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YEDITEPE UNIVERSITY
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DETERMINATION OFADAPTATION TO THE MEDITERRANEAN DIET OF YOUNG INDIVIDUALS LIVING IN THE TURKISH REPUBLIC OF NORTHERN CYPRUS

MASTER'S THESIS

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ONAY

Bu tez Yeditepe Üniversitesi Lisansüstü Eğitim-Öğretim ve Sınav Yönetmeliğinin ilgili maddeleri uyarınca yukarıdaki jüri tarafından uygun görülmüş ve Enstitü Yönetim Kurulu'nun 31../12./2019.. tarih ve 2019/20-38... sayılı kararı ile onaylanmıştır.

Prof. Dr. Bayram YILMAZ
Sağlık Bilimleri Enstitüsü Müdürü

DECLARATION

I declare that the following thesis is my work; from planning to writing, I had not committed any unethical behavior during any phase; that I have obtained all of the information within the framework of academic and ethical rules; that I have cited sources for all of the information and remarks which were not obtained through this thesis research, and I have listed the sources at works cited section that I have not committed any acts that violate patent and cause copyright infringements.

Date

Signature

Aslıhan Soyal

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Aslıhan SOYAL

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LIST OF ABBREVIATIONS

USA	United States of America
BMI	Body Mass Index
BMR	Basal Metabolic Rate
WHO	World Health Organization

ABSTRACT

Soyal, A. (2019). Determination of adaptation to the Mediterranean diet of young individuals living in the Turkish Republic Of Northern Cyprus. Yeditepe University, Institute of Health Science, Department of Nutrition and Dietetics, Master's Thesis, Istanbul.

This study aims to determine the adaptation level of the individuals living in TRNC to the Mediterranean diet and revealing the factors affecting the adaptation to the diet. For this purpose, 422 participants between 18-65 years of age living in the TRNC were surveyed. The data collection tool contains General Information Form, Nutritional Habits Form, Food Consumption Frequency Form, and Mediterranean Diet Quality Index Form. 76.8% of the respondents were TRNC nationals and, 54% were women. 51.2% of the sample is average weight, 38.4% is overweight, and 10.4% is obese.

In the evaluation of Mediterranean diet quality, 57.1% of the participants were found to have an optimal diet, 31.3% of the participants had required intervention in their diet, and 11.6% of the participants had a very low-quality index. While the Mediterranean diet quality of women included in the sample was higher than that of men, the quality of diet does not differ according to nationality, marital status, and educational status. However, dietary quality is high in younger age groups, those with average weight, and those who have experienced weight changes over the past six months. The dietary quality of people living with their families was found to be higher than those living with their friends. Furthermore the quality of the diet does not differ according to the person cooking the food. In terms of smoking and alcohol use, the dietary quality was not different between the groups using and not using alcohol. On the other hand, while the quality of diet did not differ according to the number of primary and intermediate meals, the dietary quality of those who stated that they skipped meals was identified as low.

When the findings of the study are evaluated in general, there is evidence that individuals living in the TRNC adhere to the Mediterranean diet. Considering the well-documented health benefits of the Mediterranean diet, it is thought that dietary adaptation levels of the people of the region will be a protective factor in preventing long-term health problems.

Keywords: Mediterranean diet, diet quality, TRNC

ÖZET

Soyal, A. (2019). Kuzey Kıbrıs Türk Cumhuriyeti'nde Yaşayan Genç Bireylerin Akdeniz Diyetine Uyumlarmm Belirlenmesi. Yeditepe Üniversitesi Sağlık Bilimleri Enstitüsü, Beslenme ve Diyetetik Anabilim Dalı, Yüksek Lisans Tezi, İstanbul.

Araştınna, KKTC'de yaşayan bireylerin Akdeniz diyetine uyum düzeylerini belirlemek ve diyete uyumda etkili olan faktörleri oiiaya koymak amacıyla yapılmıştır. Bu amaç doğrultusunda KKTC'de ikamet eden 18-65 yaş aralığındaki 422 katılımcıya anket uygulanmıştır. Uygulanan veri toplama aracında Genel Bilgiler Fonnu, Beslenme Alışkanlıkları Formu, Besin Tüketim Sıklık Fonnu ve Akdeniz Diyeti Kalite İndeksi Fonnu yer almaktadır. Araştırmaya katılanların %76,8 ile çoğunluğu KKTC uyruklu ve %54 ile çoğunluğu kadınlardan oluşmaktadır. Örneklemin %51,2'si nonnal kilolu, %38,4'ü fazla kilolu, %10,4'üobezdir.

Akdeniz diyet kalitesi açısından yapılan değerlendiiinede katılımcıların %57,1 ile çoğunluğunun diyetinin optimal olduğu, %31,3'lük katılımcı grubunun diyetine müdahale edilmesi gerektiği, %11,6'lık katılımcı grubunun yaptığı diyetin çok düşük kalite indeksli olduğu görülmüştür. Örnekleme dahil edilen kadınların Akdeniz diyet kalitesi erkeklerden daha yüksek iken; diyet kalitesi uyruğa, medeni duruma ve öğrenim durumuna göre farklılaşmamaktadır.Bununla birlikte diyet kalitesi küçük yaş gruplarında, nonnal kilolu olanlarda ve son 6 ay içerisinde kilo değişimi yaşayanlarda yüksektir. Birlikte yaşanan kişi açısından yapılan değerlendiiinede ailesi ile yaşayanların diyet kalitesi arkadaşları ile yaşayanlardan yüksek bulunurken; diyet kalitesi yemeği pışıren kişiye göre farklılaşmamaktadır. Sigara ve alkol kullanımı açısından yapılan değerlendiime kullanan ve kullanmayan gruplar arasında diyet kalitesinin farklı olmadığı belirlenmiştir. Diğer taraftan diyet kalitesi ana ve ara öğün sayısına göre farklılaşmazken, öğün atladığını belirten kişilerin diyet kalitesi düşük bulunmuştur.

Araştınna bulguları genel olarak değerlendirildiğinde KKTC'de yaşayan bireylerde Akdeniz diyetine bağlı kaldığına dair kanıtlar dikkat çekmektedir.Akdeniz diyetinin iyi belgelenmiş sağlık yararları göz önüne alındığında bölge halkının diyete uyum düzeylerinin uzun vadede sağlık problemlerinin önüne geçilmesi için koruyucu bir faktör oluşturacağı düşünülmektedir.

Anahtar kelimeler: Akdeniz diyeti, diyet kalitesi, KKTC

1. INTRODUCTION AND PURPOSE

Mediterranean diet is defined as the dietary model that was applied at the olive cultivated regions Mediterranean basin, at the end of the 1950s and the beginning of the 1960s, just before fast-food culture has not originated (1).It is also possible to define the Mediterranean diet as not only the consumption of certain food types but also as the lifestyle exclusive to the Mediterranean people (2).Around the 1960s, Angel Keys defined the Mediterranean diet as the fundamental dietary habits of some populations in the Mediterranean region. The Mediterranean diet, as observed by Keys, despite being vegetable-based, constituted around a wide variety of foods and is more diverse around regions in the Mediterranean basin. For example, when energy satisfaction percentage has taken into account, fat consumption may increase from 30% to 40%. Additionally, high consumption of food types such as fruit, vegetable, legume, grains, oily seed, olive oil, and low consumption of processed foods such as meat, bologna, and sausage are the fundamental properties of this dietary model (3,4).

Rather than a specific diet, the Mediterranean diet is the whole of the traditional eating habits of various countries around the Mediterranean region (5). This diet is a nutritional model where frequent consumption of fruit and vegetables, legumes, whole grains and oily seeds a couple of times in a week consumption of seafood and poultry, and less consumption of red meat is made; and main fat component is composed of olive oil; and a bit amount of wine accompanies the food (6). This diet, which is associated with low mortality due to the disease's preventative and positive effects on health are associated with antioxidants, dietary fibers, unsaturated fatty acids, bioactive components and, anti-aging secondary plant metabolites (7,8). Academy of Nutrition and Dietetics of the American Dietetic Association (ADA) recommends the consumption of food and drinks that are rich in nutrients and moderate physical activities for the encouragement of a healthy life. It was reported that the ADA Mediterranean diet corresponds with healthy dietary habits (9).

Mediterranean diet is one of the nutritional models that have the healthiest dietary habit. Since the Mediterranean diet is a dietary model that is sufficient in terms of energy, vitamin-mineral, fruit and vegetables, whole grains; and it is rich in olive oil and fish, food deficiency issues are rare occurrences. Mediterranean diet, due to its

healthy fat intake, low carbohydrate, low glycemic index, and high in pomace, antioxidant components, and anti-inflammatory effects, reduces chronic health risks such as cancer and cardiovascular disease. It has been found that adaptation to the Mediterranean diet has been associated with low mortality and morbidity rates (10,11,12,13).

From this point of view, the aim of this research is to determine the adaptation of adults living in the Turkish Republic of Northern Cyprus (TRNC) to the Mediterranean diet. Therefore, ascertaining the level of adaptation to the Mediterranean diet among the young individuals living in TRNC, and the evaluation of the effect of area of residence on dietary habits has been aimed.

2. LITERATURE REVIEW

2.1 Diet and Health

2.1.1 Definitions Regarding Diet

Nutrition is a process that is comprised of providing growth, the continuation of survival, procuring nutrients to tissues and organs for executing functions, consumption, digestion, absorption, metabolizing, and excretion (14).

Once the effects of nutrition on both social and individual health are examined in various aspects such as spending on health, early deaths, the burden of sickness, and health level, nutrition is among the fundamental determinant of health (15). World Health Organization (WHO) has identified five fundamental headlines.Moreover, the following headlines have been focused on such topics as breastfeeding of toddlers and babies, plentifully consumption of fruit and vegetables, variety of food, consumption of liquid and fats with an appropriate amount, and the reduction of salt and sugar consumption (16).

Balanced and adequate nutrition is the sufficient acquisition of the nutritional elements and energies appropriately.In every part of life, nutrition should be done consciously to preserve health and to survive. Healthy nutrition is a process that starts from pre-birth until the end of life, consumption of all food in a required frequency, and amount, therefore, preserving body weight. In order to have healthy development, growth, and functions, nutrition requires nutritional elements that are comprised of minerals, vitamins, fat, protein, and carbohydrates. Vegetative and animal tissues that contain such nutritional elements have been given such definitions as food and nourishment (17).

Through nutrition, the required energy needs should be met, and by obtaining the necessary amount of approximately 70 different food types, the variety of food should be established. Macro food components are fats, carbohydrates, and proteins, and these components are the sources of energy. A healthy adult should gather their daily energy by 10-20% from proteins, by 20-35% from fats and 45-60% from carbohydrates. Minerals and vitamins are micro food components and hold an essential place in the metabolic process. Water is one of the most critical components of nutrition

and crucial to regulation of body temperature, reactions that take place atthe cellular level, excretion, digestion and maintaining the normal function of the circulatory system (18).

The sum of the thermic rate of food, physical activity, and the basal metabolic rate determines the daily required energy level (18,19). The amount of required food and energy components of an individual varies in many factors, such as environmental and personal factors. Medical conditions, health level, environmental aspects, the intensity of physical activity, body integrity, gender, and age are the main factors (18).

Malnutrition is a reciprocal definition that comprises excessive, imbalanced and inadequate nutrition types. One part of this definition contains the inadequate consumption of required food that causes skinniness and primary inadequate illnesses. The other part contains the consumption of excessive consumption of required food that results in metabolic issues such as hypercholesterolemia, hyperlipidemia, obesity, and overweightedness (14,20).

Undernutrition is an instance that appears as a dysfunction of organs and tissues due to not obtaining enough nutritional elements to keep the demand. *Imbalanced nutrition* is an instance that appears due to wrong cooking techniques, consumption of a single type of food, inappropriate food decisions, and despite the nutritional elements is adequately consumed; it involves the failure of absorbing some nutritional elements. Furthermore, adverse health effects on an individual as a result of imbalanced nutrition can be observed.*Over-nutrition* is an instance that appears after excessive consumption of nutritional elements, and it results in fat accumulation due to gathering more energy than the required amount. This accumulation may result in health issues such as diabetes, obesity, and overweightedness (17)

2.1.2. Health Problems Regarding Nutrition

Various illnesses may occur when nutritional elements are obtained more or less than the required amount. It is possible to classify nutrition-related illnesses as primary and secondary illnesses. Primary nutritional illnesses are over-nutrition, mineral deficiencies, avitaminosis and protein-energy deficiencies. Secondary nutritional illnesses are cancer, degenerative illnesses and metabolism dysfunctions (14,21).

2.1.2.1. Primary Nutritional Illnesses

According to WHO definition of obesity is the excessive or abnormal accumulation of fat in the body that will disrupt the health.Once the proportion of the body fat ratio to body mass exceeds 25-30% in women and 15-20% in men, it means that the body fat has accumulated excessively.Pregnancy, genetics, insufficient physical activity, and unhealthy dietary habits constitute the primary risk factors for the development of obesity (22,23). Secondary reasons comprised of hereditary diseases, medicines, and endocrine illnesses such as polycystic over syndrome, Cushing syndrome and hypothyroidism (24).

Obesity and overweightedness are seen as a public health problem in the world. Obesity, which is globally increasing at an alarming rate, is a chronic disease that affects the public and lowers the quality of life. Once examined globally,the frequency of overweightedness in people who are the age of 18 and above 39%, and the frequency of obesity is 13% (25). The same examination in Turkey reveals that the frequency of obesity is 25-35% in women, 11-22% in men. However, this frequency varies between the level of education, geographical region, settlement and age groups.

Obesity causes various health issues. The core reasons for these problems are due to metabolic changes caused by fat tissues and the increase in fat tissues. Obesity causes the following health issues (24)

Metabolic disorders: Congestive heart failure, dyslipidemia, type 2 diabetes, insulin resistance.

Heart and circulatory system disorders: Deep vein thrombosis, apoplexy, coronary heart disease, hypertension.

Digestive system disorders: Gastro-esophageal reflux, non-alcoholic fatty liver disease, cholelithiasis.

Musculoskeletal system disorders: Gout arthritis, osteoarthritis.

Respiratory system disorders: Obesity hypoventilation syndrome, obstructive sleep apnea syndrome.

Malign neoplasms: Breast, renal, colon, thyroid, esophagus adenocarcinoma, gall bladder, and endometrium and stomach cancers.

Psychosocial disorders: Depression.

Genitourinary system disorders: Polycystic over syndrome, orgasm and sexual stimulation issues in women and erectile dysfunction in men.

Chronic Energy Deficiency (Skinniness): The criterion for the definition of skinniness in an adult, BMI value has to be lower than18.5 kg/m^2. Skinniness is caused by many reasons such as skipping meals, loss of appetite, irregular eating hours and malnutrition and it is risky for health. Psychological issues, endocrine system disorders, medicine, and excessive physical activity are also among the causes of skinniness (21). According to the data accessed in Turkey in 2016 the frequency of skinniness observed in people who are aged 15 and above is 4%. This ratio is 5.6% among women and 2.5% in men (26).

Iron Deficiency Anemia (IDA): Anemia that occurs due to iron deficiency is often seen globally in pregnant and women of fertile age and childhood. Primary factors that cause IDA involve issues such as insufficient iron intake, problems related to iron absorption from the gastrointestinal system, losses due to bleeding, and parasitic infections. Some of these factors are related to dietary habits. Therefore it is not expected to observe IDA in women not experiencing menstruation and men who have a balanced diet. Among the iron-rich food, green-leaved vegetables, legumes, poultry, fish, giblets, and meat can be listed (27). According to research in 2011 conducted with 6-17 months old babies and their mothers, the IDA frequency in women is 6.9% and 6.3% in children. According to research conducted by Saydam et al. IDA frequency among women who are aged 15 and above in the Izmir province is 10.3% (28).

Vitamin Mineral Deficiencies: Among the typically seen primary deficiency disorders folate deficiency, vitamin A deficiency, iodine deficiency, iron deficiency, B12, and D vitamin deficiency can be listed. According to researches that had been conducted since 1988, goiter and iodine deficiencies are endemic. To prevent such illnesses caused by iodine deficiency "Iodine Deficiency Illness Prevention and Iodization of Salt Program" has been conducted since 1994.And starting from 1998,all

table salts have been enriched with iodine through "Communiqué on cooking salt" (29). According to a research conducted in 2011 among 6-17 months old babies and their mothers, the frequency of observed vitamin D deficiency among mothers is 81.7% and 26.8% among children (21). To combat vitamin D deficiency, within the scope of "Prevention of Vitamin D Deficiency and Preservation of Bone Health Project" babies have been given vitamin D support since 2005.Similarly,women who breastfeed and pregnant have also been given free vitamin D support through the "Vitamin D support program to pregnant" in 2011 by the Ministry of Health (30).

Osteoporosis and Bone Fracture: Vitamin C and D deficiencies are caused by nutrition-related factors such as excessive caffeine consumption, fluoride and calcium deficiencies resulting in the reduction of bone mass. Osteoporosis, especially in women, is seen in the elderly and to protect from it increasing physical activity, sunbathing and obtaining sufficient vitamin D and calcium is required (31).

Dental Issues: Dents caused by fluoride deficiency, scurvy caused by vitamin C deficiency correlates a relation between dental health and nutrition (14). Through a change in nutrition culture caused by the frequent consumption of high sugar concentrated carbonated drinks cause decay and dents on teeth (32).

2.1.2.2. Secondary Nutritional Illnesses

Cancer: There is a relation between some cancer types and nutrition. Preserving ideal weight through healthy nutrition reduces kidney, endometrium, breast, colorectal and esophagus cancer risks. Alcohol consumption increases breast, colorectal, liver, esophagus, throat and mouth cancer risks.It has been indicated that a diet poor of fruit and vegetables correlates with colorectal, stomach, esophagus and oral cavity cancers (32).

Cardiovascular Diseases: Insufficient and excessive consumption of particular food in the applied diet may cause cardiovascular disease risks. The risk increases once the cholesterol, consumption of salt, trans-fats, frozen fat increases and fish, fruit and vegetable consumption decreases. Additionally, excessive consumption of food that contains a high concentration of sugar and fat poses a risk to health through cardiovascular diseases by causing obesity (33,34).

Diabetes: Abdominal obesity that results in fat and carbohydrate-based diet causes type 2 diabetes and insulin resistance. On the other hand, diabetes increases the risk of infection, stroke, kidney diseases, and cardiovascular disease risks (32).

2.2. Mediterranean Diet

Mediterranean diet is a dietary habit observed in Southern Italy, some regions in Greece and the Mediterranean islands where olive is planted (35). Defined by Angel Keys for the first time, the fundamental property of the Mediterranean diet is the variety of food (36). Aromatic foliage available in the barren and hard soils, orange and lemon trees, olive trees around the Mediterranean and seafood in region has become a strong foundation element of the Mediterranean kitchen. Also legumes and raw vegetables that were spread through agriculture have developed the variety and richness of the kitchen (5). Traditional Mediterranean basin diets contain fresh and natural food, vegetable, fruit, grains, bread, fish, olive oil, nuts such as walnut, peanut, hazelnut, wine in moderate dose, low level of milk and meat products, and poultry animals(37,38,39, 40,41). The following foods are rich in selenium, beta-carotene, vitamin C, vitamin E, antioxidants, glutathione, calcium and folate (42, 43). Mediterranean diet is the traditional nutritional habit of the people living around the countries located in the Mediterranean (38). According to the definition of the Mediterranean diet, there is a single diet for all of the countries in the Mediterranean. However, there are different diets among many countries (39). Tunis, Morocco, some parts of Italy, Spain, Portugal, southern France, and Greece are the countries loyal to the fundamentals of this diet. Syria, Lebanon, Turkey and a part of Balkans also had used this diet (44). The following "Mediterranean Diet Pyramid" demonstrates the frequency of the consumption of the food in Figure 1.

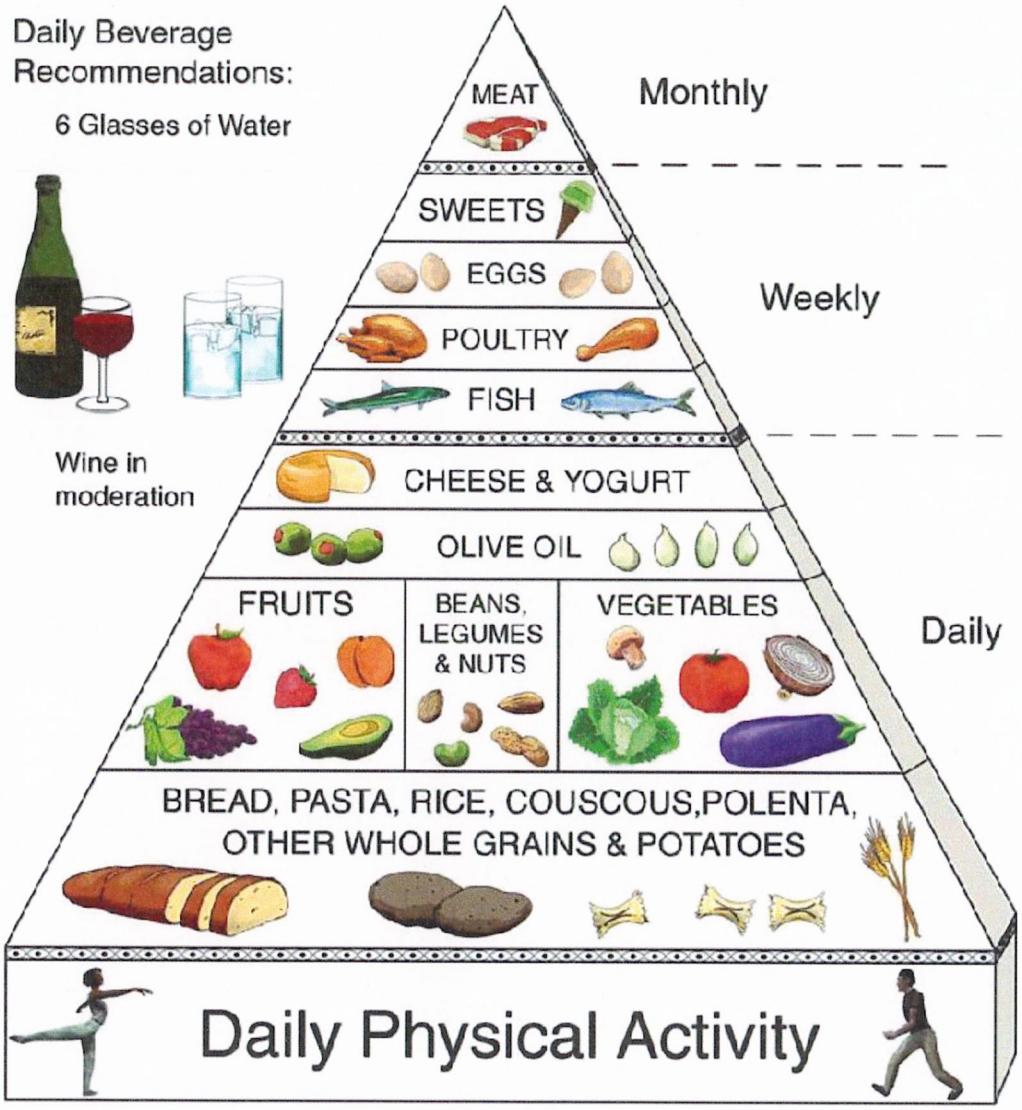

Figure 2.1. Mediterranean Diet Pyramid[1]

In 1995 Willett et al. have introduced the Mediterranean diet pyramid (Figure 1). This pyramid is based around southern Italy, Greece and Crete's typical food patterns. The aim behind the development of this model is to give a general idea of which food groups should be consumed how often (45). As mentioned in the pyramid, the frequency of food consumption is as follows:

[1]Translator's Note: Image has been obtained from: https://www.semanticscholar.org/paper/Should-Canadians-eat-according-to-the-traditional-Downs-Willows/7475bc0974e6705e39a84136bac63207a63de0e5/figure/2)

Daily consumption consists of vegetables (2-3 portions/day), fruits (4-6 portions/day), non-refined cereals and cereal products (such as brown rice, pasta, whole grain bread) low fat or skimmed dairy products (1-2 portions/day), olive oil (as an extra fundamental lipid); weekly consumption of olive, potatoes, poultry, fish, nuts, and legumes (4-6 portion/week), desserts and eggs (1-3 portions/week); monthly consumptions of meat products and meat (4-5 portions/month) (46).

Daily physical activity holds an essential place in the Mediterranean diet. Physical activity does not constitute doing competitive sports or making an exhausting heavy marathon sprint. Therefore physical activity means spending energy to sustain control of weight and energy balance. Exercise is regularly performed physical activity and comprises repetitive and regular body movements. Exercises that are done to reinforce cardiorespiratory resistance, muscular durability and power and elasticity should be frequently done in the adolescent period. Sports such as volleyball, basketball, and swimming, running and walking are the types of exercises that should be done in the adolescent period. Taking a walk in the park, using stairs instead of elevators, walking to the school, getting off the bus 1-2 stops prior to destination and walking the rest of the distance is the examples of physical activity. For humans, young adult and childhood periods are the most viable periods to gain a habit of physical activity and sustaining it for the rest of life (47,48). From childhood period to adult period people should be encouraged to do physical activities. In addition to having healthy habits and being educated about nutrition for an average person who has not have any health issues, mid-level physical activity for approximately half an hour is also crucial (49).

At the base of the pyramid, brown rice, whole grain and products, liquid oils of quality, olive oil, sunflower oil, soy, peanut, corn, colza are present. The reason is due to the bran layer of whole grains, contrary to processed carbohydrates, are cannot be absorbed quickly by the body. In addition, these also regulate insulin and blood sugar, preventing diabetes. The effect of these foods on the level of the glucose levels in the blood varies. Glycemic Index (GI) is the measurement of the effects of the increase of glucose level after consumption of these foods. Glucose 100 is accepted as the fastest type of sugar that is mixed in blood and the GI levels of the food are determined through this. Healthy oils in the base level of the pyramid both affect cholesterol levels positively and protect people from a sudden stroke or any heart-related rhythm problems (50).

Legumes and dried nuts such as walnuts, almonds, and hazelnuts are an excellent source of minerals, vitamins, pulp, and protein. Dried nuts such as almonds and hazelnuts contain healthy fats and these fats mainly affect cholesterol and the health level of the heart (50).

Fruits and vegetables should be consumed 2-3 portions a day. In Mediterranean diet fruits and vegetables, are known by most of the people, grown and harvested locally in Mediterranean regions, consumed fresh, mainly either less processed or unprocessed in the relevant season. Plants and the roots of haw, radicchio, milk thistle, zucchini blossoms, corn poppy, and wild radish plants are especially consumed often in Mediterranean Region, Aegean Region and Crete (35,50). Due to vegetables being rich in mineral and vitamin, food fiber content and low energy content, it is an essential group for human health and nutrition. Consumption of fruits and vegetables in their respective seasons, in relation to the personal state of the individual, physical activity, gender and age, and sufficient consumption reduces the risk of diabetes, cancer, hypertension, heart and vein diseases, and digestive system disorders, delays aging and strengthens the immune system (51).

Dairy products should be consumed 1-2 portions daily. To create bone structures and preserving the existing structure, vitamin D, calcium and exercise play a crucial role. Milk and dairy products are the best sources of calcium (50).

Poultry animals, eggs and fish are important resources of protein. Consuming fish in various stages reduces the risk of heart diseases. Turkey and chicken are also a great source of protein and contains less amount of saturated fat compared to red meat. In terms of the cholesterol amount, eggs have been debated for a long time; however, it has been known that it is not as dangerous as it was thought to be nowadays (50).

Desserts, pasta made out of white flour, white bread, and white rice are at the top of the pyramid in the Mediterranean diet. The reason for this is the sudden increase in blood sugar, weight gain, and the possibility of chronic disorders such as heart disease and diabetes. Due to its high ratio of saturated fat ingredient, butter, and red meat is also at the top of the pyramid. Those who frequently consume red meat are recommended to consume fish and chicken occasionally (50).

Mediterranean diet is an example of balanced and sufficient nutrition (36). While vegetative foods are a fundamental part of the diet, animal-based foods are mainly kept in the background. Consumption of legumes and plants that are commonly seen at many parts of the Mediterranean has been eased by the olive oil that enriches their taste and increases their energy. North African diet is based on legumes, vegetables, and couscous while, the South African diet is based on beans, chickpeas, vegetables, potatoes, rice, and pasta. This diet has the least allocation of sugar consumption (35).

In recent years, the Mediterranean Diet has been scrutinized in terms of heart diseases and healthy nutrition. According to many research projects and nutrition experts, this diet is among the healthiest diets in the world to protect against many diseases such as cancer and heart diseases and to have a longer lifespan (50).

Owing to changing living standards, people nowadays have taken more interest in health. Therefore the average lifespan has increased; however, humanity is also under risk of various diseases. Researches that were conducted to sustain a long and healthy life have reached certain goals. Alternative sectors,nutrition, and sports have been developed to live healthily. Mediterranean diet is one of the forefront diets in terms of having healthy nutrition. Nutrition, illness cures and retaining survival through food, the increased average lifespan of people living in the Mediterranean region and the lower risk of catching chronic diseases have attracted the attention of many researchers. In accordance with the researches, it has been acknowledged that the region's dietary habits have caused this situation, therefore Mediterranean Diet acquiring currency as an important lifestyle (52,53). Gradually, this dietary plan has been globally launched and it has been introduced as a model towards having a healthier diet. It also increased the intake of multiple unsaturated fatty acids, beneficial antioxidant vitamins and other nutritional elements at a certain level to prevent degenerative illnesses. Furthermore,it has been stated that it has associated with having a better life quality and better health (38).

It is easy to apply the Mediterranean diet and appeals to the taste buds (54). The most important components of the diet are olive oil and olive itself. Olive oil can be used in salads, or with the bread, in the raw and cooked form (45). Olive oil due to its

nature, the effects on the nutrition and the increased benefits through the prepared meals in cooking, have been used frequently in the Mediterranean diet (55).

People living in countries in the Mediterranean region share a common interaction in terms of food ingredients and names. Especially olive oil dishes can be seen frequently on the daily menus in various countries and favored by many. Vegetable olive oil dishes, dolma, sarma are among the commonly prepared food (53).

The main components of the olive oil are comprised of: 0-1.5% Linolenic (Omega-3), Linoleic (Omega-6) fatty acids, and 55-85% Oleic acid (Omega-9). In addition, olive oil is a rich source of vitamin E (56). Antioxidants, in other words, beta-carotene (vitamin A precursor) and vitamin E in olive oil help tissues and cells to replenish themselves. Especially it also plays an important role in preserving youth longer for women, and the development of children through the contained vitamins A, D, E, K, aging and obesity. Once consumed hot or cold, natural olive oil reduces the acidity of the stomach and protects it from ulcer and gastritis. Olive oil is the best absorbable oil by the intestines and has an absorbent regulatory aspect. It reduces the gallstone risk and helps to melt gallstones. It also helps the replenishment of the tissues and cells of the teeth and bones and delays aging(52,57).

2.3. Mediterranean Diet's Effect on the Health

Nutrition types may have a positive effect on healthy growth and development during childhood and adolescence periods and on health problems in the oncoming periods. According to this opinion, getting children to adopt nutrition habits have the utmost importance in adults at planning strategies that aims improving health in the long term (58).

Nutrition style that is defined as the Mediterranean Nutrition Diet has a relation with many illnesses, and this relationship has become an accentuated topic in recent years. This diet has been pointed out among the most efficient nutritional habits of having healthy nutrition and reducing the risk of cardiovascular diseases (59). Angel Keys has pioneered the first research related to the Mediterranean diet's effect on health. In the research called Seven Countries that was conducted in 1960, a total of 12763 male soldiers in the age group of 40-59 from Japan, USA, Yugoslavia, Crete and Corfu islands of Greece, Italy, Netherlands, and Finland have been inspected and the relation

between mortality rates of cancer and heart diseases have been researched for 15 years. Results have been published in the years 1970, 1980, 1986 and 1991. In the year 1991 where all of the findings have been published, the positive effects of the Mediterranean diet on human life have been proven. The rates of heart diseases that were sighted on thewell-nourished American males are higher than the countries with poverty due to war, and the best cardiovascular health was observed in Crete. The reason for such discrepancy was indicated as the consumption of fish, legumes, grains, vegetables and fruits (60,61,62,63). While the mortality rates due to heart diseases that were seen at males in the USA were 466 out of 100.000, at the countries located around the Mediterranean region, for example in Greece the same ratio is 4.8. The rate of breast cancer and similar diseases are also way lower (64).

Following this diet that was based around dietary habits of the people living in Italy, France, Southern Spain, Greece, Crete the shores of Western Anatolia and Islands reduces the mortality rates caused by metabolic syndrome, cardiovascular diseases, cancer (especially breast and colon cancer), neurodegenerative diseases (Alzheimer and Parkinson), hypertension, inflammation, paralysis, obesity, type 2 diabetes, depression, mental function diseases atherosclerosis alt incidence, chronic degenerative and aging diseases;expands the longevity of healthy lifespan, and affects the overall general health condition (36,65,66,67).

The benefit of this diet towards primary and secondary prevention of various chronic diseases has been revealed by researches performed on various population groups and various cultures. According to some researches carried within the last five years, the ratio of the incidence of illnesses in the societies following the Mediterranean diet is less than in other developed and Western countries. Moreover, this ratio has a positive correlation with the traditional Mediterranean diet. Additionally, according to the findings at hand from these researches the Mediterranean diet has a preventative role against kidney neurodegenerative and respiratory illnesses (68,69).

Gastrointestinal diseases are less encountered around the countries located in the Mediterranean region. Also, the rate of obesity and hypertension is lower and it is a diet that is beneficial recommended by the experts as for health (64). Especially it has long and short term health benefits towards the prevention of adiposity during childhood (67).

The protective effects of this diet have been exhibited through antioxidants, bioactive components, pulp, and unsaturated fatty acids (36).

The Mediterranean diet contains a high amount of antioxidants (52). Antioxidants such as selenium, pulp, crucial fatty acids, glutathione, (70) carotenoids, vitamin C, vitamin E, polyphenol components are available in olive oil, wine, unprocessed grains, walnut, hazelnut, foliage, fruits, vegetables and wild vegetation (52). In terms of natural antioxidants, the richest resource is unrefined olive oil (45).

Moderate consumption of alcohol and daily consumption of fruits vegetables, grains and fish has positive effects. By not smoking and regular physical activity in accordance with the Mediterranean diet may prevent chronic heart disease by 80%, paralysis by 70%, type 2 diabetes by 90% (71,72).A research that was conducted in 11 countries of Europe, 2339 applicants who are physically active for 10 years, consume less alcohol and non-smoker and have been given the Mediterranean diet. According to the findings, in addition to the regular daily 30-minute exercise, cardiovascular diseases and cancer are reduced by 60%(49).

2.3.1. Mediterranean Diet's Effect on Cardiovascular Diseases

In industrial countries, cardiovascular diseases are among the most important health disorders. These illnesses have high morbidity and mortality ratios (73).

Mediterranean diet has a preventative role in the cardiovascular system (74). Once people who suffer from coronary heart diseases who follow the Mediterranean diet, there has been a 70% decrease in experiencing a secondary heart attack (75). Following the Mediterranean diet may also prevent coronary heart disease for people who experience hypertension, hypercholesterolemia, and metabolic syndrome problems (76).In regards to the research conducted by Trichopoulou, Bamia, and Trichopoulos1302 people who had coronary heart disease have been investigated in terms of Mediterranean diet and survival. It has been stated that there has been a relation between the significant decrease in mortality rates and coronary heart disease and the Mediterranean diet (77).

Mortality rates due to heart diseases are high in the countries that almost never consume olive oil; consume fruit, vegetable and salad less and excessively consume lard

and red meat. In Crete Island where especially only olive oil is consumed the same mortality rate is between 3-5% (62). It has been emphasized that there is a relation between the rate of mortalities due to the scantiness of cardiovascular disease and in the regions where the Mediterranean diet is being followed (70).

2.3.2. Mediterranean Diet's Effect on Obesity

Obesity in the adolescent era is a public health problem that has various effects in both the short and long term (78). The increase in the obesity rate in modern countries nowadays, have brought the diets that would lessen the occurrence of obesity. Mediterranean diet is recommended to people who seek a healthy diet (79). It has many protective effects against the occurrence and development of metabolic issues, cancer types and effective for the treatment of obesity (80,81).

Following the Mediterranean diet has an effect on the prevention of obesity by 33% (76). Dishesthat are rich in olive oil have a very high substantial effect and this effect has been presented by many kinds of researches. In adaptation with the following researches, there is an inverse relationship between obesity and following the Mediterranean diet and it grants many advantages to curing obesity. Due to its high carbohydrate content, it does not trigger over-nutrition and hunger (79,80,81).

Due to adherence being low to the Mediterranean diet during childhood and adolescence, in recent years,obesity rates have Greece escalated in the following periods and it has become one of the most common rates in Europe (82). According to cross-sectional data and epidemiological researches gathered from Europe, children who live in countries inside the Mediterranean region, the obesity observed in childhood is an important health problem (60).In accordance with the research conducted in Pacific Asia and Europe, the rate of obesity and overweightedness has increased in recent periods (81).

In proportion to the CYKIDS research that was conducted by Lazarou, Panagiotakos and Matalasto observe obesity situation in children: 37.8% of the obese, 40.7% of normal weighed have a low (0-3) dietary quality (KIDMED score). 60.3% of the obese and 52.4% of the normal weighted have middle (4-7); 1.9% of the obese and 7.0% of the normal weighted have high (8-12) dietary quality and there is a significant relationship between obesity and diet quality(83). In reference to research conducted by

Kontogianni et al., the relation between children's and teens'lifestyle patterns and BMI have been examined. According to the research, the KIDMED score of the children and teens who are obese and overweight and aged between 3-12 and 13-14 is lower compared to the normal weighed children(84).

2.3.3. Mediterranean Diet's Effect on Diabetes

In accordance with obesity, the frequency of diabetes also continuously increases and the number of people with diabetes has reached 340 million globally. General management of diabetes can be done through education, physical activity, and medical nutrition treatment. The first phase of the treatment for overweight diabetes patients is weight loss. In addition, certain food and aliments also have either a retarding effect on the progress or protective effect against type 2 diabetes (85).

Mediterranean kitchen is rich with fruits, vegetables, and grains, and due to this aspect, it provides necessary food for diabetes patients. Since the Mediterranean diet is rich inthe pulp, less processed grains, fruits, and vegetables, it has a regulatory effect on lipid and blood glucose profile (86). Many foods in the Mediterranean diet have a minimal glycemic index (87). As mentioned in the high Mediterranean diet score SUN (Seguimiento Universidad de Navarra) research, it reduces the risk of weight risk that increases through age. It is possible to lower the obesity by using the Mediterranean diet. After the weight loss diet, following the Mediterranean diet is the best course of action to preserve reached healthy weight (87,4).

According to cross-sectional research regarding the topic, there is a significant independent relation between type2 diabetes and following the Mediterranean diet (46). In other research the relation of type 2 diabetes development risk and Mediterranean diet has been examined. In accordance with the research, that involved examination of 1528 women and 1514 men living in Greece,to raise the Mediterranean diet score by 10 units, the minimum ratio of diabetes is 21% (88). In another research that assessed the same relation, 13.380 students studying at the University of Spain have been investigated. The risk of diabetes for the participants, who are completely committed to the Mediterranean Diet, is less than the ones who are less committed to the diet by 83% (89).

2.3.4. Mediterranean Diet's Effect on Cancer

One of the most important problems of nowadays is cancer. It is a type of tumor where certain cells in an organism multiply uncontrollably. During this multiplication, biochemical functions of certain cells either change or these cells vanish. These tumors are divided into two categories malignant and benign (90).

It is possible to prevent the occurrence of cancer significantly by correctly followed diet. By healthy adaptation to the Mediterranean diet endometrial pancreas and prostate cancer risk can be prevented by 10%, colorectal cancer can be prevented by 25% and breast cancer risk can be prevented by 15%. Therefore the Mediterranean diet has proven the importance of healthy nutrition to prevent the development and delaying of cancer (91).

One of the most commonly encountered cancer types is lung cancer and the most important risk factor for the development of this cancer is smoking. Diets similar to the Mediterranean diet that is rich in fruit and vegetables can protect the individual from lung cancer. Phytochemicals and antioxidant vitamins are the most important actors of this relation. Diets that have a high ratio of singular unsaturated fat; and rich in fruits and vegetables, and similar to the Mediterranean diet have partial preventative aspects towards breast cancer (63).

According to the recent studies, Mediterranean diet and consumption of antioxidant foods have been examined and the relation between beta carotene deficiency and larynx, bladder and lungs has been found. Vitamin C in fruit and vegetables has a preventative aspect of stomach and esophagus cancer. Food that is rich in vitamin E such as olive oil and hazelnuts are effective against digestive system cancers (63). Oleic acid that is among the important components of olive oil prevents oncogene that grows breast cancer cells. Again, polyphenol components available in olive oil reduce oxidative DNA damage and protects against such cancer types as colorectal cancer (71). Consumption of tomatoes has a reductive effect on prostate cancer that can be observed in males. Consumption of fiber and bran food may prevent intestine cancer (63). According to research conducted by Benetou et al., the relation between the frequency of cancer and the Mediterranean diet has been examined. In the research where 25.623

participants were analyzed, people who show a high ratio of commitment towards the Mediterranean diet have a lower rate of experiencing cancer(92).

2.3.5. Mediterranean Diet's Effect on Metabolic Syndrome

It is possible to detect metabolic syndrome and components that are related tothe syndrome during childhood and adolescence. The frequency of metabolic syndrome in teens is approximately 4%. However,the lower ratio of metabolic syndrome can be observed in kids with normal weight. The same ratio is 30-50% in teen and obese kids. The majority of the teens have at least one risk factor of metabolic syndrome. There is a relation between the frequency of metabolic syndrome in teens and low physical activity, overweightedness, socio-economic situation, education level of the parents and ethnicity (93).

There is also a relation between nutrition habits and metabolic syndrome as well. In regards to the research on the following topic, the Mediterranean diet may decrease the signs of metabolic syndrome. This situation comprises many health risks such as abnormal levels of cholesterol, high blood pressure, obesity, and vasculitis and it is characterized by insulin resistance (71).

Even in the pediatric population that has limited data on the frequency of metabolic syndrome, Obesity is a public health problem and a threat that can be observed in adolescents in the Mediterranean region. The frequency rate of metabolic syndrome is lower for people who follow the Mediterranean diet. However,the Mediterranean diet is losing its importance among teens that live in the Mediterranean region (93).

2.3.6. Mediterranean Diet's Effect on Alzheimer

Alzheimer's is a neurodegenerative disease that is characterized by loss of cognitive skills and reduction of daily activities.Also, it is accompanied by neuropsychiatric symptoms (94). Alzheimer's shows itself as a form of amnesia after the cellular loss in the neural structure. Etiological mechanisms are not enabled; however due to many risks factors such as genetic factors, nutritional habits, lifestyle, environmental, psychological, social and medical factors the sickness begins and develops (95). There are additional reasons aside from genetic factors. Development of

insoluble P-amyloid and soluble amyloid layers accumulation in the brain are among the development reasons behind Alzheimer's. These amyloids accumulate due to insufficient intake of multi-level polyunsaturated fatty acids (PUFA), excessive intake of saturated fatty acids and the usage of refined sugar. With regard to the experiments conducted on both humans and animals, the intake of saturated fatty acids in high amounts and polyunsaturated fatty acids in low amounts, and also high levels of LDL causes the development of Alzheimer's. Epidemiological researches indicate that there is a relation between Alzheimer's and the consumption of sugar and the usage of fats that contain saturated fatty acid.People who consume less unsaturated fatty acids, notably Omega-3, the risk of Alzheimer'sare higher.

Along with the increase in the elderly population in Turkey nowadays, there has been a surge of Alzheimer's disease patients as well. In developed countries, based on the increase of the elderly population Alzheimer's is the most commonly seen dementia type. In parallel to the elderliness ratio of the population, there is also a frequency of encountering the disease(49).

It is possible to get protected or retardant the development of Alzheimer through changing dietary habits (95). Vitamin E, vitamin C, vegetables, fruits, wine, olive oil and carotenoids in the Mediterranean diet may have a protective role against Alzheimer's. Flavonoids in fruits and vegetables are also effective (38). A diet containing a high intake ratio of vitamins E and C has a detractive effect on Alzheimer's (96). Consumption of fish, due to its Omega-3 content, can prevent development or progress of Alzheimer (95).

The 4 years of follow-up research in 2006 involving 2258 patients with no dementia, is the first research that shows the relation between Alzheimer's and the Mediterranean diet. After 4 years, 262 of the participants have been diagnosed with Alzheimer's. The risk of Alzheimer's is higher in the people who have a lower score on adherence to the Mediterranean diet. In the group with the highest adherence, the risk of Alzheimer's is 40% lower. The results of the research have been verified through other researches that were conducted with the same group. According to the control research that was conducted with this group, high adaptation to the Mediterranean diet reduces Alzheimer's risk by 68% without any effects of vascular comorbidities (38).

2.3.7. Mediterranean Diet's Effect on Hypertension

Despite assumed as an adult sickness, hypertension can be seen in childhood and adolescence period by 2-5% and the rate of frequency is being increased. Compared to adults, secondary hypertension is more commonly seen in children;however children and teens with mild or medium hypertension have primary hypertension of unknown origin. There is a relation between the increase of primary hypertension prevalence in childhood and adolescence with nutrition comprised of excessive salt and high calories, insufficient physical activity and obesity (97). Adaptation to the Mediterranean diet, food sufficiency, and the quality of the diet may have a protective factor against asthma, hypertension, and obesity (83).

2.3.8. Mediterranean Diet's Effect on Digestive System Illnesses

The digestive system is comprised of a process where receiving liquid and solid food through the digestive tract, absorption of mineral, vitamin and water fats, carbohydrates and proteins to the bloodstream by breaking these down to their small main components. To live a healthy life it is important to have a balanced and sufficient diet. To achieve this, a healthy digestive system is required. Moreover, healthy nutrition is required for a healthy digestive system. In addition to the unbalanced diet, digestive system related illnesses are gradually increasing owing to the factors of stress, and infection agents (98).

Due to its abundant allocation of olive oil, the Mediterranean diet has positive effects on the digestive system. Consuming olive oil before breakfast on an empty stomach is helpful against basic chronic constipation. Additionally, olive oil affects cholecystokinin production.This component helps the fast discharge of gall bladder and accelerates small intestine peristalsis. Since olive oil increases bile production and provides balanced single/multiple unsaturated fatty acids, it may also prevent the formation of gall cholesterol stones. In the regions where olive oil consumption is more the risk of gallstone formation is lower (86).

Despite the fact that the Mediterranean diet has proven itself to increase health conditions and many works were published regarding the subject, it is argued that this diet will continue to exist in the future. The adherence towards the Mediterranean diet is gradually decreasing day by day. This tendency can be significantly observed in North

African and South European countries that use the Mediterranean diet. As the fundamental nutrition type among the elderly, the youth does not like the Mediterranean diet (59). In the Mediterranean region, the youth is abandoning the traditional diet and prefers a Westernized diet. This tendency can be observed both in children and teens. According to the research conducted about this matter, university students were assumed as a population that has the wrong diet and has a tendency towards acquiring a healthy diet due to the fact that the majority of the students are residing far away from their homes (99).In relation to the latest reports, teens are nourishing themselves with a diet containing high consumptions of unsaturated fatty acids and carbohydrates, whichis devoid of the fundamental characteristics of the Mediterranean diet. Additionally, the rate of hypercholesterolemia and obesity among teens is increasing in Italy, Spain and Greece, making the situation similar to the USA by this aspect (100).

According to many findings coming from various Southern, Northern and Western European, the USA recommends zinc, calcium and iron intake. Especially teen girls who do not adhere to these recommendations have a high sugar intake. A long life is encouraged in the traditional Greek diet. It is related to food; and diet that has protective aspects against chronic diseases; however, due to mass urbanization,Greece has started to drift away from the Mediterranean diet nowadays. Animal-based food products and food with saturated fatty acids are being increasingly consumed, people gradually started to abandon traditional diets and there has been a significant increase has been observed in chronic diseases (100).

3. MATERIALS AND METHODS

3.1. Time and Place of the Research

Research has been conducted in the Turkish Republic of Northern Cyprus (TRNC) between the dates 01.02.2019 – 01.05.2019.

3.2. Type of the Research

This research has been prepared to evaluate meal patterns, meal frequency and identification of nutrition status in adults and the relation of physical activity level in adults; and it has been planned as cross-sectional research. Cross-sectional researches are a type of research where the prevalence of a researched case in public is examined and it has results that can be generalizable towards society and involves the whole or a representative part of society. It can also be planned to identify the factors that are related to the researched result. The situation of factor and results are evaluated simultaneously. Data can be obtained through various means such as questionnaire and/or physical examination, and laboratory research (101).

3.3. The population of the Research

The population of the research is comprised of people who live at TRNC and aged around18-65. In TRNC the relevant age group of individuals is 190754, showing the population of the research. Due to the research covering a wide scope and causing issues at cost and time in reaching the whole area, the research has been sampled with this population. In deciding this sampling, a basic sampling method has been used. This sampling method is comprised of people who are believed to have answers to the researcher's problem. In terms of specifying the sampling size that will be represented by the population in question:

$$n = Nt^2 pq / d^2 (N-1) + t^2 pq$$

N: The number of individuals at the target populace, (190754 people)

n: The number of individuals to be sampled.

p: The prevalence of the researched incident (0, 9)

q: The frequency of non-occurrence of the researched incident (0, 1)

t: Within a specified level of significance, theoretic level according to thet table (For sampling error of 5% and trust level of 95%, it has been assumed as 1.96)

d: Depending on the prevalence of the incident +/- sampling error. (0,05)

By using the formula population of the research is in a 95% confidence interval, with a sampling error of ± 5% the required sampling size has been calculated, n=383 individuals. Accordingly, 450 participants have been given a questionnaire. 28% of the participants' data have been identified as either incomplete or contradictory.And these participants have been excluded from the scope of the research. Therefore the sampling of this research is comprised of 422 people in the age groups of 16-65.

3.4. Data Collection Tools of the Research

During the research, General Information Form, Dietary Habits Form, Food Consumption Frequency Form, and Mediterranean Diet Quality Index Form have been used as the general tools for gathering data.

3.4.1. General Information Form

During the collection of required data regarding participants, literature, and works (102,103,104,105) have been used (APPENDIX-3) by the researcher. The questionnaire form is comprised of questions about socio cultural, socioeconomic and personal characteristics.

3.4.2. Dietary Habits Form

Keeping the works in literature (102,103,104)in mind, the form prepared by the researcher contains 15 articles. Through these articles data regarding meal habits, water consumption and food components in meals have been gathered(APPENDIX-4).

3.4.3. Food Consumption Frequency Form

In order to identify the dietary habits and nutrition situation of the individuals, food consumption form has been applied (APPENDIX-5). Through the form, the frequency of the consumed food from last 1 month has been calculated by the

options"didn't consume, every day, 5-6 times in a week, 3-4 times in a week, 1-2 times in a week, 1 time in 15 days and once in a month" (106,107).

3.4.4. Mediterranean Diet Quality Index Form

To collect data regarding the identification of dietary situations, the Mediterranean Diet Quality Index form (APPENDIX-6) has been used. The form question paper contains 16 questions. While the 1^{st}, 2^{nd}, 3^{rd}, 4^{th}, 5^{th}, 7^{th}, 8^{th}, 9^{th}, 10^{th}, 11^{th}, 13^{th}, and 15^{th} questions have been evaluated as positive (+1); 6^{th}, 12^{th}, 14^{th}, and 16^{th} questions have been calculated as negative (-1) values. The evaluation result is defined as ≥ 8 points: optimal diet; 4-7 points: diet requires intervention; ≤ 3 points very low diet quality (108).

3.5. Variables of the Research

In the research Mediterranean Diet Quality was depending variable; personal characteristics of the participants, meal pattern, meal frequency,and nutritional status are independent variables.

3.6. Limitations of the Research

1. Research has been limited to 422 participants of the age ranges 18-65.
2. Findings gathered within the scope of the research have been limited with the attributes calculated by the used data collection tool.

3.7. Ethical Principles of the Research

Before the collection of the data, an application has been made to the Yeditepe University Ethical Council and ..... numbered ..... dated "Ethical Council Approval" has been received (APPENDIX-1). In the framework of the research, applicants have been informed and their consent has been received. The consent form can be found in the attachments (APPENDIX-2).

3.8. Statistical Evaluation of the Data

For the statistical analysis of the data gathered from the research, SPSS 23.00 statistics packet software was used. Upon the evaluation of research data, statistical

identifier methods (average, standard deviation, frequency) have been prioritized. Upon the comparison of independent dual groups t-test, for the comparison of three and more independent groups, ANOVA and Scheffe Test of Post Hoc test was used. Collected findings have been evaluated as a confidence interval by 95% and significance level by 5%.

4. RESULTS

Table 4. 1. Demographic Properties Regarding Participants

	n	%
Gender		
Male	194	46.0
Female	228	54.0
Nationality		
TRNC	324	76.8
TR	98	23.2
Age		
25 years old and below	156	37.0
26-35 years old	134	31.8
36 years old and above	132	31.3
BMI		
Normal weighed	216	51.2
Overweighed	162	38.4
Obese	44	10.4
Changes in body mass within the last 6 months		
Yes	232	55.0
No	168	39.8
Doesn't know	22	5.2
Marital Status		
Single	216	51.2
Married	206	48.8
Education Level		
High School	124	29.4
Graduate	230	54.5
Post-Graduate	68	16.1
Cohabited person		
Family	324	76.8
Alone	46	10.9
Friends	52	12.3

46% of the participants are male and 54% are female. 76.8% of the participants are TRNC nationals while 23.2% is the Republic of Turkey nationals. 37% of the participants aged below 25 years old, 31.8% are aged 26-35 years old, and 31.3% are above 36 years old. The youngest participant is aged 18;the eldest participant is aged 65. The average of the ages is34.27±10.68. 51.2% of the participants are average weighed, 38.4% are overweight, and 10.4% are obese. The average of the BMI is 24.98±4.66. The lowest ratio is 16.28;the highest ratio is 41.47. The average of the weight is 72.51±16.06; the lightest weighed participant is 42kgs, the heaviest weighed is 145kgs.

The average of the height is 169.97±8.19. The shortest participant is 152cm tall; the tallest participant is 195cm tall. While 55% of the participants had changed in their body mass within the last six months, 39.8% had not any change. 51.2% of the participants are single, 48.8% are married. 29.4% are high school, 54.5% are university, and 16.1% are master's degree graduates. 76.8% of the participants live with their families, while 12.3% are living with their friends, and 10.9% live alone.

Table 4. 2. Information Regarding Food Supplement, Cigarette Smoking, and Alcohol Usage

	n	%
Vitamin-mineral tablet usage within the last 12 months		
Used	138	32.7
Not used	284	67.3
Cigarette Smoking		
Smoking	160	37.9
Not smoking	262	62.1
Daily average cigarette usage		
1-4 pieces	18	11.4
5-9 pieces	18	11.4
10-19 pieces	78	49.4
20 pieces and more	44	27.8
Alcohol usage		
Drinking	294	69.7
Not drinking	128	30.3
Amount of alcohol consumed in one sitting		
M>4 andF>3	152	51.7
M<5 andF<4	142	48.3

32.7% of the participants have used vitamin-mineral tablets within the last 12 months. 37.9% of the participants have smoked cigarettes. The rates of the participants who use cigarettes,11.4% smoke 1-4 pieces daily, 11.4% smoke 5-9 pieces daily,49.9% smoke 10-19 pieces daily, and27.8% smoke 20 pieces and more in a day. 69.7% of the participants consume alcohol. 51.7% of the participants consume M>4 and F>3; 48.3% M<5 and F<4 amount of alcohol.

Table 4. 3. Information Regarding Illness Situation

	n	%
Status of having any illness diagnosed by an expert		
Available	104	24.6
Not available	318	75.4
Diagnosed illness		
Adiposity	10	7.1
Ulcer-gastritis	12	8.6
Diabetes	10	7.1
Hypertension	26	18.6
Hypotension	2	1.4
Iron deficiency anemia	16	11.4
Hyperlipidemia, cholesterolemia	10	7.1
Kidney diseases	10	7.1
Liver-gall bladder illnesses	2	1.4
Food allergies	6	4.3
Psychiatric disorders	8	5.7
Other	28	20.0

24.6% of the participants have been diagnosed by an expert with an illness. 7.1% have been diagnosed with adiposity, 8.6% with ulcer-gastritis, 7.1% with diabetes, 18.6% with hypertension, 1.4% hypotension, and 11.4% with iron deficiency anemia, 7.1% with hyperlipidemia and cholesterolemia, 7.1% with kidney disease, 1.4% with liver-gall bladder illness, 4.3% with food allergies, 5.7% with psychiatric disorders and 20% with other diseases.

Table 4. 4. Information Regarding Medical Nutrition Treatment

	n	%
The situation of following medical nutrition treatment for illness		
Yes	40	38.5
No	64	61.5
Followed Medical Nutrition Treatment		
Weight loss	24	31.8
Low fat, including cholesterol	8	10.5
No salt, sodium limited	20	26.3
Compatible with diabetes	8	10.5
Low pulped	2	2.6
High pulped	4	5.3
Protein limited	2	2.6
Other	8	10.5

38.5% of the participants have been using medical-dietary treatment for the illness. Participants who followed a medical nutrition treatment, by 31.8% for weight loss, by 10.5% for low fat including cholesterol, by 26.3% for no-salt, sodium limited, by 10.5% compatible with diabetes, by 2.6% low pulped, by 5.3% high pulped, by 2.6% protein limited and by 10.5% have followed a diet for other illnesses.

Table 4. 5. Information Regarding the Source of Medical Nutrition Treatment

	n	%
Person/Place where nutrition treatment was received		
Dietician	44	52.4
Doctor	26	31.0
Internet	8	9.5
Other	6	7.1

52.4% of the participants have received their dietary treatment from a dietician, 31% from a doctor, 9.5% from the internet and 7.1% from other parties/places.

Table 4. 6. Information Regarding Meal Consumption

	n	%
Number of main meals consumed daily		
1 meal	30	7.1
2 meals	120	28.4
3 meals	272	64.5
Number of refreshments consumed daily		
Not consuming	78	18.5
1 refreshments	126	29.9
2 and more refreshments	218	51.7
The instance of skipping meals		
Does skip	328	77.7
Doesn't skip	94	22.3
Skipped meal		
Breakfast	194	59.1
Lunch	116	35.4
Dinner	18	5.5
Reason for skipping a meal		
Insufficient time	174	53.0
Feeling disinclined, loss of appetite	86	26.2
Not having a habit	36	11.0
Other	32	9.8

7.1% of the participants have one, 28.4% have two and 64.5% have three main meals a day. While 18.5% of the participants don't have any refreshments; 29.9% have one, 51.7% have two and more refreshments. 77.7% of the participants skip meals. 59.1% of the participants skip breakfast, 35.4% skip lunch and 5.5% skip dinner. The average consumption of water is 8.30±4.32. Least consumption is 1 liter and the most consumption is 30 liters. Finally, 53% skips a meal due to insufficient time, 26.2% due to feeling disinclined and loss of appetite, 11% due to not having a habit and 9.8% due to other factors.

Table 4. 7. Information Regarding Meal Preference

	n	**%**
The person who cook meals		
On their own	202	47.9
Parents	124	29.4
Others	96	22.7
Oil type used in meals		
Olive oil	310	73.5
Vegetable oils	98	23.2
Margarine	2	0,5
Butter	8	1.9
Other	4	0.9
The instance of limiting the salt amount		
Does limit	354	83.9
Doesn't limit	68	16.1
The instance of preferring whole grained products		
Prefers	346	82.0
Doesn't prefers	76	18.0
The instance of preferring snacks such as potato chips and popcorn		
Prefers	242	57.3
Doesn't prefers	180	42.7
Limiting oneself about eating snacks before the main meals		
Does limit	228	54.0
Doesn't limit	194	46.0
The instance of using sugar with tea, coffee, etc.		
Does use	146	34.6
Doesn't use	276	65.4
The instance of consuming oily seeds such as walnuts, almonds, hazelnuts as refreshments		
Does consume	284	67.3
Doesn't consume	138	32.7
The instance of paying attention to consuming vegetables daily		
Does pay attention	214	50.7
Doesn't pay attention	208	49.3
The instance of consuming fish		
Does prefer	282	66.8
Doesn't prefer	140	33.2

47.9% of the participants prepare their own food, 29.4% by their parents, and 22.7% by other parties. 73.5% of the participants use olive oil, 23.2% use vegetable oils, 0.5% use margarine, 1.9% use butter and 0.9% use other oils. 83.9% of the participants limit salt usage. 82% of the participants prefer whole grain products, 57.3% prefer snacks such as potato chips and popcorn. 54% of the participants limit themselves to eating something before the main meals. 34.6% of the participants use sugar in their tea, coffee, etc. 67.3% of the participants consume oily seeds such as walnuts, almonds, hazelnuts. 50.7% of the participants pay attention to the daily intake of vegetables. 66.8% of the participants prefer fish.

Table 4. 8. Information Regarding Food Consumption

	No Consumption	Every day	5-6 Times in a week	3-4 Times in a week	1-2 Times in a week	Once in 15 days	Once in a month
Low fat milk, yogurt	156 (%37.0)	90 (%21.3)	32 (%7.6)	68 (%16.1)	52 (%12.3)	10 (%2.4)	14 (%3.3)
Full fat milk, yogurt	46 (%10.9)	142 (%33.6)	58 (%13.7)	62 (%14.7)	78 (%18.5)	20 (%4.7)	16 (%3.8)
Cheese	4 (%1.4)	178 (%42.2)	94 (%22.3)	84 (%19.9)	52 (%12.3)	4 (%0.9)	4 (%0.9)
Red meat	14 (%3.3)	16 (%3.8)	48 (%11.4)	160 (%37.9)	150 (%35.5)	26 (%6.2)	8 (%1.9)
Giblets	188 (%44.5)	8 (%1.9)	4 (%0.9)	24 (%5.7)	22 (%5.2)	64 (%15.2)	112 (%26.5)
Sausage, salami, pastrami	150 (%35.5)	4 (%0.9)	4 (%0.9)	28 (%6.6)	62 (%14.7)	44 (%10.4)	130 (%30.8)
Chicken, turkey	22 (%5.2)	28 (%6.6)	44 (%10.4)	192 (%45.5)	90 (%21.3)	32 (%7.6)	14 (%3.3)
Fish	14 (%3.3)	6 (%1.4)	12 (%2.8)	42 (%10.0)	194 (%46.0)	92 (%21.8)	62 (%14.7)
Egg	12 (%2.8)	56 (%13.3)	46 (%10.9)	178 (%42.2)	102 (%24.2)	14 (%3.3)	14 (%3.3)
Legume	18 (%4.3)	22 (%5.2)	26 (%6.2)	56 (%13.3)	172 (%40.8)	86 (%20.4)	42 (%10.0)
Bread	24 (%5.7)	256 (%60.7)	34 (%8.1)	64 (%15.2)	30 (%7.1)	4 (%0.9)	10 (%2.4)
Bulgur, rice, pasta etc.	8 (%1.9)	54 (%12.8)	52 (%12.3)	190 (%45.0)	102 (%24.2)	8 (%1.9)	8 (%1.9)
Green leaved vegetables	4 (%0.9)	88 (%20.9)	72 (%17.1)	178 (%42.2)	66 (%15.6)	12 (%2.8)	2 (%0.5)
Other vegetables	4 (%0.9)	46 (%10.9)	42 (%10.0)	132 (%31.3)	184 (%43.6)	14 (%3.3)	-
Potatoes	16 (%3.8)	18 (%4.3)	28 (%6.6)	92 (%21.8)	214 (%50.7)	42 (%10.0)	12 (%2.8)
Citrus fruits	12 (%2.8)	44 (%10.4)	42 (%10.0)	128 (%30.3)	148 (%35.1)	34 (%8.1)	14 (%3.3)
Other fruits	6 (%1.4)	64 (%15.2)	92 (%21.8)	134 (%31.8)	88 (%20.9)	30 (%7.1)	8 (%1.9)
Butter, margarine	56 (%13.3)	30 (%7.1)	30 (%7.1)	50 (%11.8)	102 (%24.2)	116 (%27.5)	38 (%9.0)
Liquid oils	120 (%28.4)	96 (%22.7)	42 (%10.0)	52 (%12.3)	32 (%7.6)	38 (%9.0)	42 (%10.0)
Olive oil	16 (%3.8)	256 (%60.7)	48 (%11.4)	62 (%14.7)	28 (%6.6)	2 (%0.5)	10 (%2.4)
Olive	20 (%4.7)	146 (%34.6)	100 (%23.7)	52 (%12.3)	72 (%17.1)	20 (%4.7)	12 (%2.8)
Honey, jam	44 (%10.4)	48 (%11.4)	26 (%6.2)	100 (%23.7)	124 (%29.4)	52 (%12.3)	28 (%6.6)
Molasses	96 (%22.7)	72 (%17.1)	26 (%6.2)	58 (%13.7)	82 (%19.4)	40 (%9.5)	48 (%11.4)
Chocolate etc.	30 (%7.1)	46 (%10.9)	54 (%12.8)	88 (%20.9)	124 (%29.4)	48 (%11.4)	32 (%7.6)
Pastry	30 (%7.1)	16 (%3.8)	12 (%2.8)	64 (%15.2)	172 (%40.8)	88 (%20.9)	40 (%9.5)
Milk puddings	46 (%10.9)	8 (%1.9)	12 (%2.8)	58 (%13.7)	128 (%30.3)	92 (%21.8)	78 (%18.5)
Cake, biscuit	34 (%8.1)	20 (%4.7)	18 (%4.3)	92 (%21.8)	128 (%30.3)	82 (%19.4)	48 (%11.4)
Carbonated drinks	92 (%21.8)	124 (%29.4)	30 (%7.1)	52 (%12.3)	48 (%11.4)	38 (%9.0)	38 (%9.0)
Instant fruit juice	234 (%55.5)	18 (%4.3)	16 (%3.8)	32 (%7.6)	46 (%10.9)	30 (%7.1)	46 (%10.9)
Instant soup	280 (%66.4)	4 (%0.9)	6 (%1.4)	22 (%5.2)	30 (%7.1)	32 (%7.6)	48 (%11.4)
Hamburger, pittaetc.	72 (%17.1)	12 (%2.8)	6 (%1.4)	20 (%4.7)	124 (%29.4)	128 (%30.3)	60 (%14.2)
Donner kebab	58 (%13.7)	12 (%2.8)	10 (%2.4)	22 (%5.2)	152 (%36.0)	108 (%25.6)	60 (%14.2)
Instant canned food	158 (%37.4)	4 (%0.9)	10 (%2.4)	24 (%5.7)	54 (%12.8)	94 (%22.3)	78 (%18.5)
Frozen food	120 (%28.4)	6 (%1.4)	6 (%1.4)	30 (%7.1)	78 (%18.5)	112 (%26.5)	70 (%16.6)
French fries	42 (%10.0)	10 (%2.4)	24 (%5.7)	84 (%19.9)	160 (%37.9)	68 (%16.1)	34 (%8.1)
Ice cream	50 (%11.8)	26 (%6.2)	20 (%4.7)	144 (%34.1)	90 (%21.3)	50 (%11.8)	42 (%10.0)
Mineral water, fizzy water	60 (%14.2)	128 (%30.3)	48 (%11.4)	64 (%15.2)	56 (%13.3)	44 (%10.4)	22 (%5.2)
Coffee, Nescafé	12 (%2.8)	324 (%76.8)	26 (%6.2)	24 (%5.7)	22 (%5.2)	12 (%2.8)	2 (%0.5)
Tea (black, green)	24 (%5.7)	274 (%64.9)	28 (%6.6)	52 (%12.3)	26 (%6.2)	10 (%2.4)	8 (%1.9)
Herbal tea	48 (%11.4)	186 (%44.1)	26 (%6.2)	50 (%11.8)	58 (%13.7)	28 (%6.6)	26 (%6.2)
Alcoholic drinks	76 (%18.0)	28 (%6.6)	24 (%5.7)	130 (%30.8)	88 (%20.9)	36 (%8.5)	40 (%9.5)
Wine	118 (%28.0)	12 (%2.8)	6 (%1.4)	58 (%13.7)	120 (%28.4)	52 (%12.3)	56 (%13.3)
Breakfast desserts	82 (%19.4)	52 (%12.3)	40 (%9.5)	132 (%31.3)	68 (%16.1)	30 (%7.1)	18 (%4.3)
Simit	82 (%19.4)	12 (%2.8)	4 (%0.9)	64 (%15.2)	136 (%32.2)	76 (%18.0)	48 (%11.4)
Potato chips etc.	80 (%19.0)	16 (%3.8)	14 (%3.3)	90 (%21.3)	130 (%30.8)	46 (%10.9)	46 (%10.9)

Evaluation of the daily consumption regarding food is primarily by 76.8% is coffee, Nescafé, 64.9% is tea, by 60.7% olive oil and 60.7% bread. The majority of the food that is not consumed by the participants is 66.4% instant soup, 55.5% instant fruit juice and 44.5% giblets.

Table 4. 9. Distribution Regarding Mediterranean Diet Quality

	n	%
Mediterranean diet quality		
Optimal diet	241	57.1
Diet requires intervention	132	31.3
Very low diet quality index	49	11.6

Evaluation of the quality of the diet shows that by 57.1% the majority hasan optimal diet, 31.3% require intervention to their diet, and 11.6% have a very low-quality index.

Table 4. 10. Differentiation of Mediterranean Diet Quality by Gender

	n	$\bar{X}$	ss	t	p
Mediterranean diet quality					
Male	194	2.94	2.30	-2.74	**0.006**
Female	228	3.55	2.28		

The quality of the Mediterranean diet differentiates on gender ($p<0.05$). The average of female participants is significantly higher than male participants.

Table 4. 11. Differentiation of Mediterranean Diet Quality by Nationality

	n	$\bar{X}$	ss	t	p
Mediterranean diet quality					
KKTC	324	3.28	2.32	1.03	0.304
TR	98	3.01	2.26		

The quality of the Mediterranean diet does not differentiate by nationality ($p>0.05$).

Table 4. 12. Differentiation of Mediterranean Diet Quality by Age

	n	$\overline{X}$	ss	F	p	Difference
Mediterranean diet quality						
Aged 25 and below[1]	156	3.27	2.16			**1>3**
Aged 26-35 [2]	134	3.09	2.18	1.66	0.046	**2>3**
Aged 36 and above[3]	132	2.89	2.04			

The quality of the Mediterranean diet differentiates by age ($p<0.05$). Therefore, participants aged 36 and above have significantly lower diet quality.

Table 4. 13. Differentiation of Mediterranean Diet Quality by BMI

	n	$\overline{X}$	ss	F	p	Difference
Mediterranean diet quality						
Normal weighed[1]	216	4.14	2.39			**1>2**
Overweighed[2]	162	3.12	2.44	3.93	**0.020**	**1>3**
Obese[3]	44	3.11	2.04			

The quality of the Mediterranean diet differentiates by BMI ($p<0.05$). The average of normal weighted participants is significantly higher than overweighed and obese participants.

Table 4. 14. Differentiation of Mediterranean Diet Quality by the Change Occurred in Body Mass within Last 6 Months

	n	$\overline{X}$	ss	F	p	Difference
Mediterranean diet quality						
Yes[1]	232	3.43	2.20			**1>2**
No[2]	168	3.15	2.29	2.32	0.039	**1>3**
Doesn't know[3]	22	2.36	3.08			

The quality of the Mediterranean diet differentiates by the change occurred in the body within the last 6 months ($p<0.05$). Therefore, the diet quality of those with weight change is significantly higher than the groups who don't know and haven't had any change.

Table 4. 15. Differentiation of Mediterranean Diet Quality by Marital Status

	n	$\bar{X}$	ss	t	p
Mediterranean diet quality					
Single	216	3.27	2.28	0.48	0.631
Married	206	3.17	2.34		

The quality of the Mediterranean diet does not differentiate by marital status ($p>0.05$).

Table 4. 16. Differentiation of Mediterranean Diet Quality by Education Level

	N	$\bar{X}$	ss	F	p	Difference
Mediterranean diet quality						
High school[1]	124	3.23	2.22			
Graduate[2]	230	3.27	2.35	0.33	0.717	
Post-graduate[3]	68	3.01	2.31			

Quality of the Mediterranean diet does not differentiate by education level ($p>0.05$).

Table 4. 17. Differentiation of Mediterranean Diet Quality by Cohabitants

	n	$\bar{X}$	ss	F	p	Difference
Mediterranean diet quality						
Family[1]	324	3.50	2.75			
Alone[2]	46	3.24	2.16	1.94	0.036	**1>3**
Friends[3]	52	2.85	2.72			

The quality index of the Mediterranean diet differentiates by cohabitants ($p<0.05$). Therefore, people who live with their parents have significantly higher diet quality than the ones living with their friends.

Table 4. 18. Differentiation of Mediterranean Diet Quality by the Usage of Vitamin-Mineral Tablet within Last 12 Months

	n	$\bar{X}$	ss	t	p
Mediterranean diet quality					
Used	138	2.84	2.27	-2.37	**0.018**
Didn't use	284	3.40	2.31		

Quality of the Mediterranean diet differentiates by vitamin-mineral tablet usage within the last 12 months ($p<0.05$). The average of participants who do not use is significantly higher than the ones who use it.

Table 4. 19. Differentiation of Mediterranean Diet Quality by the Instance of Cigarette Usage

	n	$\overline{X}$	ss	t	p
Mediterranean diet quality					
Uses	160	3.34	2.48	0.83	0.405
Doesn't use	262	3.15	2.19		

The quality of the Mediterranean diet does not differentiate by cigarette usage ($p>0.05$).

Table 4. 20. Differentiation of Mediterranean Diet Quality by Alcohol Usage

	n	$\overline{X}$	ss	t	p
Mediterranean diet quality					
Uses	294	3.23	2.30	0.10	0.919
Doesn't use	128	3.20	2.33		

The quality of the Mediterranean diet does not differentiate by alcohol usage ($p>0.05$).

Table 4. 21. Differentiation of Mediterranean Diet Quality by Any Illness That was diagnosed by an Expert

	n	$\overline{X}$	ss	t	p
Mediterranean diet quality					
Available	104	3.42	2.22	1.03	0.302
Not available	318	3.15	2.33		

Quality of the Mediterranean diet does not differentiate by any existing illness diagnosed by an expert ($p>0.05$).

Table 4. 22. Differentiation of Mediterranean Diet Quality by the Number of Consumed Daily Main Meals

	n	$\bar{X}$	ss	F	p	Difference
Mediterranean diet quality						
1 meal[1]	30	2.90	2.84			
2 meals[2]	120	3.24	2.04	0.31	0.733	
3 meals[3]	272	3.25	2.36			

Quality of the Mediterranean diet does not differentiate by the number of consumed daily main meals (p>0.05).

Table 4. 23. Differentiation of Mediterranean Diet Quality by the Number of Consumed Daily Refreshment Meals

	n	$\bar{X}$	ss	F	p	Difference
Mediterranean diet quality						
Doesn't consume[1]	78	3,23	2,01			
1 refreshment meal[2]	126	3,37	2,19	0,40	0,668	
2 and more refreshment meals[3]	218	3,13	2,47			

Quality of the Mediterranean diet does not differentiate by the number of consumed daily refreshment meals (p>0.05)

Table 4. 24. Differentiation of Mediterranean Diet Quality by the Instance of Skipped Meals

	n	$\bar{X}$	ss	t	p
Mediterranean diet quality					
Does skip	328	3.18	2.30	-1.62	0.034
Doesn't skip	94	3.35	2.33		

Quality of the Mediterranean diet differentiates by skipping meals (p>0.05). The quality of the Mediterranean diet is significantly higher in the participants who do not skip a meal.

Table 4. 25. Differentiation of Mediterranean Diet Quality by the Party who cooks the Meals

	n	$\overline{X}$	ss	F	p	Difference
Mediterranean diet quality						
On their own[1]	202	3.01	2.38			
Parents[2]	124	3.43	2.12	1.62	0.198	
Others[3]	96	3.40	2.37			

Quality of the Mediterranean diet does not differentiate by the party who cooks the meals ($p>0.05$).

Table 4. 26. Differentiation of Mediterranean Diet Quality by the Water Consumption

	n	$\overline{X}$	ss	F	p	Difference
Mediterranean diet quality						
Optimal diet[1]	241	8.01	3.80			
Diet require intervention[2]	132	9.04	5.07	2.92	0.055	
Very low diet quality index[3]	49	7.73	4.40			

Water consumption does not differentiate by the Mediterranean diet quality index ($p>0.05$).

5. DISCUSSION AND CONCLUSION

Research has been conducted with the purpose of ascertaining the adaptation levels to the Mediterranean diet of individuals in TRNC and effective factors that are effective on adaptation. In line with this objective, 422 participants between the ages of 18-65 living in TRNC have been given a questionnaire. Among the applied data collection tools General Information Form, Dietary Habits Form, Food Consumption Frequency Form and Mediterranean Diet Quality Index Form is available.

Participants that were included in the research, the majority is made up of women by 54%. 76.8% of the participants are TRNC nationals. While the average age has been found as 34.27±10.68,by 51.2% the majority has been identified as single and by 54.5%. Also, the majority has been identified as graduates. In addition with 76.8%, the majority is living with their parents. The demographic structure of the research coincides with the demographics of TRNC (109). In the literature researches where adaptation to the Mediterranean diet was examined, different results have been gathered in terms of the distribution of demographic properties(81,110,111,112). This difference that is seen in the findings of existing literature generally reflects the demographic structure of the research and considered to be directly related to the properties of the chosen sampling.

Obesity is one of the most commonly encountered health issues that were seen in modern societies.And both in the developed and developing countries and in our country it has reached the levels of an epidemic, and became a gradually increasing frequent issue that is not preventable, but also a global public health issue (113,114,115,116). Within this framework of the research, the BMI values of the participants have been examined. According to the findings, 51.2% of the participants have normal weight, 38.4% are overweight and 10.4% are obese respectively. The average of the BMI is 24.98±4.66. According to the latest data from WHO (World Health Organization), individuals that are aged 18 and above in the year 2016, 1.9 billion of the adults are overweighed and 650 million are obese.Therefore these findings indicate that 39% of the world population is overweighed and 13% are obese (117). According to the TURDEP-2 research that was conducted back in 2010, with the participation of 26500 adults, the frequency of obesity among women is 44%, 27% among men and 35% in general public(118). In the research conducted by Soydemir,

while researching the eating behavior of the individuals, the results were 40% of males were overweight 60% were adipose; 42.2% of the women were overweight and 42.2% were adipose respectively(119). According to the research conducted by Boğaz et al. the patients who consulted to Konya Meram Medical Faculty Family Practice Polyclinic187 people were chosen by random sampling method. It has been identified that 34.8% of the participants are normal weighed, 31% are overweighed and 34.2% are obese(116). According to the research conducted by Hadjimbei et al.. where the university students in Cyprus evaluated adaptation to the Mediterranean diet, 4.1% of the participants are obese and 24.9% are overweighed(111). Research results in the literature generally correspond to the BMI profile of the research sampling.

The tendencies to use vitamin and mineral supplement against possible vitamin deficiency that may occur due to insufficient and unhealthy diet have become more frequent nowadays. According to a research made by Coşkun and Turan, vitamin usage habits and the factors affecting these habits were evaluated in Istanbul.It has been stated that the majority of the participants have irregular vitamin pill usage habit, and the reason behind using vitamin pill is to feel better and becoming more resistant to illnesses(120). Similar results were reached according to another research conducted by Bülbül et al.. In the framework of the existing research, it has been identified that 32.7% of the participants take vitamin and mineral supplements within the past 12 months(121). The occurrence of this result, as mentioned in the researches in the literature, can be explained as an irregular action committed by the people to feel themselves better.

It has been concluded that by 62.1% the majority of the participants are non-smokers. At the daily smoked cigarette section, with a rate of 49.4% of the participants, the majority has answered 10-19 cigarettes a day. Also, 31.1% of participants consume alcohol. According to the WHO 2015 data, 39.5% of the individuals aged 15 and above in Turkey use tobacco and tobacco products every day or occasionally(122). Again, according to the data published by WHO back in 2005, the total recorded and off record annual average alcohol consumption of adults is 4.09 liters in our country. In reference to the 2003 data, the frequency of people who have never drink alcohol in their lives is 81.1% (123). In their findings Bertan et al. have concluded that the frequency of smoking is 22.5%, the rate of alcohol consumption is 22.9% and the frequency of drug usage is 3.0%(124). As regards to research conducted by Boğaz et al.,it has been

identified that the rate of cigarette usage is 21.4%(116). According to research conducted by Springer et al. in El Salvador, it has been identified that 14.4% of the individuals are smokers(125). With regard to a research conducted by Günal and Günal, in the research that was conducted with 400 participants at Fırat Universityto examine some behavioral health risk factors of the workers, 45% of the individuals were smokers, 11.5% have quit smoking and 43.5% have never smoked before(126). In the research conducted by Yılmaz, it has been identified that 11.8% of males and 3.3% of females consume alcohol(127). In regards to Sanrı's findings, out of 33.6% of males and 14.9% of the female patients who consulted a dietary polyclinic consume alcohol(128).In terms of cigarette usage and alcohol consumption, the properties of the participants generally coincide with theparticipants' profiles available at other works in the literature.

In the evaluation of illness diagnosis,24.6% of the participants have been diagnosed with an illness by a doctor. Additionally, with the rate of 18.6% hypertension is one of the most commonly encountered illnesses. Hypertension is a severe disease that insidiously starts through systolic and diastolic cardiac dysfunction, causing congestive heart failure and left ventricular pump failure in the long term (October 2018). Hypertension related risk factors are generally summarized as obesity, smoking, alcohol, tea and coffee, carbohydrate-based diet, excessive salt usage, fat choices and sedentary lifestyle (129). Inrelation to the food consumption, such mistakes cause a risk factor for hypertension, and through the conducted researches it has been proven that Mediterranean diet has an important place for both prevention and treatment of hypertension (130,131). At this point, an analogy of premorbid food habits triggers hypertension can be made for the samplings included in the research. In another analysis, it has been observed that 38.5% of the participants who use treatment have been applying weight loss treatment for the existing diseases. While 31.8% of the participants who use treatment continue weight-loss treatment, 26.3% use no-salt/sodium limited dietary program. These results show that dietary treatments are an indispensable part of the treatment process that helps to remove health risk factors.

While 52.4% of the participants who use medical-dietary treatment take their diet program from a dietician; by 31% this ratio is followed by doctor prescription. According to a research conducted on adults, the frequency of receiving a diet from a dietician is 31.4% in adipose people, 31.1% in overweighed people and 12.9% in

normal weighed individuals (132). In relation to a research conducted on healthcare workers, for the diets applied by individuals while dieticians recommended a doctor recommended detox, diabetic and protein limited diets, kidney protective diet and liver-protective diet.While 28.6% of the people who use low energy weight-loss diet have received this diet from a dietician, 14.3% have received from a doctor and 57.1% have applied for the diet program by themselves (133). As for the diets followed due to any illness, the majority of the research sampling consults to an expert. The literature supports this result.

According to an evaluation in terms of dietary habits, 7.1% of the participants have one, 28.4% have two and 64.5% have three meals a day. While 18.5% of the participants don't have any refreshments; 29.9% have one, 51.7% have two and more refreshments. 77.7% of the participants skip meals. 59.1% of the participants skip breakfast, 35.4% skip lunch and 5.5% skips dinner. 53% skip a meal due to insufficient time, 26.2% due to feeling disinclined and loss of appetite, 11% due to not having a habit and 9.8% due to other factors.In research that determine the dietary habits of the participants, 81.9% regularly have 3 main meals, 54.3% never skip any refreshments, those who skip meals by the ratio of 80% neglect breakfast. As for the reason, the majority was due to reasons such as loss of appetite (48%) and not having a habit (32%) was indicated (134). Vançelik et al. have presented questions regarding skipping meals to individuals and 87.4% of the students who participated in research skip meals and the most skipped meal is breakfast(135). Similarly, Özçelik's research indicates that 36.8% of the individuals skip meals, 34.2% skip meals sometimes and the most skipped meal is breakfast(136). In Kaplan's research, that the reasons behind skipped meals were shown as,by 32.4% participants does not have any habits, 27% due to workload and 21.6% getting late and 10.8% due to feeling disinclined. In similar research done on working individuals, 71.6% of the workers have an average of 3 meals daily, 28.4% skip meals and 61.5% have refreshments(137). The reason for skipping a meal is mainly due to not having a habit (138). In another research where nutritional patterns of sale clerks were examined, participants consume 2-3 meals a day and the main reasons for skipping a meal were due to feeling disinclined and not being able to allocate time to it (139). In different research that was conducted to determine the dietary habits of the individuals, the frequency of workers who have 3 main meals is 68.3% (140).

The water intake for the body has various important roles such as protection of cells and tissue structures, conductions of physiological functions, transportation of required components to nurture cells and tissues, disposal of the metabolic wastes generated by cells and tissues and regulation of body temperature (141). While the daily required water intake for body varies due to physical and environmental conditions, it has been emphasized that for a sedentary adult the daily minimum intake of water needed is 1.5 liters (142). Research sampling indicates that daily average water intake is 8.30±4.32. Once the glass is assumed as 200ml, it can be concluded that the water consumption of participants is very close to the minimum threshold.

As defined by Angel Keys for the first time, the fundamental property of the Mediterranean diet is the variety of food (36). Aromatic foliage available in the barren and hard soils, orange and lemon trees, olive trees around the Mediterranean, and seafood in region has become a strong foundation element of the Mediterranean kitchen. Also legumes and raw vegetables that were spread through agriculture have developed the variety and richness of the kitchen (5). Traditional Mediterranean basin diets contain fresh and natural food, vegetable, fruit, grains, bread, fish, olive oil, nuts such as walnut, peanut, hazelnut, wine in moderate dose, low level of milk and meat products, and poultry animals (37,38,39, 40,41). The following foods are rich in selenium, beta-carotene, vitamin C, vitamin E, antioxidants, glutathione, calcium and folate (42,43).Daily consumption in Mediterranean diet consist of vegetables (2-3 portions/day), fruits (4-6 portions/day), non-refined cereals and cereal products (such as brown rice, pasta, whole grain bread) low fat or skimmed dairy products (1-2 portions/day), olive oil (as an extra fundamental lipid); weekly consumption of olive, potatoes, poultry, fish, nuts, and legumes (4-6 portions/week), desserts and eggs (1-3 portions/week); monthly consumptions of meat products and meat (4-5 portions/month) (46).

The most critical components of the diet are olive oil and olive itself. Olive oil can be used in salads, or with the bread, in the raw and cooked form(45). Olive oil due to its nature, the effects on the nutrition and the increased benefits through the meals it has been used to cook, has been used frequently in the Mediterranean diet (55).Antioxidants, in other words, beta-carotene (vitamin A precursor) and vitamin E in olive oil help tissues and cells to replenish themselves. Notably it also plays a vital role to preserve youth longer for women, and the development of children through the

contained vitamins A, D, E, K, aging and obesity. Once consumed hot or cold, natural olive oil reduces the acidity of the stomach and protects it from ulcer and gastritis. Olive oil is the best absorbable oil by the intestines and has an absorbent regulatory aspect. It reduces the gallstone risk and helps to melt gallstones. It also helps the replenishment of the tissues and cells of the teeth and bones and delays aging (52,57). At this point within the scope of the research, 73.5% of the participants prefer olive oil in their meals.And this ratio is followed by vegetable oils by 23.3%. Therefore, it can be concluded that the research sampling caused a change in oil preference that is suitable for the Mediterranean diet.

Within the framework of the research, it was concluded that the majority of 83.9% of participants limit their salt intake. Excessive salt usage causes many illnesses such as osteoporosis, goiter, hypertension, and cancer (143). According to WHO,the daily salt usage should be limited with 5gr (144). In addition, the Mediterranean diet also limits salt usage. Therefore, it has been considered that the participants in the research have limited salt usage to maintain adaptation to the Mediterranean diet.

Another important food component in the Mediterranean diet is whole grain products (19). It has been recommended to consume an average of 8 portions daily in the diet (81). It has been stated that whole grain resource foods reduce the risk oftype 2 diabetes, coronary heart disease, and cancer occurrence. Additionally, whole grains are low of glycemic index and regulate insulin values, therefore protecting vein functions. Additionally, whole grains regulate weight control and help the digestive system to work correctly. Whole grains' effect on health is associated with being rich in vitamin, mineral, diet pulp, lignin, beta-glycan, inulin, phytosterol and many phytochemicals (145,146). It has been observed that the majority of 83.9% of the participants have preferred whole grain products that are suitable for the Mediterranean diet.

Recently conducted researches frequently emphasize the negative effect caused by free sugar on human health by such nutritional elements as fast-food, chips, and cola. Through guide prepared, WHO indicates the correct free sugar intake in adults and children, and emphasizes that accurate free sugar consumption acts as an important factor in the prevention of non-communicable diseases and dents. Additionally, consumption of free sugars, chips, and coke are the most important risk factors of diabetes, cardiovascular diseases and obesity (147,148). In the research,it has been

observed that 65.4% of TRNC citizens do not use sugar with drinks such as tea and coffee. This result, as indicated by other works in the literature, increases the suitability level towards the Mediterranean diet.

According to another finding of the research, 67.3% of the participants consume fatty seeds such as walnut, almond, and hazelnuts as refreshments. Dried nuts such as walnuts, almonds, and hazelnuts are an excellent source of minerals, vitamins, pulp, and protein. Dried nuts such as almonds and hazelnuts contain healthy fats and these fats mainly affect cholesterol and the health level of the heart (19) At this point, participants have parallel refreshment habits towards the Mediterranean diet.

Within the scope of the Mediterranean diet, vegetables should be consumed 2-3 portions a day. Due to vegetables being rich in mineral and vitamin, food fiber content and low energy content, it is an essential group for human health and nutrition. Consumption of fruits and vegetables in their respective seasons, in relation to the personal state of the individual, physical activity, gender and age, and sufficient consumption reduces the risk of diabetes, cancer, hypertension, heart and vein diseases, and digestive system disorders, delays aging and strengthens the immune system (51). In the research sampling, it has been found that the people who pay attention to their vegetable consumption is 50.7%.

Poultry animals, eggs and fish are important resources of protein. Consuming fish in various stages reduces the risk of heart diseases. Turkey and chicken are also a great source of protein and contains less amount of saturated fat compared to red meat. In terms of the cholesterol amount, eggs have been debated for a long time, however, nowadays it has been known that it is not as dangerous as it was thought to be (19).

Fish consumption in the Mediterranean diet is vital due to fish being an outstanding food and due to the inverse proportion between fish consumption and mortality rates caused by coronary heart disease (149). Some researchers believe that saturated fats in a diet affects memory and increase the potential risk of Alzheimer's disease. Fatty acids are 1/5 of the dry weight of the human brain, and 20% of these fatty acids are in omega-3 docosahexaenoic acid (DHA) form and this is concentrated in nerve synapses and has anti-inflammatory properties that prevent Alzheimer's disease. It has been reported that fatty fish such as sardine and anchovy have important benefits.

Fatty fish is a source of omega-3, which is a type of multi-unsaturated fatty acid. And it is beneficial for the heart due to its anti-inflammatory effect, and it prevents vasodilation blood veins. Additionally, it has been stated that eicosapentaenoic (EPA) acid, which is another type of omega-3 fatty acid, and DHA prevents carcinogenesis. The examination of conducted researches shows that having fish in a person's diet acts as a shield against cardiovascular diseases. In the panel where the studies on the side effects of the cardiovascular diseases were examined, the recommended diets for EPA and DHA 25-500 mg/day (150). However, according to the conducted researches indicate that the fish consumption in our country generally is at a low level, (151,152,153). In the results of the research, 66.8% of the sampling prefers consuming fish. This result can be associated with TRNC being located on a shore and adaptation to the Mediterranean diet.

On the evaluation regarding food consumption of the participants, the daily consumed products are mostly 76.8% coffee, 64.9% tea, 60.7% olive oil and 60.7% bread. According to the research conducted by Bal et al. at the Tokat province,individuals consume 291.95gr of bread daily(154). In another research conducted by Yurdatapan in Edirne province,individuals consume 175gr of bread daily(155). Additionally, Toker and Kaya have presented that in our country tea consumption is very intense and this ratio is followed by Turkish coffee, espresso, filtered coffee, instant coffee, and iced coffee accordingly(156). These results show that research sampling, through the concentrated consumption of coffee, tea, and bread consumption, is compatible with Turkey's profile. Also, olive oil being one of the most consumed foods by the participants indicates adaptation to the Mediterranean diet.

Evaluation of diet quality indicates that by 57.1% majority of the participants have an optimal diet, 31.3% of the participant group requires intervention to their diet, and 11.6% of the participants have a very low-quality index in their diet. In a research made by Barut Uyar and Yücecan,it has been identified that out of 400 adults 2.7% have an optimal diet and 78.8% require intervention and 18.8% have a very low-quality index(157). In another research made by Öteleş and Bilgiç,it has been stated that 8.9% of the participants have optimal, 52.6% require intervention and 38.5% have a very low-quality index in their diet(158). As for the research made by Hadjimbei et al. to examine university students living in Cyprus, the average adaptation to the Mediterranean diet is high and those who have optimal diet are in the majority. These results indicate that in

our country individuals generally require intervention to their diets in accordance with Mediterranean Diet Quality Index, and Mediterranean regions such as Cyprus apply the Mediterranean diet at an optimum level(111). Therefore, this result supports the research finding.

In a comparison made between genders, it has been identified that the diet quality index is higher in females. Once the researches on the topic have been examined, contradictory results can be observed. Erçim and Pekcan have found that quality indexes of females are significantly higher than males, in parallel to the research findings of the current research(159). Contrarily to the research findings, Barut Uyar and Yücecan have concluded that there is no significant difference between females and males in terms of diet quality index(157). Similarly, according to research conducted by Kyriacou et al. in Cyprus, diet quality index does not differentiate by gender(160).

Another finding of the research indicates that Mediterranean diet quality does not differentiate by age. Therefore participants aged 36 and above have significantly lower dietary quality. This result shows that dietary quality is higher among young individuals. According to the meta-analysis research done in Cyprus by Kyriacou et al., as parallel to this finding, it has been identified that the lower age groups have a higher adaptation to the Mediterranean diet(160). It has been considered that the reasons behind such a result are individuals of younger ages wish to lose weight due to high body image concern and more willing to apply for diet programs. Another finding of the research that supports this claim is the significant difference in the Mediterranean diet quality index according to BMI. The group consists of normally weighed individuals who have a higher Mediterranean diet quality index than overweighed and obese. Also, the Mediterranean diet quality differentiates upon the changes that occurred at the body mass within the last 6 months. According to this, those who had a change in body mass have significantly higher diet quality than other groups. At this point, the prominent advantages of the Mediterranean diet in terms of health on weight control are higher (150). According to research made by Sundararajan et al.,a negative relationship between diet quality index and BMI has been identified(161).

Another finding of the research indicates that the Mediterranean diet quality index does not differentiate by marital status. Due to stew-like meal habits being higher in our country's culture, and within patriarchal fundamentals, mothers or wives cooking

meals at home, it has been expected from those who live with their parents to show similar habits with those who live with their wives. By the majority of 47.9% of participants' cooking their own meals and it is followed by parents with a ratio of 29.4% supports the claim of no difference in diet quality by the party who cooks the meals. Additionally, the evaluations regarding the cohabitants verify the claim. Accordingly, those who live with their parents have significantly higher diet quality than those who live with their friends. It has been confirmed by other researches that individuals who live with their friends dine out more and preferred food usually consisting of fast-food products (162,163). Therefore, the expectation regarding the consumption of fast-food products lowers the Mediterranean diet quality index in parallel.

According to the evaluation results regarding the education level, Mediterranean diet quality does not differentiate in terms of education level. For such a result it has been considered that the Mediterranean diet is independent of education level, and TRNC being located at the shores of the Mediterranean is generally effective as a nutrition culture. In the researches regarding the topic conducted at Cyprus and Mediterranean specific, similar findings have been found (111,160).

In terms of cigarette and alcohol consumption, it has been identified thatthe Mediterranean diet quality index does not differentiate by cigarette and alcohol consumption. Generally, individuals' dietary habits having no relation with smoking and non-addictive alcohol consumption have been proven with other works in the literature (164,165). On the other hand, Erçim and Baydaş have concluded that exposure to passive smoking reduces diet quality in their works(159). Similarly, Şahin has concluded that individuals who smoke have a lower diet quality index(166).

According to another finding of the research, the Mediterranean diet quality score does not differentiate towards the total main meal and refreshment amounts. In addition to participants generally having different meal numbers, it has been considered that adaptationto the Mediterranean diet has caused such finding. At this point, the important aspect is thought to be skipping meals rather than meal numbers. Thus it has been identified that in the other conducted analyses diet quality index differentiates by skipping meals. Accordingly, participants who don't skip meals have significantly higher diet quality indexes. Participants who have a higher diet quality index through

complying with a determined diet program are anticipated. Similarly, Şahin has identified an opposite relation between skipping meal and diet quality index in their work(166). Also, other works in the literature show a positive relation between regular diet and diet quality index (165,167).

As for the evaluation of water consumption, the Mediterranean diet quality index does not affect by water consumption. As so in the other diet programs, water consumption has an important place in the Mediterranean diet. Within diet's scope, daily water consumption of 1.5-2 lt has been recommended with the variability of personal and environmental changes in mind (168). However, due to sampling's average daily water consumption being close to the threshold, it can be said that no significant difference in terms of diet quality index is within expectations.

Once research findings have been evaluated generally, important proofs of individuals who live in TRNC remain complying with the Mediterranean diet draws attention. Once the well-documented health benefits of the Mediterranean diet have been considered, it has been considered that nationals' adaptation levels to the diet will create a protective factor towards health issues in the long term. In this context, it has been recommended to conduct public information movements regarding the Mediterranean diet in both TRNC and our country.

To prevent the highly common consumption of instant food products in the society, creating awareness on healthy nutrition and Mediterranean Diet style nutrition is required. This can be done through educations given by the dieticians and experts on the topic.The members of society's awareness should be raised on healthy nutrition and they should be encouraged on the matter. On the other hand it has been recommended that joint projects should be conducted by the relevant public state institutions and organizations and, NGOs of such organizations. On the other hand, educative programs that can be used by individuals compatible with their living standards could be published through mass mediaorgans and social media. Additionally, through educations regarding purchasing food, individuals should begain the habit of reading food labels. By this means obesity and other illnesses will be prevented.

Research has been limited to 422 participants living in TRNC. By keeping this limitation in mind, in the next researches to evaluate adaptation to the Mediterranean

diet in various parts of Turkey, cross-sectional studies and bigger samplings are recommended. Especially, comparative studies between regions will reveal the application of the Mediterranean diet on a region basis.

Another important limitation of the Mediterranean diet is adaptation level has been associated with socio-demographic properties of participants and dietary habits. In the next studies, evaluation of physical activity and adaptation to the Mediterranean diet is recommended. Nevertheless, keeping the Mediterranean diet in mind, especially for weight loss, adaptation level, and body perception can be evaluated.

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7. APPENDIX

7.1. Ethical Council Approval

BK: 854-2019

YAKIN DOĞU ÜNİVERSİTESİ
BİLİMSEL ARAŞTIRMALAR ETİK KURULU

ARAŞTIRMA PROJESİ DEĞERLENDİRME RAPORU

Toplantı Tarihi :28.03.2019
Toplantı No : 2019/67
Proje No : 778

Yeditepe Üniversitesi Sağlık Bilimleri Enstitüsü öğretim üyelerinden Dr. Hülya Demir'in sorumlu araştırmacısı olduğu, YDU/2019/67-778 proje numaralı ve **"Kuzey Kıbrıs Türk Cumhuriyeti Lefkoşa İlçesinde Yaşayan 18-65 Yaş Bireylerin Akdeniz Diyetine Uyumları nın Belirlenmesi"** başlıklı proje önerisi kurulumuzca değerlendirilmiş olup, etik olarak uygun bulunmuştur.

1. Prof. Dr. Rüştü Onur (BAŞKAN)
2. Prof. Dr. Nerin Bahçeciler Önder (ÜYE) KATILMADI
3. Prof. Dr. Tamer Yılmaz (ÜYE)
4. Prof. Dr. Şahan Saygı (ÜYE)
5. Prof. Dr. Şanda Çalı (ÜYE) KATILMADI
6. Prof. Dr. Nedim Çakır (ÜYE)
7. Prof. Dr. Kaan Erler (ÜYE) KATILMADI
8. Prof. Dr. Atalay Arkan (ÜYE) KATILMAD
9. Doç. Dr. Ümran Dal Yılmaz (ÜYE)
10. Doç. Dr. Nilüfer Galip Çelik (ÜYE) KATILMADI
11. Doç.Dr. Emil Mammadov (ÜYE)
12. Doç. Dr. Mehtap Tınazlı (ÜYE) KATILMADI

7.2. Questionnaire Form

Questionnaire No: Date:
Pollster Name-Surname: Aslıhan SOYAL
Address:

I. GENERAL INFORMATION

1. Name-Surname:.....

2. Gender: 1. Male 2. Female

3. Nationality: 1. TRNC 2. TR 3. Other (.....)

4. Place of Birth:.....

5. Birth Date:...../...../..... Age:.....

6. Body Mass:.....kg Waist Circumference:.....

7. Height:..... cm BMI:.....

8. Has there been any change in your body mass within last 6 months?
   1. Yes (gained ..... kg / lost ....kg) 2. No 3. Don't know

9. Marital Status: 1. Single 2. Married

10. Class: 1. Freshman 2. 2nd Year 3. 3rd Year 4. Senior

11. Lived place:

1.At home, with family	2.At home, alone	3.At home, with friends
4. At dormitory, alone	5.At dormitory with friends	6.With relatives
7. Other(.....)		

12. Do you have a health problem diagnosed by a doctor? (If your answer is "no", skip to question #17)
   1. Yes 2.No

13. If you have a diagnosed health problem what is it/are them?

1.Overweightedness	7. Hyperlipidemia, Cholesterolemia
2.Ulcer-Gastritis	8. Kidney diseases
3. Diabetes	9. Liver-gall bladder diseases
4.Hypertension	10. Food Allergies
5.Hypotension	11. Psychiatric Disorders
6. Iron deficiency anemia	12. Other(.....)

14. Do you use a medical diet for your health problem? 1. Yes 2. No

15. Pick the medical diet(s) you're using.

1.Weight loss	5. Low pulp
2. Low fat,cholesterol	6. High pulp

3. No Salt, sodium limited	7. Protein limited
4. Compatible with diabetes	8. Other (.....)

16. From whom did you receive your nutritional treatment?

1.Dietician	5.Radio/television
2. Doctor	6.Magazine/Newspaper
3.Friends	7. Internet
4. Class Notes	8. Other (.....)

17. Have you used vitamin-mineral tablets in the past twelve months?
1. Yes 2. No

18. For how long have you used the vitamin-mineral tablets?
1. A month or less 2. More than a month

19. Did you use vitamin-mineral tablets for treatment?
1. Yes 2. No

20. Who recommended vitamin-mineral tablet usage?

1.Doctor	4.Relative/Friend
2.Dietician	5.My family
3.Pharmacist	6. No one recommended to me, I bought it on my own

21. Do you smoke cigarettes?
1. No 2. No, I used to 3. Yes, I still smoke

22. If your answer is "Yes", choose the amount you smoke daily.
1. 1-4 pieces 2. 5-9 pieces 3. 10-19 pieces 4. ≥20 pieces

23. Do you drink alcohol?
1. Yes 2. No

24. If your answer is "Yes", choose the amount you drink in one sitting. (1 sec = 360 ml beer, 150 ml wine, 45 ml raki, whiskey, gin, etc.)
1. M: ≥5 sec, F: ≥4 sec 2. M: <5 sec, F: <4 sec

25. If your answer is "M: <5 sec, F: <4 sec'' describe the amount of alcohol you consume.

1. M:<1-≤14 sec ,F<1-≤7sec	
2. M: <14-≤21 sec, F: <7-≤14sec	
3. M: <21-≤28 sec, F: <14-≤21sec	
4. M: <28-≤35 sec, F: <21-≤28sec	
5. M: >28 sec, F: >35sec	

II. DIETARY HABITS

26. How many meals do you have in a day? (.....Main Meals..... Refreshments)

27. Do you skip meals?
1. Yes 2. No 3. Sometimes

28. If your answer is "Yes" and "Sometimes" which main meals/refreshments do you skip?

1.Morning 2. Noon 3. Evening

29. What is your reason to skip meals?

1. Insufficient time	2. Feeling disinclined, loss of appetite	3. Meal doesn't get prepared
4. Want to lose weight	5. Doesn't have any habit	6.Other (.....)

30. How many glasses of water do you drink?.....

31. Who cooks the meals at the place of your residence?

1.Myself	2.Mother/Father	3. My relatives
4. Prepared in the kitchen of my residence	5. Other(.....)	

32. Which oil type do you use in your meals?

1.Olive oil	2. Vegetable oils	3.Margarine
4.Butter	5. Other(.....)	

33. Do you limit the salt amount in your meals? 1. Yes 2. No

34. Do you prefer whole grain products? 1. Yes 2. No

35. Do you prefer snacks such as potato chips, popcorn etc.?

1. Yes 2. No

36. Do you limit yourself on not consuming snacks before main meals?

1. Yes 2. No

37. Do you use sugar in your drinks such as tea, coffee etc.? 1. Yes 2. No

38. Do you consume oily seeds such as walnut, almond, hazelnut etc. in your refreshments?

1. Yes 2. No

39. Do you pay attention to consume vegetables every day? 1. Yes 2. No

40. Do you prefer fish in terms of consuming meat? 1. Yes2. No

41. Select the answers for the following questions:

Select the amount of food consumption frequency within last month (portion/month)

	No Consumption	Every day	5-6 Times in a week	3-4 Times in a week	1-2 Times in a week	Once in 15 days	Once in a month
Low fat milk, yogurt							
Full fat milk, yogurt							
Cheese							
Red meat							
Giblets							
Sausage, salami, pastrami							
Chicken, turkey							
Fish							
Egg							
Legume							
Bread							
Bulgur, rice, pasta etc.							
Green leaved vegetables							
Other vegetables							
Potatoes							
Citrus fruits							
Other fruits							
Butter, margarine							
Liquid oils							
Olive oil							
Olive							
Honey, jam							
Molasses							
Chocolate etc.							
Pastry							
Milk puddings							
Cake, biscuit							
Carbonated drinks							
Instant fruit juice							
Instant soup							
Hamburger, pitta etc.							
Donner kebab							
Instant canned food							
Frozen food							
French fries							
Ice cream							
Mineral water, fizzy water							
Coffee, Nescafé							
Tea (black, green)							
Herbal tea							
Alcoholic drinks							
Wine							
Breakfast desserts							
Simit							
Potato chips etc.							

III. MEDITERRANEAN DIET QUALITY INDEX

	Consumption frequency (serve/month)					
How frequently consume the following food?	**None**	**1-4**	**5-8**	**9-12**	**13-18**	**>18**
Unrefined grains (Whole grain bread, pasta, rice etc.)	0	1	2	3	4	5
Potatoes	0	1	2	3	4	5
Fruits	0	1	2	3	4	5
Vegetables	0	1	2	3	4	5
Legumes	0	1	2	3	4	5
Fish	0	1	2	3	4	5
Red meat and products	5	4	3	2	1	0
Poultry animals	5	4	3	2	1	0
Full fat dairy products (cheese, yogurt and milk)	5	4	3	2	1	0
Olive oil usage while cooking (times/week)	**None**	**Rarely**	**<1**	**1-3**	**3-5**	**Everyday**
Alcoholic drinks (ml/day, 100 ml=12 g ethanol)	**<300** 5	**300** 4	**400** 3	**500** 2	**600** 1	**>700 or none** 0

8. CURRICULUM VITAE

Personal Informations

Name	Aslıhan	**Surname**	Soyal
Place of Birth	Edirne	**Date of Birth**	1995
Nationality	T.C.	**TR ID Number**	
E-mail	soyalasli.1@gmail.com	**Phone number**	

Education

Degree	Department	The name of the Institution Graduated From	Graduation year
Doctorate			
Master	**Nutrition and Dietetic**	**Yeditepe University**	2020
University	**Nutrition and Dietetic**	**Yeditepe University**	2017
High school	-	**Bülent Ecevit Anatolia High-School TRNC**	2013

Languages	Grades (#))

#All the grades must be listed if there is more than one (KPDS, ÜDS, TOEFL; EELTS vs),

Work Experience (Sort from present to past)

Position	Institute	Duration (Year - Year)
		-
		-

Computer Skills

Program	Level

***Excellent , good, average or basic**

Scientific works

The articles published in the journals indexed bySCI, SSCI, AHCI

Articles published in other journals

Proceedings presented in international scientific meetings and published in proceedings book.

Journals in the proceedings book of the refereed conference / symposium

Others (Projects / Certificates / Rewards)
