferences of milk according with different packaging methods and their studying department at university was not found statistically significant (p > 0.05)

2% of NAD students, 8.1% of PTR students and 4% of GCA students were found prefer street milk.

64% of NAD students, 57.6% of PTR students and 65% of GCA students stated they prefer UHT milk.

30% of NAD students and 22.2% of PTR students and 27% of GCA students were found prefer pasteurized milk.

4% of NAD students, 12.1% of PTR students and 4% of GCA students stated they do not consume milk.

**Table 40.** Consumer Preferences of Milk with Different Packaging Methods Accordingto Different University Courses

	eferences of Milk Packaging Method		prefer street milk	I prefer UHT milk	I prefer pasteurized milk	I do not consume milk	Total	□2	р
	NAD	n %	2	64 64.0	30 30.0	4	100 100		
University Course		n	8	57	22	12	99	12.284	0.056
Course	PTR	%	8.1	57.6	22.2	12.1	100	12.264	0.036
		n	4	65	27	4	100		
	GCA	%	4.0	65.0	27.0	4.0	100		

2: Chi Squared Test Value NAD: Nutrition and Dietetics

PTR: Physiotherapy and Rehabilitation GCA: Gastronomy and Culinary Arts

The link between consumers' fruits and vegetables purchasing place preferences and their studying department at university was not found statistically significant (p > 0.05)

61% of NAD students, 46.5% of PTR students and 45% of GCA students were found buying fruits and vegetables from supermarkets.

35% of NAD students, 48.5% of PTR students and 52% of GCA students stated they buy fruits and vegetables from farmer's market / greengrocery.

3% of NAD students, 1% of PTR students and 1% of GCA students stated they buy fruits and vegetables from organic bazaar.

3% of PTR students, 1% of GCA students were found growing their own fruits and vegetables.

1% of NAD students, 1% of PTR students and 1% of GCA students stated they do not consume fruits and vegetables.

### Table 41. Place Preferred to Purchase Fruits and Vegetables According to Different

### University Courses

				I buy fruits						
		I bu	y fruits	and						
			and	vegetables	I buy fruits and	I grow my	I do not			
		veg	etables	from farmers	vegetables	own fruits	consume			
Place Preferr	ed to Purchase	1	from	market /	from organic	and	fruits and			
Fruits and	Vegetables	supe	rmarkets	greengrocery	bazaar	vegetables	vegetables	Total	□2	р
		n	61	35	3	0	1	100		
	NAD	%	61.0	35.0	3.0	0.0	1.0	100.0		
University	PTR	n	46	48	1	3	1	99	11.76	0.162
Course		%	46.5	48.5	10	3.0	1.0	100.0	11.70	0.102
	GCA	n	45	52	1	1	1	100		
		%	45.0	52.0	1.0	1.0	1.0	100.0		

2: Chi Squared Test Value
 NAD: Nutrition and Dietetics
 PTR: Physiotherapy and Rehabilitation
 GCA: Gastronomy and Culinary Arts

The link between consumers' perception towards packaged bread groups and their studying department at university was found statistically significant (p < 0.05).

22% of NAD students, 25.3% of PTR students and 25% of GCA students stated they find packaged breads healthy and they consume them.

66% of NAD students, 52.5% of PTR students and 46% of GCA students stated they are worried about additives inside packaged breads because of the long shelf life.

2% of NAD students, 12.1% of PTR students and 13% of GCA students stated they find packaged breads unnecessarily expensive.

1% of NAD students, 2% of PTR students and 5% of GCA students were found making their own bread.

9% of NAD students, 8.1% of PTR students and 11% of GCA students declared they do not consume bread.

### Table 42. Perception towards Packaged Bread Groups According to Different

#### University Courses

-	owards Packaged d Groups	I find pac breads he and I con then	ealthy	ac b	worry about lditives inside ecause of the ong shelf life	I find packaged breads expensive	I prefer to make my own bread	I do not consume bread	Total	□2	р
	NAD	n %	22 22.0		66 66.0	2 2.0	1 1.0	9 9.0	100 100		
University Course		n	25		52	12	2	8	99		
Course	PTR	%	25.3		52.5	12.1	2.0	8.1	100	16.031	0.042
		n	25		46	13	5	11	100		
	GCA	%	25.0		46.0	13.0	5.0	11.0	100.0		

□2: Chi Squared Test Value NAD: Nutrition and Dietetics PTR: Physiotherapy and Rehabilitation

GCA: Gastronomy and Culinary Arts

The link between consumers' perception towards UHT milk and their studying department at university was found statistically significant (p < 0.05).

49% of NAD students, 36.4% PTR students and 60% GCA students stated they find UHT milk healthy and I consume it.

35% of NAD students, 44.4% PTR students and 27% GCA students were found worried about additives inside UHT milk because of the long shelf life.

15% of NAD students, 19.2% PTR students and 12% of GCA students stated they think milk loses its nutritional value after UHT.

1% of NAD students and 1% of GCA students declared they find UHT milk expensive.

	ption towards HT Milk	n	I find UHT nilk healthy and I consume it	I worry about additives inside because of long shelf life	I think milk loses its nutritional value after UHT	I find UHT milk expensive	Total	□2	р
		n	49	35	15	1	100		
	NAD	%	49.0	35.0	15.0	1.0	100.0		
University		n	36	44	19	0	99	12.695	0.048
Course	PTR	%	36.4	44.4	19.2	0.0	100.0		
		n	60	27	12	1	100		
	GCA	%	60.0	27.0	12.0	1.0	100.0		

 Table 43. Perception towards UHT Milk According to Different University Courses

2: Chi Squared Test Value
 NAD: Nutrition and Dietetics
 PTR: Physiotherapy and Rehabilitation
 GCA: Gastronomy and Culinary Arts

The link between consumers' perception towards packaged / industrial yoghurts and their studying department at university was found statistically significant (p < 0.05).

36% of NAD students, 27.3% of PTR students and 40% of GCA students stated they find packaged yoghurt healthy and consume it.

36% of NAD students, 24.2% of PTR students and 20% of GCA students were found worried about additives inside packaged / industrial yoghurt because of long shelf life.

12% of NAD students, 12.1% of PTR students and 5% of GCA students stated that they think packaged yoghurt has a loss of its nutritional value.

5% of NAD students, 14.1% of PTR students and 16% GCA students declared they find packaged yoghurt tasteless.

11% of NAD students, 22.2% of PTR students and 19% of GCA students were found making their own yoghurt at home.

## Table 44. Perception towards Packaged / Industrial Yoghurts According to Different University Courses

					I think					
			I find	I worry about	packaged					
		p	ackaged	additives	yoghurt has	I find	I make			
Perception tow	ards Packaged /		yoghurt	inside because	a loss of its	packaged	my own			
Industria	l Yoghurts	hea	lthy and I	of long shelf	nutritional	yoghurt	yoghurt			
		с	onsume it	life	value	tasteless	at home	Total	□2	р
		n	36	36	12	5	11	100		
	NAD	%	36	36.0	12.0	5.0	11.0	100		
University		n	27	24	12	14	22	99	20.744	0.008
Course	PTR	%	27.3	24.2	12.1	14.1	22.2	100		
		n	40	20	5	16	19	100		
	GCA	%	40.0	20.0	5.0	16.0	19.0	100		

2: Chi Squared Test Value
 NAD: Nutrition and Dietetics

PTR: Physiotherapy and Rehabilitation

GCA: Gastronomy and Culinary Arts

The link between consumers' perception towards processed meat products like salami, sausage, ham, pastrami, dried meat and their studying department at university was found statistically significant (p < 0.05).

66% of NAD students, 60.6% of PTR students and 42% of GCA students stated they find processed meat products unhealthy.

28% of NAD students, 25.3% of PTR students and 33% of GCA students were found not trusting the ingredients inside processed meat products.

2% of NAD students, 8.1% of PTR students and 15% of GCA students declared they find processed meat products healthy.

4% of NAD students, 6.1% of PTR students and 10% of GCA students stated they find it easy to preserve processed meat products for a long time.

**Table 45.** Perception towards Processed Meat Products Like Salami, Sausage, Ham,Pastrami, Dried Meat According to Different University Courses

Meat Proc	towards Processed lucts Like Salami, am, Pastrami, Dried Meat	n	I find processed neat products unhealthy	I do not trust the ingredients inside	I find processed meat products healthy	I find it easy to preserve processed meat products for a long time	Total	□2	р
		n	66	28	2	4	100		r
	NAD	%	66.0	28.0	2.0	4.0	100.0	-	
		n	60	25	8	6	99	19.607	0.003
University	PTR	%	60.6	25.3	8.1	6.1	100.0		
Course		n	42	33	15	10	100		
Course	GCA	%	42.0	33.0	15.0	10.0	100.0		

2: Chi Squared Test Value
 NAD: Nutrition and Dietetics
 PTR: Physiotherapy and Rehabilitation
 GCA: Gastronomy and Culinary Arts

The link between consumers' perception towards organic foods and their studying department at university was found statistically significant (p < 0.05).

36% of NAD students, 36.4% of PTR students and 9% of GCA students stated they find organic foods healthier.

29% of NAD students, 30.3% of PTR students and 50% of GCA students stated they do not believe organic foods' being organic.

28% of NAD students, 30.3% of PTR students and 34% of GCA students stated they find organic foods unnecessarily expensive.

7% of NAD students, 3% of PTR students and 7% of GCA students were found not having an idea about organic foods.

### Table 46. Perception towards Organic Foods According to Different University

#### Courses

				I do not					
			I find	believe	I find organic	I am not sure			
			organic	organic	foods	/ I do not			
Perce	ption towards		foods	foods' being	unnecessarily	have any			
Org	anic Foods		healthier	organic	expensive	idea	Total	$\Box 2$	р
		n	36	29	28	7	100		
	NAD	%	36.0	29.0	28.0	7.0	100.0		
University		n	36	30	30	3	99	28.169	0.000
Course	PTR	%	36.4	30.3	30.3	3.0	100.0		
		n	9	50	34	7	100		
	GCA	%	9.0	50.0	34.0	7.0	100.0		

2: Chi Squared Test Value
 NAD: Nutrition and Dietetics
 PTR: Physiotherapy and Rehabilitation
 GCA: Gastronomy and Culinary Arts

The link between consumers' perception towards light milk and dairy products and their studying department at university was found statistically significant (p < 0.05).

44% of NAD students, 42.4% of PTR students and 43% of GCA students were found not consuming light milk and dairy products.

30% of NAD students, 27.3% of PTR students and 22% of GCA students stated they find light milk and dairy products healthy and they consume them.

11% of NAD students, 17.2% of PTR students and 9% of GCA students were found worried about additives inside light milk and dairy products.

3% of NAD students, 5.1% of PTR students and 8% of GCA students stated they do not believe that light milk and dairy products have less fat.

12% of NAD students, 8.1% of PTR students and 18% of GCA students stated they do not like the taste of light milk and dairy products.

## **Tablo 47.** Perception towards Light Milk and Dairy Products According to DifferentUniversity Courses

	n towards Light M Dairy Products	ilk	I do not consume light milk and dairy products	I find light milk and dairy products healthy and I consume them	I worry about additives inside	I do not believe that light milk and dairy products have less fat	I do not like the taste of light milk and dairy products	Total	□2	р
	NAD	n	44	30	11	3	12	100		
		% n	44.0 42	30.0 27	11.0 17	3.0	12.0	100.0 99		
University Course	PTR	n %	42.4	27.3	17.2	5.1	8.1	100.0	10.467	0.234
	GCA	n %	43 43.0	22 22.0	9 9.0	8 8.0	18 18.0	100 100.0		

2: Chi Squared Test Value

NAD: Nutrition and Dietetics PTR: Physiotherapy and Rehabilitation

GCA: Gastronomy and Culinary Arts

The link between consumers' perception towards light / diet snacks and their studying department at university was found statistically significant (p < 0.05).

17.2% of NAD students, 17% of PTR students and 20% of GCA students stated they find light / diet snacks healthy.

25% of NAD students, 33.3% of PTR students and 23% of GCA students stated they think light / diet snacks have much more additives than regular ones.

23% of NAD students, 13.1% of PTR students and 15% of GCA students were found not believing that light / diet snacks have fewer calories than regular ones.

24% of NAD students, 12.1% of PTR students and 13% of GCA students stated they think light / diet snacks have loss of their nutritional value.

11% of NAD students, 24.2% of PTR students and 29% of GCA students stated they have no idea about light / diet snacks.

### Tablo 48. Perception towards Light / Diet Snacks According to Different University Courses

-	owards Light / Snacks	diet	d light / snacks	I think light / diet snacks have much more additives than regular ones	I do not believe that light / diet snacks have fewer calories than regular ones	I think light / diet snacks have loss of their nutritional value	I do not have any idea	Total	□2	р
	NAD	n %	17 17.0	25 25.0	23 23.0	24 24.0	11 11.0	100		
University		n	17	33	13	12	24	99		
Course	PTR	%	17.2	33.3	13.1	12.1	24.2	100.0	19.191	0.014
	GCA	n %	20 20.0	23 23.0	15 15.0	13 13.0	29 29.0	100 100.0		

2: Chi Squared Test Value

NAD: Nutrition and Dietetics PTR: Physiotherapy and Rehabilitation

GCA: Gastronomy and Culinary Arts

The link between consumers' perception towards artificially sweetened beverages (ASBs) and their studying department at university was found statistically significant (p < 0.05).

7% of NAD students, 4% of PTR students and 9% of GCA students stated they find ASBs healthy and consume them.

9% of NAD students, 9.1% of PTR students and 19% of GCA students stated they prefer ASBs because of their low calorie content.

3% of NAD students, 20.2% of PTR students and 15% of GCA students declared they do not like the taste of ASBs.

73% of NAD students, 58.6% of PTR students and 52% of GCA students stated they find ASBs unhealthy.

8% of NAD students, 8.1% of PTR students and 5% of GCA students were found not having an idea about ASBs.

## **Table 49.** Perception towards Artificially Sweetened Beverages (ASBs) According to Different University Courses

Perception towards Artificially Sweetened Beverages (ASBs)			I find ASBs healthy and consume them	I prefer ASBs because of their low calorie content	I do not like the taste of ASBs	I find ASBs unhealthy	I do not have any idea	Total	□2	р
	NAD	n %	7 7.0	9 9.0	3 3.0	73 73.0	8 8.0	100 100.0	-	
University Course	PTR		4 4.0	9 9.1	20 20.2	58 58.6	8 8.1	99 100.0	24.030	0.002
	GCA	n %	9 9.0	19 19.0	15 15.0	52 52.0	5 5.0	100 100.0		

2: Chi Squared Test Value NAD: Nutrition and Dietetics PTR: Physiotherapy and Rehabilitation

GCA: Gastronomy and Culinary Arts

The link between consumers' approach towards food labels and their living places was not found statistically significant (p > 0.05).

50.6% of students living at home and 45.6% of students living in a dorm room stated they always read food labels.

6.9% of the students living at home and 7.4% of students living in a dorm room stated that they found food labels too small to read.

3.5% of students living at home and 2.9% of students living in a dorm room stated they do not understand the information written on food labels.

14.7% of students living at home and 10.3% of students living in a dorm room declared that the information is located on a hard-to-read place of the package.

14.7% of students living at home and 23.5% of students living in a dorm room stated they do not trust the information written on food labels.

9.5% of students living at home and 10.3% of students living in a dorm room were found not having an idea about food labels.

				Food labels	I do not	The information	I do not				
			I always	are too	understand	is located on a	trust the				
			read food	small to	the	hard-to-read place	information	I have			
Approa	Approach towards			read	information	of the package	written	no idea	Total	$\Box 2$	р
	Home	n	117	16	8	34	34	22	231		
Living		%	50.6	6.9	3.5	14.7	14.7	9.5	100.0		
Place	Dorm	n	31	5	2	7	16	7	68	3.549	0.616
	Room	%	45.6	7.4	2.9	10.3	23.5	10.3	100.0		

Table 50. Approach towards Food Labels According to Living Places

2: Chi Squared Test Value

The link between consumers' decisive ingredients on food labels and their living places was not found statistically significant (p > 0.05).

48.9% of students living at home and 55.9% of students living in a dorm room chose calorie content as a decisive ingredient on food label while shopping.

11.7% of students living at home and 8.8% of students living in a dorm room stated they look for fat content first at shopping.

2.6% of students living at home and 1.5% of students living in a dorm room stated they look for carbohydrate content first at shopping.

12.6% of students living at home and 7.4% of students living in a dorm room stated they look for protein content first at shopping.

22.5% of students living at home and 22.1% of students living in a dorm room stated they look for sugar content first at shopping.

0.4% of students living at home declared they look for salt content first at shopping.

1.3% of students living at home and 4.4% of students living in a dorm room stated they look for fiber content first at shopping.

Decisive Ingredients on Food Labels		Calorie	Fat content	Carbohydrate content	Protein content	Sugar content	Salt content	Fiber content	Total	□2	р	
	Home	n	113	27	6	29	52	1	3	231		
Living		%	48.9	11.7	2.6	12.6	22.5	0.4	1.3	100.0		
Place	Dorm Room n		38	6	1	5	15	0	3	68	5.266	0.510
		%	55.9	8.8	1.5	7.4	22.1	0.0	4.4	100.0		

### **Table 51.** Decisive Ingredients on Food Labels According to Living Places

□2: Chi Squared Test Value

The link between consumers' decisive ingredients on food labels and their living places was not found statistically significant (p > 0.05).

8.2% of students living at home and 2.9% of students living in a dorm room stated that packaging of the product affects them while shopping.

35.1% of students living at home and 44.1% of students living in a dorm room stated that brand of the product affects them while shopping.

11.3% of students living at home and 7.4% of students living in a dorm room stated that advertisements and recommendations affect them while shopping.

24.2% of students living at home and 20.6% of students living in a dorm room declared they look for expiry date while purchasing a product.

21.2% of students living at home and 25% of students living in a dorm room stated they look for nutrition information while purchasing a product.

Table 52. Decisive Factors to Purchase According to Liv
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Decisive Factors to Purchase			Packaging of the product affects me	Brand of the product affects me	Advertisements and recommendations affect me	I look for expiry date	I look for nutrition information	Total	2	р
	Home n		19	81	26	56	49	231		
Living		%	8.2	35.1	11.3	24.2	21.2	100.0		
Place	Dorm Room	n	2	30	5	14	17	68	4.661	0.324
		%	2.9	44.1	7.4	20.6	25.0	100.0		

□2: Chi Squared Test Value

The link between consumers' preference for buying and consuming sugar sweetened beverages (SSBs) and their living places was not found statistically significant (p > 0.05).

41.1% of students living at home and 35.3% of students living in a dorm room stated they prefer to buy and consume SSBs.

12.6% of students living at home and 7.4% of students living in a dorm stated they buy SSBs for home or room but do not consume them.

46.3% of students living at home and 57.4% of students living in a dorm declared they definitely do not buy or consume SSBs.

 Table 53. Preference for Buying and Consuming Sugar Sweetened Beverages (SSBs)

 According to Living Places

Consuming	for Buying and Sugar Sweetened	1	I prefer to buy and consume SSBs	I buy SSBs for home or room but do not consume them	I definitely do not buy or consume SSBs	Total	□2	2
Bevera	ages (SSBs)		2288	consume them	consume SSBs	Total	$\Box Z$	р
	Home	n	95	29	107	231		
Living Place	%		41.1	12.6	46.3	100.0	3.008	0.222
	Dorm Room n		24	5	39	68	5.008	0.222
		%	35.3	7.4	57.4	100.0		

2: Chi Squared Test Value

The link between consumers' preference of milk with different packaging method and their living places was not found statistically significant (p > 0.05).

5.6% of students living at home and 1.5% of students living in a dorm stated they prefer street milk.

61.5% of students living at home and 64.7% of students living in a dorm stated they prefer UHT milk.

26.8% of students living at home and 25% of students living in a dorm declared they prefer pasteurized milk.

6.1% of students living at home and 8.8% of students living in a dorm stated they do not consume milk.

# **Table 54.** Consumer Preferences of Milk with Different Packaging Methods According to Living Places

Consumer Preferences of Milk According to the Packaging Method			I prefer street milk	I prefer UHT milk	I prefer pasteurized milk	I do not consume milk	Total		р
-	Home	n	13	142	62	14	231		
Living		%	5.6	61.5	26.8	6.1	100.0		o
Place	Dorm	n	1	44	17	6	68	2.694	0.441
	Room %		1.5	64.7	25.0	8.8	100.0		

2: Chi Squared Test Value

The link between consumers' preferred place to purchase fruits and vegetables and their living places was not found statistically significant (p > 0.05).

49.8% of students living at home and 54.4% of students living in a dorm room stated they buy fruits and vegetables from supermarkets.

45.9% of students living at home and 42.6% of students living in a dorm room stated they buy fruits and vegetables from farmer's market/greengrocery.

1.7% of students living at home and 1.5% of students living in a dorm room declared they buy fruits and vegetables from organic bazaar.

1.7% of students living at home and 1.5% of students living in a dorm room stated they grow their own fruits and vegetables.

0.9% of students living at home and 1.5% of students living in a dorm room declared they do not consume fruits and vegetables.

					I buy fruits					
Place Preferred to			I buy fruits and	and	I grow my	I do not				
Purchase Fruits and		I buy fruits and	vegetables from	vegetables	own fruits	consume				
Vegetables		vegetables from	farmer's	from organic	and	fruits and				
		supermarkets	market/greengrocery	bazaar	vegetables	vegetables	Total	□2	р	
	Home	n	115	106	4	4	2	231		
Living		%	49.8	45.9	1.7	1.7	0.9	100.0	1 70 4	0.705
Place	Place Dorm n		37	29	1	0	1	68	1.734	0.785
	Room % 54.4		54.4	42.6	1.5	0.0	1.5	100.0		

Table 55. Place Preferred to Purchase Fruits and Vegetables According to Living Places

2: Chi Squared Test Value

The link between consumers' perception towards packaged bread groups and their living places was not found statistically significant (p > 0.05).

24.2% of students living at home and 23.5% of students living in a dorm room stated they find packaged breads healthy and they consume them.

54.5% of students living at home and 55.9% of students living in a dorm room were found worried about additives inside because of the long shelf life.

7.8% of students living at home and 13.2% of students living in a dorm room stated they find packaged breads expensive.

3.5% of students living at home declared they prefer to make their own bread.

10% of students living at home and 7.4% of students living in a dorm room were found not consuming bread.

Table 56. Perception	towards Packaged Bread	d Groups Accor	ding to Living I	Places
1	$\mathcal{O}$	1	0 0	

			I find	I worry about						
			packaged	additives						
			breads	inside I find		I prefer				
Perception towards Packaged		ged	healthy and	because of	packaged	to make	I do not			
Bread Groups		I consume	the long	breads	my own	consume				
			them	shelf life	expensive	bread	bread	Total	$\Box 2$	р
	Home	n	56	126	18	8	23	231		
Living	iving %		24.2	54.5	7.8	3.5	10.0	100.0		
Place	Dorm Room n		16 38		9	0	5	68	4.487	0.344
		%	23.5	55.9	13.2	0	7.4	100.0		

2: Chi Squared Test Value

The link between consumers' perception towards UHT milk and their living places was not found statistically significant (p > 0.05).

48.1% of students living at home and 50% of students living in a dorm room stated they find UHT milk healthy and they consume it.

35.1% of students living at home and 36.8% of students living in a dorm room were found worried about additives inside of UHT milk because of long shelf life.

16.5% of students living at home and 11.8% of students living in a dorm room stated they think milk loses its nutritional value after UHT.

0.4% of students living at home and 1.5% of students living in a dorm room stated they find UHT milk expensive.

Perception to	owards UHT M	ſilk	I find UHT milk healthy and I consume it	I worry about additives inside because of the long shelf life	I think milk loses its nutritional value after UHT	I find UHT milk expensive	Total		р
T :	Home	n	111	81	38	1	231		
Living Place		%	48.1%	35.1%	16.5%	0.4%	100.0	1.679	0.642
1 lace	Dorm	n	34	25	8	1	68	1.079	0.042
	-	n	-	-	~	1			
	Room	%	50.0%	36.8%	11.8%	1.5%	100.0		

Table 57. Perception towards UHT Milk According to Living Places

2: Chi Squared Test Value

The link between consumers' perception towards packaged / industrial yoghurts and their living places was not found statistically significant (p > 0.05).

33.8% of students living at home and 36.8% of students living in a dorm room stated they find packaged yoghurt healthy and they consume it.

25.1% of students living at home and 32.4% of students living in a dorm room were found worried about additives inside packaged / industrial yoghurts because of long shelf life.

10.4% of students living at home and 7.4% of students living in a dorm room stated they think packaged / industrial yoghurt has a loss of its nutritional value.

12.1% of students living at home and 10.3% of students living in a dorm room declared they find packaged / industrial yoghurt tasteless.

18.6% of students living at home and 13.2% of students living in a dorm room were found making their own yoghurts at home.

Table 58. Perception towards	Packaged /	Industrial	Yoghurts A	According to Livin	ng Places

Perception towards Packaged / Industrial Yoghurts		I find packaged yoghurt healthy and I	I worry about additives inside because of the long	I think packaged yoghurt has a loss of its	I find packaged yoghurt	I make my own				
Yoghurts		consume it	shelf life	nutritional value	tasteless	yoghurt	Total	$\Box 2$	р	
	Home	n	78	58	24	28	43	231		
Living Place		%	33.8	25.1	10.4	12.1	18.6	100. 0	2.691	0.611
1 1000	Dorm	n	25	22	5	7	9	68		
	Room	%	36.8	32.4	7.4	10.3	13.2	100. 0		

2: Chi Squared Test Value

The link between consumers' perception towards processed meat products and their living places was not found statistically significant (p > 0.05).

52.4% of students living at home and 69.1% of students living in a dorm room stated they find processed meat products unhealthy.

31.2% of students living at home and 20.6% of students living in a dorm room were found not trusting the ingredients inside of processed meat products.

9.1% of students living at home and 5.9% of students living in a dorm room stated they find processed meat products healthy.

7.4% of students living at home and 4.4% of students living in a dorm room declared they find it easy to preserve processed meat products for a long time.

# **Table 59.** Perception towards Processed Meat Products Like Salami, Sausage, Ham,Pastrami, Dried Meat According to Living Places

						I find it easy to			
Perception towards Processed Meat		leat	I find	I do not trust	I find	preserve			
Products Like	Products Like Salami, Sausage,		processed	the	processed	processed meat			
Ham, Pastra	Ham, Pastrami, Dried Meat		meat products	ingredients	meat products	products for a			
		unhealthy	inside	healthy	long time	Total	$\Box 2$	р	
	Home	n	121	72	21	17	231		
Living Place	%		52.4 31.2		9.1	7.4	100.0		
				5112	<i>,</i> ,,,			5.993	0.112
	Dorm Room n		47	14	4	3	68	2	
	%		69.1	20.6	5.9	4.4	100.0		

2: Chi Squared Test Value

The link between consumers' perception towards organic foods and their living places was not found statistically significant (p > 0.05).

29% of students living at home and 20.6% of students living in a dorm room stated they find organic foods healthier than regular foods.

35.1% of students living at home and 41.2% of students living in a dorm room were found not believing organic foods' being organic.

30.3% of students living at home and 32.4% of students living in a dorm room stated they find organic foods unnecessarily expensive.

5.6% of students living at home and 5.9% of students living in a dorm room were found not sure or not having an idea about organic foods.

Table 60. Perception towards Organic Foods According to Living Places

1	ion towards nic Foods		I find organic foods healthier	I do not believe organic foods' being organic	I find organic foods unnecessarily expensive	I am not sure / I do not have any idea	Total	□2	р
<b>X · · · D</b>	Home	n	67	81	70	13	231		
Living Place		%	29.0	35.1	30.3	5.6	100.0	1.990	0.575
	Dorm Room	n	14	28	22	4	68	1.790	0.575
		%	20.6	41.2	32.4	5.9	100.0		

2: Chi Squared Test Value

The link between consumers' perception towards light milk and dairy products and their living places was not found statistically significant (p > 0.05).

41.6% of students living at home and 48.5% of students living in a dorm room were found not consuming light milk and dairy products.

26% of students living at home and 27.9% of students living in a dorm room stated they find light milk and dairy products healthy and they consume them.

13% of students living at home and 10.3% of students living in a dorm room were found worried about additives inside light milk and dairy products.

5.6% of students living at home and 4.4% of students living in a dorm room stated they do not believe that light milk and dairy products have less fat than regular ones.

13.9% of students living at home and 8.8% of students living in a dorm room stated they do not like the taste of light milk and dairy products.

**Table 61.** Perception towards Light Milk and Dairy Products According to Living
 Places

		]	do not	I find light milk						
		с	onsume	and dairy	I worry	I do not believe	I do not like			
Perception	n towards	li	ght milk	products	about	that light milk and	the taste of			
Light Milk	and Dairy	a	nd dairy	healthy and I	additives	dairy products	light milk and			
Prod	lucts	p	oroducts	consume them	inside	have less fat	dairy products	Total	$\Box 2$	р
	Home	n	96	60	30	13	32	231		
Living		%	41.6	26.0	13.0	5.6	13.9	100.0		
Place	Dorm	n	33	19	7	3	6	68	2.167	0.705
	Room	%	48.5	27.9	10.3	4.4	8.8	100.0		

2: Chi Squared Test Value

The link between consumers' perception towards light / diet snacks and their living places was not found statistically significant (p > 0.05).

18.2% of students living at home and 17.6% of students living in a dorm room stated they find light / diet snacks healthy.

26% of students living at home and 30.9% of students living in a dorm room declared they think light / diet snacks have much more additives than regular ones.

16.5% of students living at home and 19.1% of students living in a dorm room were found not believing that light / diet snacks have fewer calories than regular ones.

16.9% of students living at home and 14.7% of students living in a dorm room stated they think light / diet snacks have loss of their nutritional value.

22.5% of students living at home and 17.6% of students living in a dorm room were found not having an idea about light / diet snacks.

				I think light /	I do not believe	I think light				
				diet snacks	that light / diet	/ diet snacks				
				have much snacks have h		have loss of				
			I find light /	more additives	ves fewer calories their		I do not		□2	р
Perception towards Light /		nt /	diet snacks	than regular	than regular	nutritional	have any			
	Diet Snacks		healthy	ones	ones	value	idea	Total		
	Home	n	42	60	38	39	52	231		
Living		%	18.2	26.0	16.5	16.9	22.5	100.0		
Place	Dorm Room	n	12	21	13	10	12	68	1.427	0.839
		%	17.6	30.9	19.1	14.7	17.6	100.0		

Table 62. Perception towards Light / Diet Snacks According to Living Places

2: Chi Squared Test Value

The link between consumers' perception towards artificially sweetened beverages (ASBs) and their living places was not found statistically significant (p > 0.05).

6.5% of students living at home and 7.4% of students living in a dorm room stated they find ASBs healthy and consume them.

11.7% of students living at home and 14.7% of students living in a dorm room declared they prefer ASBs because of their low calorie content.

14.3% of students living at home and 7.4% of students living in a dorm room stated they do not like the taste of ASBs.

59.7% of students living at home and 66.2% of students living in a dorm room stated they find ASBs unhealthy.

7.8% of students living at home and 4.4% of students living in a dorm room were found not having an idea about ASBs.

			I find ASBs	I prefer ASBs	I do not					
			healthy and	because of their	like the	I find	I do not			
Perception to	Perception towards Artificiall			low calorie	taste of	ASBs	have any			
Sweetened Beverages (ASBs)			them	content	ASBs	unhealthy	idea	Total	$\Box 2$	р
-	Home	n	15	27	33	138	18	231		
Living		%	6.5	11.7	14.3	59.7	7.8	100.0		
Place	Dorm Room	n	5	10	5	45	3	68	3.642	0.457
		%	7.4	14.7	7.4	66.2	4.4	100.0	-	

# **Table 63.** Perception towards Artificially Sweetened Beverages (ASBs) According to Living Places

□2: Chi Squared Test Value

The link between consumers' perception towards food labels and gender differences was not found statistically significant (p > 0.05).

50.2% of women participants and 47.4% of men participants stated they always read food labels.

6.3% of women participants and 9% of men participants declared that food labels are too small to read.

3.6% of women participants and 2.6% of men participants stated they do not understand the information in food labels.

14.9% of women participants and 10.3% of men participants stated that the information is located on a hard-to-read place of the package.

16.7% of women participants and 16.7% of men participants declared that they do not trust the information written.

8.1% of women participants and 14.1% of men participants stated they do not have any idea.

			I always	Food	I do not	The information is	I do not	I do not			
Approach	towards F	Food	read	labels are	understand	located on a hard-	trust the	have			
L	Labels		food	too small	the	to-read place of	information	any			
			labels	to read	information	the package	written	idea	Total	$\Box 2$	р
	Woman	n	111	14	8	33	37	18	221		
Gender		%	50.2	6.3	3.6	14.9	16.7	8.1	100.0		
	Man	n	37	7	2	8	13	11	78	3.884	0.566
		%	47.4	9.0	2.6	10.3	16.7	14.1	100.0		

#### **Table 64.** Approach towards Food Labels According to Gender Differences

□2: Chi Squared Test Value

The link between consumers' decisive ingredients on food labels and gender differences was found statistically significant (p < 0.05).

55.7% of women participants and 35.9% of men participants stated that they look for calorie content first at shopping.

10% of women participants and 14.1% of men participants stated they look for fat content first at shopping.

2.3% of women participants and 2.6% of men participants stated they look for carbohydrate content first at shopping.

5% of women participants and 29.5% of men participants stated they look for protein content first at shopping.

24.4% of women participants and 16.7% of men participants stated they look for sugar content first at shopping.

0.5% of women participants stated they look for salt content first at shopping.

2.3% of women participants and 1.3% of men participants stated they look for fiber content first at shopping.

Desision	T											
	Ingredients	son		_			~					
Foo	d Labels		Calorie	Fat	Carbohydrate	Protein	Sugar	Salt	Fiber			
			content	content	content	content	content	content	content	Total	$\Box 2$	р
	Woman	n	123	22	5	11	54	1	5	221		
		%	55.7	10.0	2.3	5.0	24.4	0.5	2.3	100.0		
Gender	Man	n	28	11	2	23	13	0	1	78	38.016	0.000
		%	35.9	14.1	2.6	29.5	16.7	0.0	1.3	100.0		

**Table 65.** Decisive Ingredients on Food Labels According to Gender Differences

□2: Chi Squared Test Value

The link between consumers' decisive factors to purchase and gender differences was not found statistically significant (p > 0.05).

5.4% of women participants and 11.5% of men participants stated that packaging of the product affect them.

36.2% of women participants and 39.7% of men participant stated that brand of the products affects them.

12.2% of women participants and 5.1% of men participants stated that advertisements and recommendations affect them.

23.5% of women participants and 23.1% of men participants stated that they look for expiry date.

22.6% of women participants and 20.5% of men participants stated that they look for nutrition information.

**Table 66.** Decisive Factors to Purchase According to Gender Differences

				Brand of						
			Packaging of	the	Advertisements and	I look for	I look for			
Decisi	ve Factors to		the product	product	recommendations	expiry	nutrition			
Р	urchase		affects me	affects me	affect me	date	information	Total	□2	р
	Woman	n	12	80	27	52	50	221		
Gender		%	5.4	36.2	12.2	23.5	22.6	100.0		
	Man	n	9	31	4	18	16	78	6.174	0.187
		%	11.5	39.7	5.1	23.1	20.5	100.0		

□2: Chi Squared Test Value

The link between consumers' preference for buying and consuming sugar sweetened beverages (SSBs) and gender differences was found statistically significant (p < 0.05).

35.7% of women participants and 51.3% of men participants stated they prefer to buy and consume SSBs.

14% of women participants and 3.8% of men participants stated they buy SSBs for home or room but do not consume them.

50.2% of women participants and 44.9% of men participants stated they definitely do not buy or consume SSBs.

**Table 67.** Preference for Buying and Consuming Sugar Sweetened Beverages (SSBs)

 According to Gender Differences

Consuming	e for Buying and Sugar Sweeten rages (SSBs)		I prefer to buy and consume SSBs	I buy SSBs for home or room but do not consume them	I definitely do not buy or consume SSBs	Total	□2	р
	Woman	n	79	31	111	221		
Gender		%	35.7	14.0	50.2	100.0		0.014
	Man	n	40	3	35	78	9.090	0.011
		%	51.3	3.8	44.9	100.0		

2: Chi Squared Test Value

The link between consumer preferences of milk according to the packaging method and gender differences was not found statistically significant (p > 0.05).

5.4% of women participants and 2.6% of men participants stated they prefer street milk.

62.4% of women participants and 61.5% of men participants stated they prefer UHT milk.

26.7% of women participants and 25.6% of men participants stated they prefer pasteurized milk.

5.4% of women participants and 10.3% of men participants stated they do not consume milk.

# **Table 68.** Preference for Milk with Different Packaging Methods According to Gender Differences

Consumer P	references of M	Ailk				I do not			
According	to the Packagi	ng	I prefer street	I prefer UHT	I prefer	consume			
Ν	Aethod		milk	milk	pasteurized milk	milk	Total	□2	р
	Woman	n	12	138	59	12	221		
Gender		%	5.4	62.4	26.7	5.4	100.0		
	Man	n	2	48	20	8	78	3.051	0.384
		%	2.6	61.5	25.6	10.3	100.0		

2: Chi Squared Test Value

The link between place preferred to purchase fruits and vegetables and gender differences was not found statistically significant (p > 0.05).

52% of women participants and 47.4% of men participants stated that they buy fruits and vegetables from supermarkets.

44.8% of women participants and 46.2% of men participants stated that they buy fruits and vegetables from farmer's market/greengrocery.

1.8% of women participants and 1.3% of men participants stated that they buy fruits and vegetables from organic bazaar.

0.9% of women participants and 2.6% of men participants were found growing their own fruits and vegetables.

0.5% of women participants and 2.6% of men participants were found not consuming fruits and vegetables.

 Table 69. Place Preferred to Purchase Fruits and Vegetables According to Gender

 Differences

			I buy fruits		I buy fruits					
			and	I buy fruits and	and	I grow my	I do not			
Place Pre	Place Preferred to		vegetables	vegetables from	vegetables	own fruits	consume			
Purchase	Purchase Fruits and		from	farmer's	from organic	and	fruits and			
Vege	Vegetables		supermarkets	market/greengrocery	bazaar	vegetables	vegetables	Total	□2	р
	Woman n		115	99	4	2	1	221		
Gender		%	52.0	44.8	1.8	0.9	0.5	100.0		
	Man n		37	36	1	2	2	78	4.108	0.392
		%	47.4	46.2	1.3	2.6	2.6	100.0		

□2: Chi Squared Test Value

The link between perception towards packaged bread groups and gender differences was not found statistically significant (p > 0.05).

23.1% of women participants and 26.9% of men participants stated that they find packaged breads healthy and they consume them.

58.4% of women participants and 44.9% of men participants were found worried about additives inside packaged breads because of the long shelf life.

7.7% of women participants and 12.8% of men participants stated that they find packaged breads expensive.

2.3% of women participants and 3.8% of men participants stated that they prefer to make their own bread.

8.6% of women participants and 11.5% of men participants stated they do not consume bread.

**Table 70.** Perception towards Packaged Bread Groups According to Gender

 Differences

	tion towards I Bread Grou		I find packaged breads healthy and I consume them	I worry about additives inside because of the long shelf life	I find packaged breads expensive	I prefer to make my own bread	I do not consume bread	Total	□2	р
	Woman	n	51	129	17	5	19	221		
Gender		%	23.1	58.4	7.7	2.3	8.6	100.0		
	Man	n	21	35	10	3	9	78	5.022	0.285
		%	26.9	44.9	12.8	3.8	11.5	100.0		

2: Chi Squared Test Value

The link between perception towards UHT milk and gender differences was not found statistically significant (p > 0.05).

45.2% of women participants and 57.7% of men participants stated they find UHT milk healthy and they consume it.

36.2% of women participants and 33.3% of men participants were found worried about additives inside because of the long shelf life.

17.6% of women participants and 9% of men participants stated they think milk loses its nutritional value after UHT.

0.9% of women participants stated they find UHT milk expensive.

			I find UHT milk healthy	I worry about additives inside	I think milk loses	I find UHT			
			and I consume	because of the	its nutritional	milk			
Perception to	wards UHT N	Ailk	it	long shelf life	value after UHT	expensive	Total	□2	р
	Woman	n	100	80	39	2	221		
Gender		%	45.2	36.2	17.6	0.9	100.0	5 100	0.120
	Man	n	45	26	7	0	78	5.499	0.139
		%	57.7	33.3	9.0	0.0	100.0		

**Table 71.** Perception towards UHT Milk According to Gender Differences

□2: Chi Squared Test Value

The link between perception towards packaged / industrial yoghurts and gender differences was not found statistically significant (p > 0.05).

17.6% of women participants and 9% of men participants stated that they find packaged yoghurt healthy and they consume it.

17.6% of women participants and 9% of men participants were found worried about additives inside because of the long shelf life.

17.6% of women participants and 9% of men participants stated they think packaged yoghurt has a loss of its nutritional value.

17.6% of women participants and 9% of men participants declared they find packaged yoghurt tasteless.

17.6% of women participants and 9% of men participants stated they make their own yoghurt at home.

Table 72. Perception towards Packaged / Industrial Yoghurts According to Gender	
Differences	

				I worry about	I think					
				additives	packaged		I make			
			I find packaged	inside	yoghurt has a	I find	my			
			yoghurt healthy	because of	loss of its	packaged	own			
Perception	towards Packag	ged /	and I consume	the long shelf	nutritional	yoghurt	yoghurt			
Indus	Industrial Yoghurts		it	life	value	tasteless	at home	Total	□2	р
	Woman	n	72	64	20	23	42	221		
Gender		%	32.6	29.0	9.0	10.4	19.0	100.0		
	Man	n	31	16	9	12	10	78	5.252	0.262
		%	39.7	20.5	11.5	15.4	12.8	100.0		

2: Chi Squared Test Value

The link between perception towards processed meat products like salami, sausage, ham, pastrami, dried meat and gender differences was found statistically significant (p < 0.05).

62.9% of women participants and 37.2% of men participants stated that they find processed meat products unhealthy.

27.6% of women participants and 32.1% of men participants declared that they do not trust the ingredients inside.

4.1% of women participants and 20.5% of men participants stated that they find processed meat products healthy.

5.4% of women participants and 10.3% of men participants stated that they find it easy to preserve processed meat products for a long time.

**Table 73.** Perception towards Processed Meat Products According to Gender

 Differences

Perception to	owards Proce	ssed	I find	I do not trust	I find	I find it easy to			
Meat Produ	cts Like Sala	mi,	processed meat	the	processed meat	preserve processed			
Sausage, H	Ham, Pastran	ni,	products	ingredients	products	meat products for a			
Dri	ed Meat		unhealthy	inside	healthy	long time	Total	□2	р
	Woman	n	139	61	9	12	221		
Gender		%	62.9	27.6	4.1	5.4	100.0		
	Man	n	29	25	16	8	78	27.827	0.000
		%	37.2	32.1	20.5	10.3	100.0		

2: Chi Squared Test Value

The link between perception towards organic foods and gender differences was not found statistically significant (p > 0.05).

28.1% of women participants and 24.4% of men participants stated that they find organic foods healthier than regular foods.

35.3% of women participants and 39.7% of men participants stated that they do not believe organic foods' being organic.

30.8% of women participants and 30.8% of men participants stated that they find organic foods unnecessarily expensive.

5.9% of women participants and 5.1% of men participants stated that they are not sure or they do not have any idea about organic foods.

Perception	towards Organ	ic	I find organic foods	I do not believe organic foods'	I find organic foods unnecessarily	I am not sure / I do not have			
I	Foods		healthier	being organic	expensive	any idea	Total	$\Box 2$	р
	Woman	n	62	78	68	13	221		
Gender		%	28.1	35.3	30.8	5.9	100.0		
	Man	n	19	31	24	4	78	0.661	0.882
		%	24.4	39.7	30.8	5.1	100.0		

**Table 74.** Perception towards Organic Foods According to Gender Differences

2: Chi Squared Test Value

The link between perception towards light milk and dairy products and gender differences was not found statistically significant (p > 0.05).

41.6% of women participants and 47.4% of men participants stated that they do not consume light milk and dairy products.

28.1% of women participants and 21.8% of men participants stated that they find light milk and dairy products healthy and they consume them.

11.8% of women participants and 14.1% of men participants were found worried about additives inside.

4.1% of women participants and 9% of men participants stated that they do not believe that light milk and dairy products have less fat.

14.5% of women participants and 7.7% of men participants declared that they do not like the taste of light milk and dairy products.

<b>Table 75.</b> Perception towards Light Milk and Dairy Products According to Gender
Differences

						I do not				
				I find light		believe that				
			I do not	milk and dairy	I worry	light milk	I do not like the			
			consume light	products	about	and dairy	taste of light milk			
Perception	n towards L	ight	milk and dairy	healthy and I	additives	products	and dairy			
Milk and	Dairy Produ	ıcts	products	consume them	inside	have less fat	products	Total	□2	р
	Woman	n	92	62	26	9	32	221		
Gender		%	41.6	28.1	11.8	4.1	14.5	100.0	6.239	0.182
	Man	n	37	17	11	7	6	78	0.237	0.102
		%	47.4	21.8	14.1	9.0	7.7	100.0		

2: Chi Squared Test Value

The link between perception towards light / diet snacks and gender differences was found statistically significant (p < 0.05).

19% of women participants and 15.4% of men participants stated that they find light / diet snacks healthy.

29.4% of women participants and 20.5% of men participants stated that they think light / diet snacks have much more additives than regular ones.

17.6% of women participants and 15.4% of men participants stated that they do not believe that light / diet snacks have fewer calories than regular ones.

18.6% of women participants and 10.3% of men participants stated that they think light / diet snacks have loss of their nutritional value.

15.4% of women participants and 38.5% of men participants declared that they do not have any idea about light / diet snacks.

### Table 76. Perception towards Light / Diet Snacks According to Gender Differences

				I think light /	I do not believe					
				diet snacks	that light / diet					
			I find light	have much	snacks have	I think light /	I do not			
			/ diet	more additives	fewer calories	diet snacks have	have			
Percept	tion toward	s	snacks	than regular	than regular	loss of their	any			
Light /	Diet Snack	s	healthy	ones	ones	nutritional value	idea	Total	$\Box 2$	р
	Woman	n	42	65	39	41	34	221		
Gender		%	19.0	29.4	17.6	18.6	15.4	100.0		
	Man	n	12	16	12	8	30	78	19.041	0.001
		%	15.4	20.5	15.4	10.3	38.5	100.0		

2: Chi Squared Test Value

The link between perception towards artificially sweetened beverages (ASBs) and gender differences was not found statistically significant (p > 0.05).

6.8% of women participants and 6.4% of men participants stated that they find ASBs healthy and consume them.

11.3% of women participants and 15.4% of men participants stated that they prefer ASBs because of their low calorie content.

10% of women participants and 20.5% of men participants declared that they do not like the taste of ASBs.

64.7% of women participants and 51.3% of men participants stated that they find ASBs unhealthy.

7.2% of women participants and 6.4% of men participants stated that they do not have any idea.

 Table 77. Perception towards Artificially Sweetened Beverages (ASBs)

				I prefer ASBs						
			I find ASBs	because of	I do not like		I do not			
Perception t	owards Artifi	cially	healthy and	their low	the taste of	I find ASBs	have any			
Sweetened	Beverages (A	SBs)	consume them	calorie content	ASBs	unhealthy	idea	Total	$\Box 2$	р
	Woman	n	15	25	22	143	16	221		
Gender		%	6.8	11.3	10.0	64.7	7.2	100.0		
	Man	n	5	12	16	40	5	78	7.596	0.108
		%	6.4	15.4	20.5	51.3	6.4	100.0		

2: Chi Squared Test Value

#### 5. DISCUSSION

Lately people are more interested in production methods, ingredients of the food they consume and effects of these on their health (10). Consumers believe that they can easily discriminate healthy foods from unhealthy ones and they have already known about the differences according to Lando et al. (2007) and Malam et al. (2009) (5, 14). In this study, it is searched about consumers' reading and understanding of food labels and the most obviously it was found that half of the students always look for information on food labels. Consistent with our research, Aygen et al. (2012), Ali and Kapoor (2009), Gorton et al. (2007), van Trijp et al. (2008) and Güneş et al. (2014) found in their studies that most of the consumers are likely to read food labels (9, 10, 11, 12, 13).

In the light of the comparison results between BMI and label usage, our study showed that food label reading rate decreases from lean / normal weight to overweight / obese students. It was found out that NAD students have a significant higher rate for label reading in comparison to GCA and PTR students, as we expected. When label reading rate of participants compared according to their gender, not significantly, women were found more likely to read food labels. When it comes to causes of not reading food labels, not trusting the labels and difficulty to read owing to place of the label were found as main reasons. Similar to our findings, Güneş et al. (2014) found that almost half of the consumers were found not trusting that food labels reflect truth (13). According to the study of Pelletier et al. (2004) most of the consumers claimed they cannot understand food labels easily (16). Van Trijp et al. (2007) and Malam et al. (2009) also found that shoppers have a difficulty to read food labels because they are too small and want simple and clear labels to read and understand (12, 14). We found out that, students from all three courses mostly stated they do not trust authenticity of labels. Similar to the results of other studies have done, there is a significant distrust towards food labels.

It is hypothesized that calorie can be an important factor for consumers at shopping. In this study, concerning which information consumers had looked for; the most frequently mentioned one was found as calorie, likewise findings of Malam et al. (2009) (14). Sugar, protein and fat were found as other decisive ingredients on food label according to consumers respectively. Other studies, Banterle et al. (2012) and Grunert et al. (2010) have done, found almost similar results to our study but differently, consumers were more likely to take care of fiber or salt content rather than protein content (6, 17).

While NAD and PTR students mostly look for sugar content, GCA students care about protein content at shopping. As we expected, NAD students were more likely to look for sugar, carbohydrate, salt and fiber content rather than other courses.

Depending on gender, despite the importance of calorie content for both genders, the second factor that affects choices was found as sugar for women and protein for men. Brand, expiry date and nutrition information on label were found having great influence on consumers' choices, in a similar way to Peters-Texeire and Badrie's (2005) findings (15). According to our results, different from overweight / obese students, lean / normal weight students were found mostly check expiry date. As an expected result, overweight / obese students were found affected by brand and packaging of the product more than lean / normal weight students. Concerning different courses, NAD students are less likely to be affected by brand name based on their nutritional education, as predicted. Not significantly, more students living in a dorm room choose their food by looking at brand than students living at home. Men were found a little more brand oriented than women and they affected by packaging much more than women while shopping.

According to beverage consumption, our findings showed that half of the consumers do not buy SSBs but a significant amount of them still buy and consume SSBs, similar to the results of Park et al. (2017) (24). A considerable amount of students was found buying SSBs for their living place but not consuming them. We supposed this condition could be related to parental behaviors or habits according to drinks. Studies of van der Horst et al. (2006) and Munsell et al. (2015) supported this idea and showed the effects of parental choices on choices of children according to foods and drinks (25, 26). It could also explain our study results showing that students living at home and buying SSBs but not consuming them have a high rate than the ones living in a dorm room. According to BMI levels, consumption rate for SSBs increases from lean / normal weight participants to overweight / obese ones, not surprisingly. Supportedly, Martin - Calvo et al. (2014) were found a positive relationship between SSBs consumption and body fat increase in their study (27). In our study, according to courses, most of the NAD and PTR students stated they definitely do not buy or consume SSBs, NAD students have the lowest rate for consumption, as we expected. It can be explained as effect of health education on these courses indeed. Study showed that men have a significant higher rate, 51.3%, for buying and consuming SSBs than women, 35.7%. In addition, a considerable amount of women, 14%, has a tendency to buy SSBs for home or dorm room but not consuming them. Additionally, participants in this study who look for calorie, fat, carbohydrate and sugar content first at shopping were found mostly not consuming SSBs, although the rate of buying and consuming SSBs for participants who chose protein as a decisive content was significantly higher.

It can be claimed that consumers who focused on protein content were less likely to focus on healthiness of the product. More than half of the participants stated they find ASBs unhealthy although a considerable amount of them stated they prefer ASBs because of their low calorie content. Almost half of the participants, 40.3%, who buy and consume SSBs, stated that they find ASBs unhealthy. 70.6% of the students found buying but not consuming SSBs stated they find ASBs unhealthy too. In a similar way to our results, Delagu et al. (2016) found that university students prefer SSBs double times higher than ASBs (28). It was found out that overweight / obese participants are more taste-oriented towards ASBs consumption and not liking the taste with a higher rate than lean / normal weight students. Women participants stated they find ASBs unhealthy with a considerably higher rate than men participants although in the study of Mihaela-Roxana (2010), more women found to consume and trust ASBs than men (29). In our study especially students care about protein content primarily and students care about calories primarily have the highest consumption rates for ASBs. A considerable amount of students look for calorie content first was found consuming ASBs because of low calorie content, not surprisingly.

Concerning milk preference, as we expected, more than half of the participants, 62.2%, were found prefer to consume UHT milk and then pasteurized milk, 26.4%, similar to results of Karakaya's study (2011) (34). Although our study participants' consisting of university students, almost 5% of participants were found prefer street milk. According to study results of Çelik et al. (2005) and Şeker et al. (2012) although more than half of them prefer packaged milk, there is still a high percentile, almost 40%, of people buy street milk (35, 36). Akbay and Tiryaki (2007) found even higher rate, 56.2%, for preference of unpackaged street milk in their study (37). Street milk consumption decreases from PTR students and GCA students to NAD students, even results were not found statistically significant. NAD students have the lowest rate for street milk consumption and the highest rate for pasteurized milk consumption, as it is expected. It is supposed that, this result could be explained with the effect of nutritional information on choices of students. Students living at home have five times higher rate for consuming

street milk than students living in a dorm room, expectedly. It is assumed, they have a higher opportunity to find street milk as well. Women participants have two times more consumption rate for street milk than men participants. In this study, 35.5% of participants were found concerning with the additives of UHT milk and 15.4% of them concerning about possible nutritional loss. Even students, who don't consume milk, were found concerning with the possible additives inside UHT milk. Onurlubaş (2013), Haspolat Kaya (2016), Bozoğlu et al. (2014), Erdal and Tokgöz (2011) also supported this distrust issue towards packaged milk in their studies (39, 40, 41, 42). Concerning university courses, most of GCA students, 60%, and NAD students, 49%, find UHT milk healthy while the rate for PTR students is low, 36.4%. Higher consumption rate of GCA and NAD students could be interpreted as these courses' having information about food production and packaging methods. In the same way to our study, Pazarlıoğlu et al. (2006) and Yayar (2012) found that there is a positive link between household's level of importance of health and level of education and the preference for packaged milk (43, 44).

For this study, the rate for finding UHT milk healthy and consuming it increases from lean / normal weight students to overweight / obese ones. The link between perception towards UHT milk and BMI levels was not found statistically significant but lean / normal weight students were found more concerned about nutritional loss of UHT milk than overweight / obese students. Although there is no significant difference, women were found much more suspicious about health effects, additives and nutritional value of UHT milk than men but they mostly consume it. Pazarlıoğlu et al. (2006) found that women are more likely to prefer packaged milks rather than men (43). It is assumed that UHT milk's shelf-life knowledge, being easy-to-preserve can be an explanation for higher consumption rate of students living in a dorm room than the ones living at home. Students living at home were found more concerned about nutritional loss.

Likewise, there are trust issues towards UHT milk, concerns towards packed / industrial yoghurts are also existing according to our findings. A considerable amount of participants, 17.4%, was found making home-made yoghurts. Similar results were found in studies of Karakaya (2011), Erdal & Tokgöz (2013) and Onurlubaş (2011) (34, 39, 42). In our study 11.7% of participants also stated they find packaged yoghurt tasteless in a similar way to Uzundumlu and Birinci's findings (2013) (46). Our study results showed that 26.8% of the participants were found worried about additives and a considerable amount of participants, 9.7%, was found worried about nutritional loss of packaged

yoghurt. Consumption rate for packaged yoghurt was found only 34.4%. It is assumed that, these results could give us some reasons about why people decided to make their own yoghurt at home lately. Considering BMI levels, there is no significant difference but mostly lean / normal weight participants were found focused on possible additives inside and nutritional loss of packaged yoghurts. Overweight / obese participants were found more taste oriented and the rate of declaring that packaged yoghurt is tasteless was higher for them, as expected. Students living at home have the biggest rate for making home-made yoghurt but the rate for students living in a dorm room cannot be underestimated at all. There is no significant difference between women and men perception according to packaged yoghurts likewise findings of Bayarri et al. (2009) (47). Men were found more likely to accept packaged yoghurt as healthy and consume it than women. Not surprisingly, the rate for making their own yoghurt at home is much higher for women.

Additionally, according to the results, an important amount of students, 43.1% stated they do not consume light milk and dairy products. Only 26.4% of them were found trusting and consuming light milk and dairy products. Students were found suspicious about light milk and dairy products' having less fat than regular ones and worried about the additives inside. Similar results were found in the study of Lynam et al. (2011) (49). Low preference of light milk and dairy products in our study can be related to our participants' based on university students. Adversely, in the study of Dal et al. (2018) young consumers were found mostly prefer light milk rather than regular, whole fat milk (50). Concerning BMI levels, not significantly, overweight / obese participants have higher rates for worrying about additives inside of light milk and dairy products and higher rates for not believing their having less fat than regular ones. Some of the concerns towards light milk and dairy products could be based on lack of information, we assumed. Results of this study showed that NAD students are less suspicious about light milk and dairy products than PTR and GCA students. GCA students were found more tasteoriented, as we expected. In a supported manner, findings of study of Robb et al. (2006) showed that consumption of low fat milk groups changes according to income, living environment and educational level of people (86). More students living at home were found worried about additives inside light milk and dairy products and having a thought that they are tasteless than students living in a dorm room, not significantly. Women are more likely to buy low-fat milk and dairy products in a similar way to the studies of Lynam et al. (2011) and Hill et al. (2002) (49, 51). Men were found more suspicious about light milk and dairy products' having less fat and they are worried about additives inside, more than women in our study. Not surprisingly, students who stated they prefer street milk have the highest rate for not liking the taste of light milk and dairy products. They also do not believe these products' having less fat. All the students prefer pasteurized milk, street milk and UHT milk were found worried about additives inside light milk and dairy products. Even so, students prefer UHT milk have the highest rate for finding light milk and dairy products healthy, as expected.

It is aimed to find out perception of individuals towards organic foods. 27.1% of participants find organic foods healthier than regular foods. Williams (2002), Celik (2013) and Harper et al. (2002) found in their studies that people buy organic food because of its health benefits (54, 55, 56). According to study of Hill et al. (2002) people choose organic products to avoid preservatives (51). Considering our findings, an important amount of participants, 36.5%, were found not trusting organic products' being truly organic likewise findings of Harper and Makatouni's (2002), Eti İçli et al. (2016), Nuttavuthisit & Thøgersen (2015) and Lockie et al. (2002) (56, 57, 58, 59). In our study, 30.8% of participants stated they find organic products unnecessarily expensive likewise participants of the studies of Kacur Leblebici (2009) and Millock et al. (2002) (61, 62). Even it was not found statistically significant, lean / normal weight participants were found more likely to believe that organic foods are healthier than regular foods. Significantly higher amount of GCA students were found concerned about organic foods' being truly organic. NAD and PTR students are more prone to believe organic foods' being healthier. This could be associated with GCA students' having a different perspective towards organic foods with information they have learnt about agricultural methods in our country. Eti İçli et al. (2016), Lockie et al. (2002), Kacur Leblebici (2009) and Naspetti & Zanoli (2009) also stated their results are related with education level and inadequate knowledge (57, 59, 61, 63). Students living at home were found prone to think organic products are healthier than regular foods in comparison with students living in a dorm room although there is no significant difference was found. Men were found a little more concerned about organic foods' being real organic than women, not significantly. Our findings showed that women are prone to think that organic foods are healthier than regular foods in comparison to men in a similar way to the study of Lockie et al. (2002) (59).

Considering preferred places to buy fruits and vegetables, 50.8% of the students were found buying their groceries from supermarkets, 45.2% of them were found preferring farmer's market/greengrocery, similar results were obtained from the study of Lockie et al. (2002) and Nuttavuthisit & Thøgersen (2015) also found that participants mostly trust packaged organic foods from supermarkets than those available in traditional markets / groceries (59, 58). Our findings showed that only 1.7% of students stated they buy fruits and vegetables from organic bazaar and 1.3% of students were found growing their own fruits and vegetables. Considering different studying courses, while most of NAD students choose to buy fruits and vegetables from supermarket, GCA students both choose farmers market or greengrocery and supermarket. NAD students have highest rate for choosing organic bazaar to purchase fruits and vegetables, not surprisingly. Although there was no statistically significant difference, 54.4% of students living in a dorm room were found choosing supermarkets while the rate for students living at home were 49.8%. Students living at home have the highest rate for growing their own fruits and vegetables, not surprisingly. Students living in a dorm room were found more likely to not to consume fruits and vegetables, as expected. Place preference of women and men to buy fruits and vegetables was found almost similar. Men were found more likely to not to consume fruits and vegetables than women, as expected.

In this study, perception towards packaged breads is also searched. Nielsen (2005), Nagyova et al. (2009), Bobrow-Strain (2008) and Tanık (2006) mentioned raised consumer concerns about packaged breads in their studies (64, 65, 66, 70). According to our study results, more than half of participants, 54.8% were found worried about additives inside packaged breads because of their long shelf life and only 24.1% of them stated that they find packaged breads healthy. Additionally, 9.4% of participants were not consuming bread. Findings of Ertürk et al. (2015), Taşçı et al. (2017), Gül et al. (2003), Tanık et al. (2006) and Ekmekçi Bal et al. (2013) showed that people mostly prefer unpackaged breads to buy (67, 68, 69, 70, 72). Studies showed that, while preference for unpackaged breads is rising, a considerable amount of people are making their own bread at home (67, 68, 72). According to our study, 2.7% of participants were found making their own bread. Our participants' being university students could explain this low rate for making home-made breads, we assume. Almost 10% of our participants stated that they find packaged breads expensive in a similar way to the findings of Taşçı et al. (2017) that supported price concern of consumers (68).

Regarding BMI levels, while 30.4% of overweight / obese participants find packaged breads healthy and consume them, the rate for lean / normal weight participants was 22.6%. Lean / normal weight participants were found more suspicious about additives inside packaged breads because of the long shelf life. Overweight / obese students' non-consuming rate for bread was found more than two times higher than lean / normal weight students, not significantly but considerably. This could cast a light between bread consumption rate and obesity in a detailed research. NAD students were found as the most concerned ones about additives inside packaged breads with a considerably higher rate, 66%. They also have the least consumption for packaged breads sure. While some of GCA students and PTR students stated they find packaged breads expensive, the rate for NAD students was found very low. GCA students have the highest rate for making their own bread, expectedly. They also have the highest rate for not consuming bread. Knowledge about ingredients and bread types could affect preferences about breads, we assumed. Demir & Kartal (2012) and Benson (2013) mentioned in their studies that there is a lack of knowledge about bread types, ingredients that affects bread preference and perception (73, 74). It is assumed there could be a link between trust towards packaged breads and nutritional knowledge and Cop and Doğan's (2009) findings supported this assumption (75). Both students living at home and living in a dorm room were found worried about additives inside packaged breads because of long shelf life. Students living in a dorm room are more likely to find packaged breads expensive. It is assumed that some of the students living at home could be living with their family and do not even know the price of packaged breads exactly. Only students living at home stated that they make their own bread, not surprisingly.

Women were found having more concerns about additives inside packaged breads than men. Men are more likely to find packaged breads healthy and consume them than women. Non consumer rate of men, 11.5%, was found higher than women, 8.6%. Consumers who look for fat content first at shopping were found as the most worried ones about additives inside packaged breads. They were followed by consumers who look for sugar, carbohydrate, calorie and protein content, respectively. Almost half of the students, who chose carbohydrate content as a decisive ingredient at shopping, 42.9%, stated they find packaged breads healthy and they consume them. Both fiber content oriented and protein content oriented students stated they find packaged breads expensive with a higher rate than others. Students making their own bread were the ones who chose protein, sugar or salt as a decisive ingredient at shopping.

The results can cast a new light on perception towards processed meat products. 56.2% of students stated that they find these products unhealthy and 28.8% of them were found not trusting the ingredients inside them. Our findings showed that only 8.4% of the students stated they find processed meat products healthy. 6.7% of students declared their reason to choose processed meat products as easy to preserve for a long time, in a similar way to the studies of Yılmaz et al. (2012) and Azabağaoğlu et al. (2006) showing people consume processed meat products although they know they are unhealthy (77, 80). Significant results were obtained by evaluating perceptions according to BMI levels. While 16.1% of overweight / obese students stated that they find processed meat products healthy, the rate for lean / normal weight students was only 6.6%. These results can provide evidence to create a link between processed meat products and obesity although they were not found statistically significant. The rate for accepting processed meat products as unhealthy decreases clearly through NAD students, PTR students and it reaches its lowest level with GCA students. GCA students also have the highest rate for finding processed meat products healthy in comparison to NAD and PTR students. Surprisingly, GCA students also have the highest rate for not trusting the ingredients inside processed meat products. This result could be explained by their submitting 'easyto-preserve' as a reason for consuming processed meat products with a higher rate than NAD and PTR students also. These results can be interpreted to make a connection between knowledge and perception towards processed meat products. Students living in a dorm room were found more likely to think processed meat products are unhealthy rather than students living at home.

Results showed that, the amount of students living at home and finding processed meat products healthy was five times higher than students living in a dorm room and finding processed meat products healthy. Because some of the students living at home are living with their family too and these products are more attainable for them at home, we can evaluate these results as 'family effect'. While much more than half of women, 62.9%, were found accepting that processed meat products are unhealthy, the rate for men was only 37.2%. A great number of men also stated they find these products healthy, not surprisingly. Similar results were obtained in the studies of Akçay & Vatansever (2010) and Bayrak et al. (2010) (78, 79).

Regarding perception and possible concerns towards light and diet snacks, 27.1%

of participants in our study stated that they believe light and diet snacks have much more additives than regular ones and only 18.1% of them stated they find light and diet snacks healthy. 16.4% of participants were found believing that these products have loss of their nutritional value. Interestingly, 17.1% of the participants stated were found not believing that these products have fewer calories than regular ones. Similarly, findings of Hill et al. (2002), Chan et al. (2005) and Yılmaz et al. (2007) supported this distrust towards light / diet snacks' having fewer calories or less fat than regular ones (51, 82, 83). In the present study, there are also students submitting that they have no idea about light and diet snacks consisting of 21.4% of all participants. Similarly, likewise in studies of Hill et al. and Yilmaz et al. people were found confused about light and diet snacks and their ingredients. In a blind study, Kähkönen (2000) even showed that consumers acceptance of foods as healthy or unhealthy differs according to the products and fat content do not affect this. (85). According to BMI levels, not statistically significant but considerably important results were achieved. The rate for concerning about additives and nutritional loss was higher for overweight / obese students. Overweight / obese students were found as non-believers for light and diet snacks' having fewer calories with a relatively higher rate than lean / normal weight students. This denial can cast a light on the link between obesity and consumption of and concerns towards light and diet snacks. In Yılmaz and Ünal's study (2007) overweight participants were found not liking the taste of light and diet products (83). Expectedly, a greater percentile of lean / normal weight students stated they have no idea about light and diet snacks. From the results, GCA students have a higher rate to think that light and diet snacks are healthy rather than NAD and PTR students. NAD students were found more concerned about nutritional loss and more suspicious about these products' having fewer calories, indeed. Both PTR students and NAD students were found worried about light and diet foods' having more additives than regular foods. These concerns of NAD students could be interpreted by seeking for natural products to consume based on a nutritional education. These results can maintain an environment to discuss the relationship between knowledge and perception towards light and diet products. NAD students' not believing light and diet snacks' having fewer calories or fat should be investigated, we assume. The rates for not having an idea about light and diet snacks decreases through NAD students, PTR students and reaches its lowest level with GCA students, as expected. Although there is no statistically significant difference was found, students living in a dorm room were found more worried about additives and more suspicious about light and diet products' having fewer calories.

Students living at home were found more likely to say 'I do not have an idea about light and diet snacks'. However, better results were achieved when it comes to compare genders. As we expected, number of women accepting that light and diet snacks are healthy is approximately four times more than men. Similar results were obtained in the study of Memiş (2004) (84). According to our findings, women were found more concerned and more suspicious about light and diet snacks in nutritional loss, additives and calorie issues too. Expectedly, most of the men were found having no idea about light and diet snacks even. Participants mostly focused on carbohydrate content have the highest rate for believing light and diet snacks are healthy. Besides, other participants were found worried about light and diet snacks' having more additives than regular ones, except participants who focused on protein content. Participants who choose protein as a decisive factor for them at shopping have the highest rate for not having an idea about light and diet snacks. As it is mentioned before according to our previous findings; this could be cast a light on individuals who look for protein content first at shopping can be less likely to care about nutritional loss and additives, more likely to focus on protein content instead.

#### **6.CONCLUSION**

In recent years, number of people who are concerned about ingredients of foods and drinks that they consume has been on the rise. There is no previous research evaluating consumers' buying behavior and perception of packaged products associating BMI levels. It is aimed to investigate food label knowledge and perception towards specific products as taking different BMI levels into consideration mainly, in addition to other variables; gender, living place and studying course. In the final analysis, this study reached significant results. Participants were found having distrust towards specific packaged products based on concerns such as additives and nutritional loss. In addition, the rate of participants who do not trust food labels' reflecting the truth about ingredients, light / diet products' being truly low in fat / calorie and organic products' being real organic was found significant. Women were found more concerned about additives in the products. Considering NAD students' food label knowledge, trust and perception towards products, importance of nutrition knowledge was appeared. Students' with high levels of BMI, not significantly but considerably, having lower label reading rate, lower consumption rate of bread while having higher consumption rate of SSBs and processed meat products can cast a light between obesity and consumer behavior in further researches.

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04.01.2018

#### T.C. BEYKENT ÜNİVERSİTESİ SAĞLIK BİLİMLERİ ETİK KURULU

Diyetisyen Begüm DEMİRCAN'ın **"Bir Vakıf Üniversitesindeki Öğrencilerin Belirli Paket Gıdalara Yönelik Güven Algısı ve Besin İçeriği Bilgi Düzeylerinin BKI Seviyelerine Göre Değerlendirilmesi"** başlıklı araştırması Etik Kurulumuzca uygun görülmüştür.

#### ETİK KURUL ÜYELERİ

ÜYE

Prof.Dr. İbrahim ERCAN

A

ÜYE Prof.Dr. İsmet Artun ÖNCEL

ÜYE

Prof.Dr. Yıldız ATAMER

ÜYE

Prof.Dr. Zafer ÖZSOY

ÜYE Prof.Dr. Halil TUNALI

ÜYE

Prof.Dr. Münevver GÖKYİĞİT

ÜYE

Prof.Dr. Musa Üstün GÜLDAĞ

Prof.Dr. Firdevs SENEI

BAŞKAN Prof.Dr. Burak Ömür ÇAKIR

### YEDİTEPE ÜNİVERSİTESİ BESLENME VE DİYETETİK YÜKSEK LİSANS TEZ ÇALIŞMASI

### –Bir Vakıf Üniversitesindeki Öğrencilerin Belirli Paket Gıdalara Yönelik Güven Algısı ve Besin İçeriği Bilgi Düzeylerinin BKI Seviyelerine Göre Değerlendirilmesi Soru Formu-

GÖRÜŞÜLEN TARİH : ...... / 2018

ID NO: .....

Cinsiyet :

Yaş :

Boy:

Kilo :

Fakülte, Bölüm ve Sınıf : (Çift Anadal ya da Yandal varsa belirtiniz.)

Yaşanan Yer (Ev/Yurt/Apart) :

S01. Yiyecek-içeceklerin ambalajları üzerindeki besin etiketleri ile ilgili düşünceniz nedir?

- a) Mutlaka okuyorum
- b) Yazılar çok küçük olduğu için okuyamıyorum
- c) Yazılanları anlamıyorum
- d) Paketin okunması zor kısmında yer aldığı için okumuyorum
- e) Yazılanların doğruluğuna inanmıyorum
- f) Bir fikrim yok

S02. Besin değeri bilgilerini okurken en çok hangisine dikkat edersiniz?

- a) Kalorisi
- b) Yağ içeriği
- c) Karbonhidrat içeriği
- d) Protein içeriği
- e) Şeker içeriği
- f) Tuz içeriği
- g) Lif içeriği

S03. Yiyecek-içecek tercihinizde en çok hangisinden etkilenirsiniz?

- a) Ambalajı etkiler
- b) Markasına bakarım
- c) Reklamlar ve tavsiyelerden etkilenirim
- d) Son tüketim tarihine bakarım
- e) Besin değeri bilgilerine bakarım

S04. Eve/Yurda şekerli, gazlı içeceklerden (kola grubu, şekerli sodalar, soğuk çaylar) alıyor musunuz?

- a) Evet alıyorum ve tüketiyorum
- b) Evet alıyorum ama kendim tüketmiyorum
- c) Hayır kesinlikle almıyorum

S05. Sütü satın alırken hangisini tercih ediyorsunuz?

- a) Açık süt alıyorum
- b) UHT (ambalajlı süt) alıyorum
- c) Pastörize süt (günlük süt) alıyorum
- d) Süt tüketmiyorum

S06. Sebze-meyve alışverişlerinizi nereden yapıyorsunuz?

- a) Marketten alıyorum
- b) Pazardan/manavdan alıyorum
- c) Organik pazardan alıyorum
- d) Kendim yetiştiriyorum
- e) Sebze-meyve tüketmiyorum

S07. Hazır paketlenmiş ekmekler ile ilgili düşünceniz nedir?

- a) Sağlıklı buluyorum ve tüketiyorum
- b) Uzun raf ömrü katkı maddesi olduğunu düşündürüyor
- c) Fazla pahalı buluyorum
- d) Ekmeği kendim yapmayı tercih ediyorum
- e) Ekmek tüketmiyorum

S08. Ambalajlı (UHT) sütler ile ilgili düşünceniz nedir?

- a) Sağlıklı buluyorum ve tüketiyorum
- b) Uzun raf ömrü katkı maddesi olduğunu düşündürüyor
- c) Besin değerini kaybettiğini düşünüyorum
- d) Fiyatı yüksek geliyor

S09. Markette satılan yoğurtlarla ilgili düşünceniz nedir?

- a) Sağlıklı buluyorum ve tüketiyorum
- b) Uzun raf ömrü katkı maddesi olduğunu düşündürüyor
- c) Besin değerini kaybettiğini düşünüyorum
- d) Lezzetli bulmuyorum
- e) Yoğurdu kendim yapmayı tercih ediyorum

S10. Salam, sucuk, sosis, jambon, pastırma, kuru etler gibi işlenmiş et ürünleri ile ilgili düşünceniz nedir?

- a) Sağlığa zararlı olduğunu düşünüyorum
- b) İçeriğinin doğruluğuna güvenmiyorum
- c) Sağlıklı buluyorum
- d) Uzun süre bozulmaması saklamamı kolaylaştırıyor

S11. Organik olarak satılan ürünler ile ilgili düşünceniz nedir?

- a) Daha sağlıklı buluyorum
- b) Organik olduğuna inanmıyorum
- c) Gereğinden fazla pahalı buluyorum
- d) Emin değilim / Bir fikrim yok

S12. Yağı azaltılmış süt ve süt ürünleri ile ilgili düşünceniz nedir?

- a) Tüketmiyorum
- b) Sağlıklı buluyorum ve tercih ediyorum
- c) Katkı maddesi olduğunu düşünüyorum
- d) Yağının azaldığına inanmıyorum
- e) Tadını beğenmiyorum

S13. Light ve diyet atıştırmalıklar ile ilgili düşünceniz nedir?

- a) Sağlıklı buluyorum
- b) Daha çok katkı maddesi olduğunu düşünüyorum
- c) Kalorisinin az olduğuna inanmıyorum
- d) Besin değerinin azaldığını düşünüyorum
- e) Bir fikrim yok

S14. Marketlerde satılan tatlandırıcılı içecekler (light kola, soğuk çay, limonata vb.) ile ilgili düşünceniz nedir?

- a) Sağlıklı buluyorum ve tüketiyorum
- b) Kalorisi az olduğu için tercih ediyorum
- c) Tadını beğenmiyorum
- d) Sağlıksız buluyorum
- e) Bir fikrim yok

Anketimiz sona erdi. Katılımınız için teşekkürler...

## ASGARİ BİLGİLENDİRİLMİŞ GÖNÜLLÜ OLUR FORMU

Sizi Yeditepe Üniversitesi tarafından yürütülen 14 soruluk bir anket çalışmasına davet ediyoruz. Araştırmaya katılmak tamamen gönüllülük esasına dayalıdır. Anketi yanıtlamanız, araştırmaya katılım için onam verdiğiniz biçiminde yorumlanacaktır. Araştırma sırasında sizden alınan bilgiler araştırmacıda saklı kalacak ve toplanan veriler yalnızca bilimsel amaçla kullanılacak; araştırma sonuçlarının yayımlanması halinde dahi gönüllünün kimliği gizli kalacaktır.

Ankette bulunan sorulara vereceğiniz yanıtların doğruluğu, araştırmanın niteliği açısından oldukça önemlidir. Bu nedenle, ankette bulunan sorulara doğru yanıt vermenizi rica eder, işbirliğiniz için teşekkür ederiz.

#### Araştırmanın Amacı:

Besin etiketi içeriklerini bilme ve okuma, belirli paket gıdalara yönelik tutumlar ile Beden Kütle İndeksi (BKI) arasındaki bağlantının incelenmesi araştırmanın amacını oluşturmaktadır.

Araştırmanın Süresi: Her bir gönüllü ile görüşmenin ortalama 5-6 dakika sürmesi planlanmaktadır. Araştırmanın 2 ay sürmesi planlanmaktadır.

Katılması Beklenen Gönüllü Sayısı: 300 kişi

Araştırmaya Katılan Araştırıcılar: Dyt. Begüm Demircan

<u>Katılımcının</u>

Adı - Soyadı:

İmzası:

## ÖZGEÇMİŞ

#### Kişisel Bilgiler

Adı	Begüm	Soyadı	Demircan
Doğum Yeri	Balıkesir	Doğum Tarihi	14.01.1991
Uyruğu	T.C.	TC Kimlik No	22619337148
E-mail	demircanbeg@gmail.com	Tel	05387454587

#### Öğrenim Durumu

Derece	Alan	Mezun Olduğu Kurumun Adı	Mezuniyet Yılı
Doktora			
Yüksek Lisans	Beslenme ve Diyetetik	Yeditepe Üniversitesi	
Lisans	Beslenme ve Diyetetik	Yeditepe Üniversitesi	2014
Lise	Sayısal (MF)	Antalya Anadolu Lisesi	2009

<sup>#</sup>Başarılmış birden fazla sınav varsa(KPDS, ÜDS, TOEFL; EELTS vs), tüm sonuçlar yazılmalıdır

Bildiği Yabancı Dilleri	Yabancı Dil Sınav Notu <sup>(#)</sup>
İngilizce	YDS: 76
İspanyolca	

İş Deneyimi (Sondan geçmişe doğru sıralayın)

Görevi	Kurum	Süre (Yıl - Yıl)
Diyabet Diyetisyeni	Arateus Reaktif Hipoglisemi ve Diyabet Kliniği	2014 - Halen
		-

#### Bilgisayar Bilgisi

Program	Kullanma becerisi
Microsoft Word	Çok iyi
Microsoft Excel	Çok İyi

\*Çok iyi, iyi, orta, zayıf olarak değerlendirin

#### Bilimsel Çalışmaları

SCI, SSCI, AHCI indekslerine giren dergilerde yayınlanan makaleler

Diğer dergilerde yayınlanan makaleler

Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (*Proceedings*) basılan bildiriler

Hakemli konferans/sempozyumların bildiri kitaplarında yer alan yayınlar

Diğer (Görev Aldığı Projeler/Sertifikaları/Ödülleri)