



T.C.

YEDITEPE UNIVERSITY

INSTITUTE OF HEALTH SCIENCES

DEPARTMENT OF NUTRITION AND DIETETICS

**THE COMPARISON OF HEALTHY EATING
INDEX VALUES OF FEMALE PATIENTS
BETWEEN 25-30 AND 30-40 BODY MASS INDEX
BETWEEN 18-65 YEARS WHO APPLY TO A
SPECIAL HOSPITAL NUTRITION AND DIET
POLICILINIC**

Dietitian Meryem GÜBÜR

MASTER'S THESIS

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SUPERVISOR

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Bu tez Yeditepe Üniversitesi Lisansüstü Eğitim-Öğretim ve Sınav Yönetmeliğinin ilgili maddeleri uyarınca yukarıdaki jüri tarafından uygun görülmüş ve Enstitü Yönetim Kurulu'nun 13/10/2017 tarih ve 2017/19-01 sayılı kararı ile onaylanmıştır.

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LIST of SYMBOLS and ABBREVIATIONS

BMI	Body Mass Index
cm	Centimeter
d	Day
DASH	Dietary Approaches to Stop Hypertension
DRI	Dietary Reference Intakes
HEI	Healthy Eating Index
IGF-1	Insulin-like Growth Factor-1
kg	Kilogram
mg	Miligram
mt	Meter
NHANES 2003-2004	In the 2003-2004 National Health and Nutrition Examination report
SPSS 20.0	Statistical Package for the Social Sciences
USDA	United States Department of Agriculture
w	Week
24HDR	24 Hour Dietary Recall

ABSTRACT

Gübür M. (2017). The Comparison of Healthy Eating Index Values of Female Patients between 25-30 and 30-40 Body Mass Index between 18-65 Years Who Apply to a Special Hospital Nutrition and Diet Policlinic. Yeditepe University, Institute of Health Sciences, Department of Nutrition and Dietetics, MSc thesis. İstanbul.

In this study, diet quality of the female patients aged 18-65 with a body mass index (BMI) of 25-30 who applied to the polyclinic of Nutrition and Dietetics of a private hospital were compared with those of women with body mass index 30-40 using Healthy Eating Index (HEI). This study conducted on 80 patients; 39 patients had body mass index of 25-30 and 41 patients had body mass index of 30-40. The mean age was found as $34,64 \pm 12,12$ years. Nutrient intake was measured by taking 24-hour dietary recall (24HDR) method and dietary quality was assessed by means of the HEI.

BMI' 25-30 participants with a mean HEI score of 48.10 ± 12.54 and participants with a BMI of 30-40 had an HEI average score of 52.48 ± 13.92 . 1% of the total respondents had good news, 54% needed to fix it, and 45% had bad news. In total participants, cereal, vegetables, fruit, milk, sodium and other nutritional component scores of HEI were found to be low in the overall population. The HEI value with the lowest score is the fruit, while the highest HEI value is found as total fatty acid. When the dietary qualities were compared, it was seen that the HEI scores did not differ significantly according to the BMI ($p > 0.05$). As a result of the analyzes made, there were no significant differences when HEI scores of participants were compared with marital status, age of menopause, age of menarche, smoking consumption frequency, total number of pregnancies, frequency of alcohol use, number of main meals, number of snacks, ($p > 0.05$). There was a significant difference in HEI scores according to their profession ($p < 0.05$). As a result, there is no significant difference in the degree of comparison between the groups with BMI 25-30 and 30-40 according to the total HEI scores, the total dietary quality in both groups needs to be changed and improved.

Key words: Body mass index, obesity, diet quality, healthy eating index, nutrition

ÖZET

Gübür, M. (2017). Özel Bir Hastanenin Beslenme ve Diyet Polikliniğine Başvuran 18-65 Yaş Arası Beden Kitle İndeksi 25-30 ve 30-40 Arası Olan Kadın Hastaların Sağlıklı Yeme İndeks Değerlerinin Karşılaştırılması. Yeditepe Üniversitesi, Sağlık Bilimleri Enstitüsü, Beslenme ve Diyetetik Bölümü, Master Tezi. İstanbul.

Bu çalışmada, Özel bir hastanenin Beslenme ve Diyetetik polikliniğine başvuran 18-65 yaş arası beden kitle indeksi 25-30 olan kadın hastaların diyet kalitesi, Sağlıklı Yeme İndeksi'ni(HEI) kullanarak beden kitle indeksi 30-40 arası olan kadın hastaların diyet kalitesi ile karşılaştırılmıştır. Bu çalışma 80 kadın hasta üzerinde yürütülmüştür;39hasta beden kitle indeksi 25-30 ve 41 hasta beden kitle indeksi 30-40 olarak katılmıştır. Ortalama yaş $34,64 \pm 12,12$ olarak bulunmuştur. Besin alımı genel anket ve 24 saatlik geriye dönük hatırlama yöntemi ile ölçülmüştür ve diyet HEI'nin ortalamaları ile değerlendirilmiştir. BKİ'si 25-30 olan katılımcıların HEI ortalama puanı $48,10 \pm 12,54$, BKİ'si 30-40 olan katılımcıların HEI ortalama puanı $52,48 \pm 13,92$ olarak bulunmuştur. Toplam katılımcıların %1'i iyi diyete sahipken, %54'ü düzeltmeye ihtiyacı olan diyete ve %45'i ise kötü diyete sahip olarak bulunmuştur. Toplam katılımcılarda HEI'nin tahıl, sebze, meyve, süt, sodyum ve diğer besin bileşen puanları popülasyonun genelinde düşük bulunmuştur. En düşük puana sahip HEI değeri meyve iken, en yüksek HEI değerine toplam yağ asidi olarak bulunmuştur. Yapılan analiz sonucunda diyet kaliteleri karşılaştırıldığında BKİ'lerine göre HEI puanlarının anlamlı olarak farklılaşmadığı görülmüştür ($p>0.05$). Yapılan analizlerin sonucunda katılımcıların HEI puanları ile medeni durum, menopoza girme yaşı, menarş yaşı, sigara kullanım sıklığı, toplam gebelik sayısı, alkol kullanma sıklığı, ana öğün sayıları, ara öğün sayıları, atlanan öğün, eğitim durumları karşılaştırıldığında anlamlı farklılıklar gözlenmemiştir ($p>0.05$). Mesleklerine göre HEI puanları arasında ise anlamlı farklılık görülmüştür ($p<0.05$). sonuç olarak, toplam HEI skorlarına göre BKİ'si 25-30 arasında olan grup ile BKİ'si 30-40 arasında olan gruplar kıyaslandığında anlamlı derecede farklılaşma bulunmasa da her iki grubunda toplam diyet kalitesinin değişikliğe ve düzelmeye ihtiyacı vardır.

Anahtar kelimeler: Beden kitle indeksi, obezite, diyet kalitesi, sağlıklı yeme indeksi, beslenme

1. INTRODUCTION

Nutrition supports all of life's processes with involved in how organisms obtain nutrients metabolize them (1). We need to get the calories involved energy and nutrients for proper growth are called good nutrition. To key to good nutrition is variety, balance, and moderation (2).

Nutrition and health are of great importance throughout life. For this reason, it is important to evaluate the quality of the diet (3). Healthy eating can help reduce the risk of illnesses such as heart diseases, blood pressure, diabetes, osteoporosis, diabetes, various types of cancer. They also help to achieve a healthy body weight (4).

1.1. Nutrition

Nutrition; to protect the health, to grow, to develop, and to increase the quality of life, the necessary nutrients are taken to the body at the appropriate time and in sufficient size. Adequate and balanced nutrition, each of these nutritional items in the amount required and the proper use of the body is taken. Unbalanced nutrition is defined as the intake of nutrients above or below the requirement, especially energy (5).

Failure to make proper nutrient selection, misinformation and beliefs about nutrients creates differences in nutrient selection of individuals and hence nutrient uptake, resulting in inadequate nutrient intake and unbalanced energy intake (5-6).

The lack of information, attitudes and behaviors about the foods and the fallacy of the foods constitute differences in the food consumption of the individuals. Inadequate or unbalanced nutrition can also cause various health problems. Incorrect eating habits and / or overfeeding also lead to many health problems such as obesity, cardiovascular diseases, hypertension, hypercholesterolemia and diabetes (6).

1.2. Obesity

Obesity has reached epidemic proportions with more than 1 billion adults with globally obesity and is a major contributor to the global burden of chronic illness and disability. Obesity living in developing countries, usually with malnutrition, is a complex situation affecting almost all age and socio-economic groups with serious social and psychological dimensions (7).

Parallel to the recent rise in obesity, the metabolic syndrome is also more common. Insulin resistance, a pathophysiology of metabolic syndrome, is a common consequence of obesity. Insulin resistance, which leads to an increase in insulin and insulin-like growth factor-1 (IGF-1), ultimately activates a cascade that accelerates cell proliferation and prevents programmed cell death. However, lifestyle interventions, including diet and physical activity, can reverse the metabolic syndrome, insulin resistance, and the tumorigenic effect of insulin. American Cancer Society's recommendation for cancer prevention is to maintain a healthy weight for a lifetime, since overweight and obesity as well as obesity contribute to 14-20% of cancer-related mortality (8).

Genes are important in determining the susceptibility of a person to weight gain. Sensitivity of a person to weight gain is determined by energy balance, caloric intake and physical activity. Thus social changes and world-wide dietary transitions can lead to the spread of obesity. Economic growth, modernization, urbanization and globalization of food markets are just a few of the reasons why obesity spreads (7).

Depending on the individual and the situation, the decision to eat and the decision to eat certain foods vary. Due to individual differences and different nutritional experiences and attitudes, lifelong demands develop throughout life. Food wishes and purchases can be a result of the interaction between individual physiological and psychological traits. Overweight and obese individuals show a tendency towards greater appreciation and selection of energy intensive foods. However, liking (eating pleasure) is an important part of food selection (9).

However, overall change in food choice and eating behavior can only make a small contribution. Challenges in weight control, tips and motivations for eating, and an increase in eating pleasure can be seen. People who are very interested in food intake and weight control may be sensitive to cues that can lead to feelings, emotions and excessive feeding and may weaken as nutritional attempts. It can be seen that attempts to regenerate dieting, to repeat high daily fluctuations in daily intake, and to perform strict control of eating all, contradict weight-control efforts and disrupt better food selection behaviors (9).

Throughout life, the individual's socio-economic and cultural environment will largely determine certain sensory experiences. In other words, they determine how often the food will be consumed. Although the epidemiologically overweight risk is

associated with higher fat intake, we found that the weight situation did not show a consistent association with the single food or food group. The new data show that a better diet profile may be associated with weight control and a more successful diet and more regular eating patterns. A high change in daily energy intake is associated with higher fat and energy intake and BMI (9).

Most food appraisal evaluations are done by recording the eating behavior of the patient and estimating the nutrient intake using this register. Two techniques are used to record a patient's food intake - nutrition history and food frequency surveys. A diet call is made by recording or calling each food and drink that the patient consumes over a predetermined period of time. The length of time the diary is kept may vary from a few days to a few months. The shortest time required to obtain accurate energy consumption estimates appears to be three days (10).

This study was compare and reveal the frequency of food consumption by overweight and obese individuals and was conducted to determine weight status using body mass index (BMI) of overweight and obese women and to evaluate their eating habits.

1.3. Anthropometric Measurements:

Anthropometric measurements are important because of the presence of protein and fat deposits in the determination of nutritional status. When anthropometric measurements are used regularly and regularly, the nutritional status of the individual is assessed as healthy.

1.3.1. Waist Hip Ratio (Android/Jinoid) (Abdominal/Gluteal):

The relationship between waist / hip ratio in adults and chronic diseases in waist circumference has been shown in epidemiological studies. Waist hip ratio android and jinoid definition of obesity.

$$\text{Waist/Hip} = \frac{\text{waist circumference (cm)}}{\text{Hip circumference (cm)}}$$

Waist/hip ratios (11)

Male :< 0.90

Female :< 0.85

1.3.2. Measurement of Waist Circumference:

It is located between the lowest rib bone and the crystalline bone. The environment passing through the middle point is measured by the tape measure.

1.3.3. Measurement of Hip Circumference:

Stand on the side of the individual. The environmental measure from the highest point is made.

Waist-hip circumference is associated with obesity, 94 cm in men and above risk, 102 cm and above are mentioned as high risk. In women this classification is accepted as 80 cm and above risk, 88 cm and above is accepted as high risk. This classification show is table 1.

Table 1. Obesity classification on the basis of waist circulation

	Risk	High Risk
Male	≥ 94 cm	≥ 102 cm
Female	≥ 80 cm	≥ 88 cm

1.3.4. Body Mass Index (BMI)

BMI is an anthropometric measure of body weight and height measurements accepted by the World Health Organization in obesity studies. It is also the most common and valid standard weight index that can be easily applied and applied to all individuals without sex discrimination. The body mass index is found the weight in kilograms by the height in meters (kg/m^2). Individuals are classified according to the BMI values in Table 2, which World Health Organization also accepts; they are classified as weak, normal, overweight, obese, and can be separated into classes among themselves in obesity. BMI measurement does not yield accurate results in children, in pregnant women, and in athletes with excess muscle mass (12-13).

Table 2. Obesity classification on the basis of BMI

Classification of BMI (kg/m²)	BMI
Weak	<18.5
Normal weight	18.5-24.9
Overweight=Plump	25-29.9
Obesity Step 1	30-34.9
Obesity Step 2	35-39.9
Extreme Obesity (morbid) Step 3	>40

2. HEALTHY DIET

Diet is the form of consumption and consumption of foods consumed to provide energy and nutrition to support growth and maintain tissue health. Everyone has a diet. Malnutrition and dietary needs may not be met adequately while obesity can be seen with excessive nutrition (12).

A balanced diet will meet all the nutritional needs of a person at the appropriate rate and amount. In a balanced diet, there must be a variety of foods and vary according to the age, gender, activity level and lifestyle of the person (12).

Healthy eating; Taking into account the age, gender and physiological state of the individual, all nutritional items that are needed for a healthy and productive life for a long time are met in sufficient quantities. Nutrition; It is necessary to be conscious for growth, development, maintenance of life, treatment of diseases and protection of health (14).

2.1. The Healthy Eating Index (HEI)

The HEI is a measure of nutritional quality in compliance with the Dietary Guidelines for Americans, which are specifically the nutrition policy for the United States government and the foundation of all federal nutrition guidelines. The accompanying U.S. Department of Agriculture (USDA) Food Patterns translate the most important recommendations of the Dietary Guidelines into specific recommendations stated in quantities regarding the various amounts of foods to be consumed at the level of 12 calories with calorie limits from solid fats and added sugars (15). The USDA Food Patterns are used to establish the scoring standards for the HEI. In addition to the USDA Food Patterns, the 2005 and the 2010 editions of the Dietary Guidelines contained the Dietary Approaches to Stop Hypertension (DASH) Eating Plan as another example of a dietary plan which exemplifies dietary terms of the Dietary Guidelines. By comparison with the specific food consumption patterns in the U.S., both the USDA Food Patterns and the DASH Eating Plan include higher amounts of vegetables, fruits, whole grains, and low-fat dairy products and fewer amounts of refined grains, saturated fatty acids, and added sugars (15, 16).

The USDA and U.S. Department of Health and Human Services publish the Dietary Guidelines every 5 years. The last revision of HEI was to show the 2005 edition of the Dietary Guidelines (17-18). The edition of the 2010 Dietary Guidelines and revised USDA Food Patterns required an update to the HEI-2005 with the purpose of grasping the most important changes, such as the addition of seafood (fish and shellfish) recommendations and refined grain limitations (15). However, the HEI-2010 included essential features of the HEI-2005 defined elsewhere(17): (15) diet quality is evaluated from two points of view: sufficiency (nutritional components to increase) and moderation (nutritional components to decrease)(16);the scoring standards are based on density in a way that the mix of foods is assessed in a comparative way and (17) the standards in terms of the maximum scores are the least limiting recommendations among those varying according to energy level, gender, and age. For the sufficiency of nutritional components, this means that increasing intake levels get increasingly higher scores; while for the moderation of nutritional components, increasing intake levels get decreasingly lower scores.

2.2. HEI-2010 Components

A list of the HEI-2010 and HEI-2005 components include their point values and scoring standards can be seen in Table 3. Figure 1 outlines the key dietary recommendations contained in the 2010 Dietary Guidelines regarding the components of HEI-2010. Just as its precursor, the HEI-2010 has 12 components, 9 sufficiency components and 3 moderation components (Table 3), and Figure 1 outlines how the USDA Food Patterns and the nutrients define the relation of the HEI-2010 in the HEI-2010 components. Total Fruit, Whole Fruit, Total Vegetables, Total Grains, and Sodium from the HEI-2005 were included again. Milk and Meat and Beans which have been so recalled Dairy and Total Protein Foods, respectively, were included again for the consistency with the 2010 USDA Food Patterns.

Calories of the HEI-2005 components coming from Solid Fats, Alcoholic Drinks, and Added Sugars have been changed slightly as stated below and recalled Empty Calories, which is a shorter term used to emphasize this attribute for consumers. Some components from the 2005 version were modified: Dark Green and Orange were replaced by Greens and Beans.

2.2.1. Vegetables and Legumes;

Seafood and Plant Proteins showing the selected subgroups of protein foods were introduced; two components were replaced by Fatty Acids, Saturated Fat and Oils; Refined Grains was added; and Total Grains was removed. These new components are defined in detail below. Additional details corresponding to the differences between the 2005 and 2010 editions, with the differences in maximum point values of the components and scoring standards, can be seen in Table 4.

2.2.2. Greens and Beans

Among the five vegetable groups included in the 2010 USDA Food Patterns, dark green vegetables and beans and peas are the subgroups for which intakes are farthest from the recommended levels (18-19). These two subgroups were included in the HEI-2010 contains as a single component called Greens and Beans. The HEI-2005 included orange vegetables in the vegetable subgroup component (known as Dark Green and Orange Vegetables and Legumes) since they also were among those subgroups of vegetables for which average intakes were farthest from the recommended levels (20). But when the USDA Food Patterns were updated for compliance with the 2010 Dietary Guidelines, the red vegetables were removed from the “other vegetables” subgroup, and they were combined with the orange vegetables and formed a new “red-orange” subgroup. Since tomatoes are consumed so often, intake of the new red-orange vegetable subgroup is not far from recommended levels; so the HEI-2010 does not include this subgroup.

The standard of the maximum score regarding the component of Greens and Beans is the total of the least limiting daily recommendations for those two subgroups of vegetables included in the USDA Food Patterns, stated on the basis of 1,000 calories (15, 21).

2.2.3. Seafood and Plant Proteins

The 2010 Dietary Guidelines has a new seafood recommendation based on many benefits it has, including its n-3 fatty acid content (15). Seafood consumption is recommended to be increased, taking the place of some meat and poultry. The Dietary Guidelines also emphasize the benefits of vegetarian dietary plans and, they contain lacto-ovo vegetarian and vegan adaptations of the USDA Food Patterns for the first

time. Vegetarian diets as well as the seafood consumption are associated with lower cardiovascular risks (15); so, the HEI-2010 combined plant proteins and seafood were combined into one component. This combination is in compliance with the most important feature of the HEI that no single food or item is necessary for a perfect score (Figure 1); if a component evaluates the seafood alone, vegetarian diets cannot get a perfect score. The standard of the maximum score regarding the Seafood and Plant Proteins component is the total of the daily recommendations stated by the USDA Food Patterns for three subgroups of protein foods: nuts and seeds, seafood and soy products, stated on the basis of 1,000 calories. All nuts and seeds, seafood, and processed soy products are included in Plant Proteins and Seafood. In addition, any beans and peas included in the Total Protein Foods standard are considered in the Seafood and Plant Proteins component.

2.2.4. Fatty Acids

It is emphasized by the 2010 Dietary Guidelines that the fat type is more important than the total fat amount and that it is important to replace saturated fatty acids with monounsaturated and polyunsaturated fatty acids. The proportion of unsaturated fatty acids to saturated fatty acids is used to emphasize the concept of replacement and the comparative balance of the two in the HEI-2010. As a part of another diet quality score, this proportion has been used (22).

The Fatty Acids component is categorized as a sufficiency component to indicate the health benefits of poly- and monounsaturated fatty acids. The values of this proportion vary from 2.5 to 2.6 according to the various calorie levels in the USDA Food Patterns, (19-21). 2.5, which is the least limiting value, was selected as the standard of the maximum score. The method for determining the minimum score is defined below. The proportion of unsaturated fatty acids to saturated fatty acids in a variety of diets taking place in the DASH experiments was also reviewed since the DASH Eating Plan is also included in the Dietary Guidelines as an example dietary plan. The successful diets had proportions of 2.4 to 3.1, which suggests that 2.5 is a reasonable standard (23-24).

2.2.5. Refined Grains

Refined Grains is counted as a moderation component since the 2010 Dietary Guidelines indicate levels of consumption are too high. More than 95% of Americans who are aged 2 and older consume more than the amounts stated in the recommendations of the USDA Food Patterns (20). The least limiting recommendation was chosen as the standard of the maximum score of 10, on the basis of 1,000 calories.

2.2.6. Empty Calories

The 2010 USDA Food Patterns contain calorie limitations regarding the solid fats and added sugars but specific calorie limitations regarding the alcohol is not stated. However, it is stated by the Dietary Guidelines that calories coming from alcohol decreases the calories coming from solid fats and added sugars; but they also accept the beneficial effects of moderate drinking. So, calories coming from alcohol are accepted as empty calories in the HEI-2010, provided the alcohol is consumed more than the moderate amounts. The least limiting level between the two, which is described as moderate drinking in the Dietary Guidelines, 2 drinks per day (stated as 28 grams of ethanol), was used to determine the threshold for accepting the calories from alcohol as empty. As explained below, the value that used to energy-adjust the sodium (2150 calories) (18) was used to energy-adjust the alcohol threshold. Up to 13 g of ethanol/1000 calories are not accepted as Empty Calories since 28 g ethanol/2150 calories are equivalent to 13 g ethanol/1000 calories.

Table 3. Recommended number of Food Guide Pyramid serving per day, by age/gender

Age/gender category	Energy (kilocalories)	Grains	Vegetables	Fruits	Milk	Meat ¹
Children, 2-3 ²	1300	6	3	2	2	2
†	1600	6	3	2	2	2
Children, 4-6	1800	7	3.3	2.3	2	2.1
Females, 51+	1900	7.4	3.5	2.5	2	2.2
Children, 7-10	2000	7.8	3.7	2.7	2	2.3
Females, 11-24	2200	9	4	3	3	2.4
†	2200	9	4	3	2	2.4
Females, 25-50	2200	9	4	3	2	2.4
Males, 51+	2300	9.1	4.2	3.2	2	2.5
Males, 11-14	2500	9.9	4.5	3.5	3	2.6
†	2800	11	5	4	2	2.8
Males, 19-24	2900	11	5	4	3	2.8
Males, 25-50	2900	11	5	4	2	2.8
Males, 15-18	3000	11	5	4	3	2.8

1One serving of meat equals 2.5 ounces of lean meat.

2Portion sizes were reduced to two-thirds of adult servings except for milk for children age 2-3.

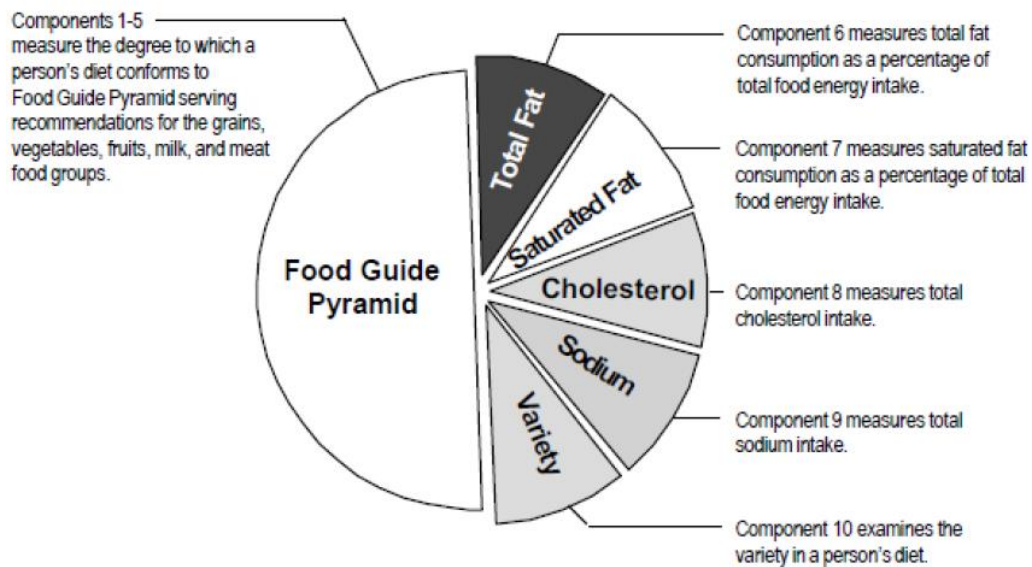


Figure 1. Components of HEI

Table 4. Components of the HEI and scoring system

	Score ranges ¹	Criteria for maximum score of 10	Criteria for minimum score of 0
Grain consumption	0 to 10	6 - 11 servings ²	0 servings
Vegetable consumption	0 to 10	3 - 5 servings ²	0 servings
Fruit consumption	0 to 10	2 - 4 servings ²	0 servings
Milk consumption	0 to 10	2 - 3 servings ²	0 servings
Meat consumption	0 to 10	2 - 3 servings ²	0 servings
Total fat intake	0 to 10	30% or less energy from fat	45% or more energy from fat
Saturated fat intake	0 to 10	Less than 10% energy from saturated fat	15% or more energy from saturated fat
Cholesterol intake	0 to 10	300 mg or less	450 mg or more
Sodium intake	0 to 10	2400 mg or less	4800 mg or more
Variety	0 to 10	8 or more different items in a day	3 or fewer different items in a day

¹People with consumption or intakes between the maximum and minimum ranges or amounts were assigned scores proportionately.

²Number of servings depends on Recommended Energy Allowance

2.3. Healthy Eating Index and Body Mass Index

Lower HEI scores have been associated with a higher BMI. HEI scores and BMI's were calculated for each individual based on the data collected. The results showed that the HEI scores are significantly lower among obese subjects when compared to those of normal weight (25).

3. MATERIALS and METHODS

3.1. Research Type

This is a cross-sectional type of descriptive study.

3.2. Research Population and Sampling

In the designated period of 06.2016-01.2017 research population consisted of female patients who consult the Nutrition and Dietetic polyclinic of a private hospital in İstanbul. Sampling of the study included BKI 25-30 and BKI 30-40. Women with ages of 18-65 years with BMI 25-30 and BMI 30-40 will be included.

3.3. Inclusion and Exclusion Criteria of the Research

3.3.1. Inclusion Criteria

- Submitting a written consent to be included in the research,
- Female patients aged 18-65 years,
- BMI 25-30 or BMI 30-40,
- Between the dates of 06.2016-01.2017, this hospital's dietary policlinic.

3.3.2. Exclusion Criteria

- Not submitting a written consent to be included in the research,
- Being outside the scope of designated research group,
- Incomplete responses to survey questions and inconsistent answers to conditional items in the form.

3.4. Data Collection Tools

Data of the research were collected by General Information Form by the researchers. General Information Form was prepared by the researchers via literature analysis (26). The form consists of 2 sections and 26 questions related to socio-demographic features and its relationship between consumption of food products. The 24HDR (Twenty Four Hour Dietary Recall) asks the participants to report everything

that they have consumed in the 24 hours prior to the survey. This allows for a detailed look at the diet, which can be broken down and analyzed at the level of the macro and micronutrient content of everything that was eaten. When conducting 24 hour recalls, a multiple pass technique should be used in order to help ensure the information given is accurate. There are generally four stages which include: first, obtain a complete list of all foods and beverages consumed in the last 24 hours; second, describe foods in as much detail as possible such as cooking methods and sauces added; thirdly, determine portion sizes using visual aids and prompts; and fourthly, review the recall to make sure all foods were recorded properly (27).

For the purpose of this study, the 24 hour recalls were used to determine the HEI score as well as determine the number of servings. The data from the 24 hour recalls were analyzed using Nutrition Information System (BeBiS) program. This software was used to calculate total energy, macro- and micro-nutrient intakes.

3.5.Data Analysis

In the analysis part, data were initially categorized and next the required codes were registered. On the designated sampling group, data collection forms were harnessed to glean the data required for the research and then these data were entered into (Statistical Package for the Social Sciences) SPSS 20.0 program. In statistical analyses, frequency distributions, and percentage measurements were evaluated via chi-square test. In all of the conducted tests significance threshold value was taken as $p < 0.05$.

3.6. Dietary Intake and Scoring System

Energy and nutrient intake were calculated by using the BeBiS program.

The HEI-2010 was chosen as a validated tool for overall diet quality assessment.

We used the recommended HEI criteria to define the diet quality as good (a score of 80 and more), needs improvement (a score between 51 and 80), and poor (a score of 51 or less) (28).

In addition to the HEI, the HEI components as well as total energy intake and protein intake, and some other selected nutrients such as folic acid, fiber, iron, and calcium, were used to further assess female patients' diet quality.

3.7. Ethical Dimensions of the Research

- Approval of the ethical board will be asked for.
- Voluntary participation will be the inclusion criteria for the subjects.
- Voluntariness form will be explained to the participants before receiving their consents, and they will be explained about the freedom to quit the research without any excuses.



4. RESULTS

4.1. Sample Characteristics:

Eighty female completed the questionnaires, 24HDR and anthropometric data collection in Özel Okmeydanı Hastanesi Diet Polyclinic in Istanbul. Participants consisted of thirty-nine persons with a body mass index of between 25 and 30, and those between 30 and 40 with a BMI of forty-one persons.

Examples; Group I, BMI 25-30; Group II, BMI 30-40. Two groups are separated. In Table 5, the first group showed age, menarche, total number of pregnancies, body weight, height, body mass index, waist hip ratio, body fat mass, and percentage of body fat mass, minimum, maximum and mean values of body water mass. The same values are shown for the second group in Table 6.

Table 5. Sample characteristics of individuals with BMI 25-30

	N	Minimum	Maximum	Mean	Std. Deviation
Age	39	18	62	34,64	10,562
Menarch	39	11,00	15,00	12,7179	0,97194
Totalnof preg.	39	0,00	4,00	1,3846	1,11486
Bodyw.(kg)	39	58,50	89,90	73,5231	5,76014
Height (mt)	39	150,00	175,00	162,6538	5,81078
BMI	39	25,30	29,40	30,3641	16,33871
Waist/Hip	39	0,79	0,93	0,8392	0,03429
Bodyfatmass (kg)	39	20,10	34,10	25,7462	2,85471
Bodyfatmass (%)	39	27,60	39,60	34,9615	2,26281
Bodywatermass	39	27,60	41,20	34,3128	2,69660
Valid N (listwise)	39				

Table 6. Sample characteristics of individuals with BMI 30-40

	N	Minimum	Maximum	Mean	Std. Deviation
Age	41	18	62	35,68	12,115
Menarch	41	11,00	15,00	13,0244	,98711
Totalnof preg.	41	0,00	6,00	1,4878	1,38061
Bodyweight (kg)	41	67,90	112,60	85,5634	9,51396
Heights(mt)	41	151,00	176,00	159,7439	5,59589
BMI	41	30,00	39,50	33,4951	2,84692
Waist/Hip	41	0,82	0,99	,9100	0,04062
Bodyfatmass (kg)	41	25,80	46,80	34,7585	5,33324
Bodyfatmass (%)	41	35,40	46,90	40,4585	2,47366
Bodywaterma ss	41	30,30	47,40	36,6683	3,49088
Valid N (listwise)	41				

Individuals participating in the study were divided into five groups in terms of age. 2.6% of the subjects with a body mass index of 25-30 were 55 years and over, 15.4% were 18-24 years, 17.9% were 45-54 years, 20.5% were 35-44 years, 43.6% It is seen in table 7 that it is between 25-34 years. In Table 8, when the age groups of the subjects with body mass index of 30-40 were examined, 7.3% were over 55 years old, 17.1% were 45-54 years, 22.0% were 18-24 years, 22.0% 35-44 years, 31.7% are between 25-34 years old.

Table 7. Age groups of individuals whose BMI is between 25-30

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18-24	6	15,4	15,4	15,4
25-34	17	43,6	43,6	59,0
35-44	8	20,5	20,5	79,5
45-54	7	17,9	17,9	97,4
55 and above	1	2,6	2,6	100,0
Total	39	100,0	100,0	

Table 8. Age groups of individuals whose BMI is between 30-40

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18-24	9	22,0	22,0	22,0
25-34	13	31,7	31,7	53,7
35-44	9	22,0	22,0	75,6
45-54	7	17,1	17,1	92,7
55 and above	3	7,3	7,3	100,0
Total	41	100,0	100,0	

In Table 9, when individuals with BMI between 25-30 were evaluated according to occupational groups, 2.6% of the individuals are retired, 5.1% are civil servants, 12.8% are self-employed, 38.5% are other, and 41% are housewives. In addition, when the BMI is between 30-40 according to the occupational groups, 2.4% are civil servants, 7.3% are unemployed, 7.3% are self-employed, 9.8% are retired, 31.7% are in the other profession group and 41.5% are housewives in Table 10.

Table 9. Distribution of individuals with BMI 25-30 according to occupational groups

	Frequency	Percent	Valid Percent	Cumulative Percent
Other	15	38,5	38,5	38,5
Retired	1	2,6	2,6	41,0
Housewife	16	41,0	41,0	82,1
Valid Officer	2	5,1	5,1	87,2
Self-employed	5	12,8	12,8	100,0
Total	39	100,0	100,0	

Table 10. Distribution of individuals with BMI 30-40 according to occupational groups

	Frequency	Percent	Valid Percent	Cumulative Percent
Other	13	31,7	31,7	31,7
Retired	4	9,8	9,8	41,5
House wife	17	41,5	41,5	82,9
Valid Unemployed	3	7,3	7,3	90,2
Officer	1	2,4	2,4	92,7
Self-employed	3	7,3	7,3	100,0
Total	41	100,0	100,0	

When the distributions according to the marital status of the individuals with BMI between 25-30 are shown in Table 11, 30.8% of the individuals were single, and 69.2% were married. According to BMI between 30-40 in Table 12 is examined, 34.1% of the individuals were single, and 65.9% were married.

Table 11. Distribution of individuals with BMK 25-30 according to their marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
	Single	12	30,8	30,8	30,8
Valid	Married	27	69,2	69,2	100,0
	Total	39	100,0	100,0	

Table 12. Distribution of individuals with BMI 30-40 according to their marital status

	Marital status	Frequency	Percent	Valid Percent	Cumulative Percent
	Single	14	34,1	34,1	34,1
Valid	Married	27	65,9	65,9	100,0
	Total	41	100,0	100,0	

When the menarche age distribution of individuals with BMI between 25-30 is evaluated in Table 13; 2.6% were 15 years old, 7.7% were 11 years old, 20.5% were 14 years old, 30.8% were 13 years old and 38.5% were 12 years old. The Table 14 shows that the menarche age distribution of the individuals whose BMI is between 30-40 is evaluated in Table 14; 4.9% were aged 15 years, 7.3% were 11 years, 19.5% were aged 12 years, 26.8% were aged 14 years and 41.5% were aged 13 years.

Table 13. Distribution of individuals with BMI 25-30 according to menarche age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 11,0	3	7,7	7,7	7,7
12,00	15	38,5	38,5	46,2
13,00	12	30,8	30,8	76,9
14,00	8	20,5	20,5	97,4
15,00	1	2,6	2,6	100,0
Total	39	100,0	100,0	

Table 14. Distribution of individuals with BMI 30-40 by menarche age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 11,00	3	7,3	7,3	7,3
12,00	8	19,5	19,5	26,8
13,00	17	41,5	41,5	68,3
14,00	11	26,8	26,8	95,1
15,00	2	4,9	4,9	100,0
Total	41	100,0	100,0	

When the individuals with BMI between 25-30 participating in the study in Table 15 are evaluated according to the total pregnancy numbers; 2.6% of the individuals were found to have 4 gestations, 10.3% to 3 gestations, 15.4% to 1 gestation and 41% to 2 gestations. It was determined that 30.8% of these individuals had no

pregnancy. In Table 16, when the subjects between 30 and 40 participating in the study were evaluated according to the total pregnancy numbers; 2.4% of the individuals had 6 pregnancies, 4.9% of them had 3 pregnancies, 7.3% had 4 pregnancies, 22.0% had 1 pregnancy and 34.1% had 2 pregnancies. It was determined that 29.3% of these individuals had no pregnancy.

Table 15. Total number of pregnancies in participants with BMI 25-30

	Frequency	Percent	Valid Percent	Cumulative Percent
,00	12	30,8	30,8	30,8
1,00	6	15,4	15,4	46,2
2,00	16	41,0	41,0	87,2
3,00	4	10,3	10,3	97,4
4,00	1	2,6	2,6	100,0
Total	39	100,0	100,0	

Table 16. Total number of pregnancies in participants with BMI 30-40

	Frequency	Percent	Valid Percent	Cumulative Percent
,00	12	29,3	29,3	29,3
1,00	9	22,0	22,0	51,2
2,00	14	34,1	34,1	85,4
3,00	2	4,9	4,9	90,2
4,00	3	7,3	7,3	97,6
6,00	1	2,4	2,4	100,0
Total	41	100,0	100,0	

In Table 17, it is seen that 2.6% of women who entered menopause at the age of 34, 42, 45, 46, 47, 48, 49 years old and those who entered menopause at 5.13% of the individuals who were between 25-30 participating in the study. 76.9% of the individuals have not yet entered menopause. 2.4% of individuals with BMI 30-40 participating in the study were 16 years old, 2.4% were 44 years old, 2.4% were 46 years old, 2.4% were 47 years old, 4.9% 4.9% were 45 years old and 4.9% were menopausal at 48 years of age. 75.6% of the individuals have not yet entered menopause in Table 18.

Table 17. Age of menopause entry of individuals with BMI 25-30

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 34	1	2,6	2,6	2,6
42	1	2,6	2,6	5,1
43	2	5,1	5,1	10,3
45	1	2,6	2,6	12,8
46	1	2,6	2,6	15,4
47	1	2,6	2,6	17,9
48	1	2,6	2,6	20,5
49	1	2,6	2,6	23,1
Not yet	30	76,9	76,9	100,0
Total	39	100,0	100,0	

Table 18. Age of entering menopause of individuals with BMI 30-40

	Frequency	Percent	Valid Percent	Cumulative Percent
	16	1	2,4	2,4
	42	2	4,9	7,3
	44	1	2,4	9,8
	45	2	4,9	14,6
Valid	46	1	2,4	17,1
	47	1	2,4	19,5
	48	2	4,9	24,4
	Not yet	31	75,6	100,0
	Total	41	100,0	100,0

Table 19 examined the educational status of 39 individuals with BMI 25-30 participating in the study. 20.5% of these individuals are primary school, 25.7% are license graduate, 25.6% are high school graduate, 15.4% are middle school, 10.3% are pre-license and 2.6% are high license graduates.

In Table 20, 9.8% of the 41 individuals between BMI 30-40 participating in the study are in pre-license, 12.2% in license, 17.1% in middle school, 22.0% in primary school and 39.0% in high school.

Table 19. Distribution of individuals with BMI 25-30 according to educational status

	Frequency	Percent	Valid Percent	Cumulative Percent
Primary school	8	20,5	20,5	20,5
License	10	25,7	25,7	46,2
High school	10	25,6	25,6	69,2
Valid Middle school	6	15,4	15,4	84,6
Pre-license	4	10,3	10,3	94,9
High-license	1	2,6	2,6	100,0
Total	39	100,0	100,0	

Table 20. Distribution of individuals of BMI 30-40 by educational status

	Frequency	Percent	Valid Percent	Cumulative Percent
Pri-school	9	22,0	22,0	22,0
License	5	12,2	12,2	34,1
High school	16	39,0	39,0	73,2
Valid Middle school	7	17,1	17,1	90,2
Pre-license	4	9,8	9,8	100,0
Total	41	100,0	100,0	

4.2. Health Indicators

Participants' smoking prevalence was reported. When the daily smoking status of 39 individuals with BMI between 25-30 participating in the study in Table 21 is examined, 2.6% of them used 1-4 pieces per day, 2.6% used 20 pieces and over, and 2.6% used 5-9 pieces. Never used 71.8%. 20.5% of the individuals have already drunk. When the daily cigarette use status of 39 individuals with BMI 30-40 participating in the study in Table 22 is examined, 2.4% said that they use 1-4, 2.4% of them 5-9, 4.9% of 20 and above, and 7.3% of them 10-19. 12.2% of the individuals have already drunk. And 70.7% never used it.

Table 21. Distribution of individuals with 25-30 according to daily smoking status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1-4 piece/d	1	2,6	2,6	2,6
20 piece/d	1	2,6	2,6	5,1
5-9 piece/d	1	2,6	2,6	7,7
Never	28	71,8	71,8	79,5
Old smoker	8	20,5	20,5	100,0
Total	39	100,0	100,0	

Table 22. Distribution of individuals with BMI 30-40 according to daily smoking status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1-4 piece/d	1	2,4	2,4	2,4
10-19 piece/d	3	7,3	7,3	9,8
20 piece/d	2	4,9	4,9	14,6
5-9 piece/d	1	2,4	2,4	17,1
Never	29	70,7	70,7	87,8
Oldsmoker	5	12,2	12,2	100,0
Total	41	100,0	100,0	

Table 23 shows the frequency of alcohol consumption among 39 individuals with a BMI of 25-30 participating in the study. 2.6% of the individuals consume 22-28 units per week and 12.8% consume 1-7 units per week. 84.6% of these individuals do not consume any alcohol. Similarly Table 24 shows the frequency of alcohol consumption among 41 individuals with BMI 30-40 participating in the study. 7.3% of individuals were found to have consumed 1-7 units a week and 2.4% of them consumed 22-28 units a week. 90.2% of these individuals do not consume any alcohol.

Table 23. Distribution of alcohol consumption frequency among individuals with BMI 25-30

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1-7 unit/w	5	12,8	12,8	12,8
22-28 unit/w	1	2,6	2,6	15,4
Never	33	84,6	84,6	100,0
Total	39	100,0	100,0	

Table 24. Distribution of alcohol consumption frequency among individuals with BMI 25-30

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1-7units/w	3	7,3	7,3	7,3
22-28 units/w	1	2,4	2,4	9,8
Never	37	90,2	90,2	100,0
Total	41	100,0	100,0	

Table 25 shows the disease states of 39 participants with between BMI 25-30 participating in the study. Among the participants, 2.6% had anemia, 2.6% had high cholesterol, 5.1% had high blood pressure, 7.7% had diabetes, 7.7% had hypothyroidism, 10.3% had ulcerative gastritis and 17.9% had obesity. 38.5% of the

participants stated that they have no illness. In addition, the participants with body mass index of 30-40, 4.9% had anemia, 2.4% had kidney, 12.2% had other, 4.9% had diabetes, 7.3% had hypothyroid, 2.4% had heart, 2.4% 4.9% had obesity, 24.4% had obesity, 2.4% had ulcer-reflux gastritis, 2.4% had high cholesterol, and 7.3% had high blood pressure in Table 26. 22% of these participants say they are healthy.

Table 25. Distribution of disease states of individuals with BMI 25-30

	Diseases	Frequency	Percent	Valid Percent	Cumulative Percent
	Anemia	1	2,6	2,6	2,6
	Other	3	7,7	7,7	10,3
	Diabetes	3	7,7	7,7	17,9
	Hypothyroid	3	7,7	7,7	25,6
	Healthy	15	38,5	38,5	64,1
Valid	Obese	7	17,9	17,9	82,1
	Ulcer-reflux gastritis	4	10,3	10,3	92,3
	High -cholesterol	1	2,6	2,6	94,9
	High blood pressure	2	5,1	5,1	100,0
	Total	39	100,0	100,0	

Table 26. Distribution of disease states of individuals with BMI 30-40

	Frequency	Percent	Valid Percent	Cumulative Percent
Anemia	2	4,9	4,9	4,9
Kidney	1	2,4	2,4	7,3
Others	5	12,2	12,2	19,5
Diabetes	2	4,9	4,9	24,4
Hiypotiroid	3	7,3	7,3	61,0
Cardio-vascular	1	2,4	2,4	34,1
Liver	1	2,4	2,4	36,6
Bone	2	4,9	4,9	41,5
Healthy	9	22,0	22,0	63,4
Obese	10	24,4	24,4	87,8
Ul-gas-ref	1	2,4	2,4	90,2
High chol.	1	2,4	2,4	92,7
High blood pressure	3	7,3	7,3	100,0
Total	41	100,0	100,0	

Table 27 shows the drug use status of 39 individuals between BMI 25-30 participating in the study. 15.4% of the individuals are using medicines and 84.6% of them do not use any medicines. In Table 28 seem that 51.2% of the individuals use drugs and 48.8% do not use any medicines with BMI 30-40 participating in the study.

Table 27. Drug use status of individuals between BMI 25-30

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	6	15,4	15,4	15,4
Valid	No	33	84,6	84,6	100,0
	Total	39	100,0	100,0	

Table 28. Drug use status of individuals between BMI 30-40

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	21	51,2	51,2	51,2
Valid	No	20	48,8	48,8	100,0
	Total	41	100,0	100,0	

Table 29 shows the nutritional support use cases of 39 individuals with BMI between 25-30 participating in the study. While 10.3% of the individuals receive support, 89.7% of them do not use any food supplements. In Table 30, 14.6% of the individuals receive support, 85.4% of them do not use any nutritional support.

Table 29. Use of nutritional supplements by individuals with BMI 25-30

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	4	10,3	10,3	10,3
Valid	No	3	89,7	89,7	100,0
	Total	39	100,0	100,0	

Table 30. Use of nutritional supplements by individuals with BMI 30-40

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	6	14,6	14,6	14,6
Valid	No	35	85,4	85,4	100,0
	Total	41	100,0	100,0	

4.3. Eating Habits

In Table 31, it is observed that 2.6% of the individuals with BMI 25-30 were using sweeteners and 97.4% did not use them. Table 32 shows that 2.4% of individuals with BMI 30-40 use sweeteners and 97.6% do not.

Table 33 assesses how many main meals are made by individuals with BMI 25-30. 48.7% of the individuals have 2 main meals and 51.3% have 3 main meals. In Table 34, by individuals with BMI 30-40; 43.9% of them had 3 main meals and 56.1% made 3 main meals.

Table 31. Sweetener use of individuals with BMI 25-30

		Frequency	Percent	Valid Percent	Cumulative Percent
	2-3per/w	1	2,6	2,6	2,6
Valid	Never	38	97,4	97,4	100,0
	Total	39	100,0	100,0	

Table 32. Sweetener use of individuals with BMI 30-40

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Everyday	1	2,4	2,4	2,4
Valid Never	40	97,6	97,6	100,0
Total	41	100,0	100,0	

Table 33. Frequency of making main meals for individuals with BMI 25-30

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2,00	19	48,7	48,7	48,7
Valid 3,00	20	51,3	51,3	100,0
Total	39	100,0	100,0	

Table 34. Frequency of making main meals for individuals with BMI 30-40

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2,00	23	56,1	56,1	56,1
Valid 3,00	18	43,9	43,9	100,0
Total	41	100,0	100,0	

In Table 35, 5% of the 2.6% of the individuals with BMI between 25-30, 4% of the 5.1% of the interim meal, 3% of the 10.3% of the interim meal, 35.9% of the interim meal, 46.2% of the 2 It was determined that he made a snack. In Table 36, it is observed that the number of intermittent meals per day among individuals with BMI 30-40 was

assessed; 9.8% had 3 snacks, 34.1% had 1 snack, 41.5% had 2 snacks. It is seen that 14.6% of the individuals did not make any snacks.

Table 35. Frequency of intermittent meals consumption of individuals with BMI 25-30

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	14	35,9	35,9	35,9
2	18	46,2	46,2	82,1
3	4	10,3	10,3	92,3
4	2	5,1	5,1	97,4
5	1	2,6	2,6	100,0
Total	39	100,0	100,0	

Table 36. Frequency of snack consumption among individuals between BMI 30-40

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	6	14,6	14,6	14,6
1	14	34,1	34,1	48,8
2	17	41,5	41,5	90,2
3	4	9,8	9,8	100,0
Total	41	100,0	100,0	

Participants included which meals they missed and why they did not use. According to this it is seen that 5.1% of the individuals with BMI between 25-30 were in the evening, 43.6% in the lunch, 46.2% in the morning. 5.1% of these individuals do not skip any meal in Table 37. Table 38 shows that 2.4% of the individuals with BMI 30-40 were in the evening, 34.1% in the noon and 48.8% in the morning. It is seen that 14.6% of these individuals have never skipped meals. In Table 39, the reasons for skipping meals of individuals participating in the study with BMI 25-30 were examined. According to the table, because 5.1% of these individuals want to weaken, 33.3% of the time is inadequate because 10.3% are not habitual, 12.8% do not want to die, 12.8% do not prepare, and 17.9% they have skipped meals. It is seen that 7.7% of these individuals skipped meals for other reasons. In Table 40, the reasons for skipping meals were examined for individuals participating in the study with a BMI of 30-40. According to the table, 7.3% is not habitual because 17.1% of them do not want to be killed because they do not prepare 4.9% because they want to weaken 2.4%, 29.3% of them have missed meals due to time insufficiency. 9,8% of these individuals indicate that they have skipped meals for other reasons.

Table 37. Meal skipping situation of individuals with BMI 25-30

	Frequency	Percent	Valid Percent	Cumulative Percent
Dinner	2	5,1	5,1	5,1
Never	2	5,1	5,1	10,3
Valid Lunch	17	43,6	43,6	53,8
Breakfast	18	46,2	46,2	100,0
Total	39	100,0	100,0	

Table 38. Meal skipping situations among individuals with BMI 30-40

	Frequency	Percent	Valid Percent	Cumulative Percent
Dinner	1	2,4	2,4	2,4
Never	6	14,6	14,6	17,1
Valid Lunch	14	34,1	34,1	51,2
Breakfast	20	48,8	48,8	100,0
Total	41	100,0	100,0	

Table 39. Reasons for skipping meals of individuals with BMI 25-30

	Frequency	Percent	Valid Percent	Cumulative Percent
No habit	4	10,3	10,3	10,3
Have to palate for	5	12,8	12,8	23,1
Other	3	7,7	7,7	30,8
Valid Be late	7	17,9	17,9	48,7
Not to prepare	5	12,8	12,8	61,5
No time	13	33,3	33,3	94,9
To lose weight	2	5,1	5,1	100,0
Total	39	100,0	100,0	

Table 40. Reasons for skipping meals of individuals with BMI 30-40

	Frequency	Percent	Valid Percent	Cumulative Percent
No habit	3	7,3	7,3	7,3
Have to palate for	7	17,1	17,1	24,4
Be late	12	29,3	29,3	53,7
Valid Not to prepare	2	4,9	4,9	58,5
Other	4	9,8	9,8	68,3
No time	12	29,3	29,3	97,6
To lose weight	1	2,4	2,4	100,0
Total	41	100,0	100,0	

In Table 41, the foods consumed between meals of individuals with BMI 25-30 were examined. 2.6% biscuits, 2.6% berry, 2.6% milk, 5,1% tea coffee, 5,1% sandwich, 10,3% sugar, 20.5% is fruit, 51.3% is consuming bagel. In Table 42, it is seen that 9.8%, 9.8% sandwich, 12.2% tea and coffee, 14.6% sugar, 48.8% consumed bagels among the meals among the individuals with BMI 30-40 in the meal. 4.9% of these individuals say that they do not consume anything between meals.

Table 41. Nutrients consumed between meals of individuals with BMI 25-30

	Frequency	Percent	Valid Percent	Cumulative Percent
Biscuit	1	2,6	2,6	2,6
Patty	1	2,6	2,6	5,1
Tea-coffee	2	5,1	5,1	10,3
Fruit	8	20,5	20,5	30,8
Valid Sandwich	2	5,1	5,1	35,9
Bagel	20	51,3	51,3	87,2
Dairy products	1	2,6	2,6	89,7
Junk food	4	10,3	10,3	100,0
Total	39	100,0	100,0	

Table 42. Food consumed between meals of individuals with BMI 30-40

	Frequency	Percent	Valid Percent	Cumulative Percent
Tea/Coffee	5	12,2	12,2	12,2
Never	2	4,9	4,9	17,1
Fruits	4	9,8	9,8	26,8
Valid Sandwich	4	9,8	9,8	36,6
Bagel	20	48,8	48,8	85,4
Junk food	6	14,6	14,6	100,0
Total	41	100,0	100,0	

In Table 43 it is seen that 97.4% of the individuals with BMI 25-30 have eaten outside the home and 2.6% have not eaten. Table 44 also examines eating habits of individuals with BMI 30-40 at home. 87.6% of these individuals stated that they had eaten outside the home; 12.2% do not eat out of the house.

Table 43. The habit of eating outside the home by individuals whose BMI is 25-30

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	38	97,4	97,4	97,4
	No	1	2,6	2,6	100,0
	Total	39	100,0	100,0	

Table 44. The habit of eating outside the home by individuals whose BMI is 30-40

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	36	87,8	87,8	87,8
	No	5	12,2	12,2	100,0
	Total	41	100,0	100,0	

4.4.Diet Quality

In this study, The HEI components; total energy and protein intake, and some other selected nutrients such as folic acid, fiber, calcium and iron, were assessed. The intakes of those nutrients according to BMI 25-30 in Table 45 and BMI 30-40 can be seen in Table 46.

Table 45. Total energy, protein and other selected nutrients intake in BMI 25-30

	N	Minimum	Maximum	Mean	Std. Deviation
Energy	39	464,30	2713,90	1304,8410	533,75637
Protein	39	20,30	90,80	50,3436	20,88125
Folic acid	39	83,30	725,80	230,5692	107,08882
Fiber	39	3,90	66,40	18,9513	10,65023
Calcium	39	109,30	1517,80	590,4667	314,53453
Iron	39	4,10	47,40	10,1385	7,31680
Valid N (list wise)	39				

Table 46. Total energy, protein and other nutrients intake in BMI 30-40

	N	Minimum	Maximum	Mean	Std. Deviation
Energy	41	426,00	4814,10	1424,2927	873,96769
Protein	41	16,00	199,70	62,9976	42,57343
Folic acid	41	102,80	836,50	261,0878	153,16736
Fiber	41	5,90	51,20	19,8561	10,11583
Calcium	41	130,90	3097,30	625,1195	495,92046
Iron	41	3,00	23,50	9,6317	4,88643
Valid N (list wise)	41				

Mean of total HEI score and mean scores for each of the food category can be found in table 47 of individuals with BMI 25-30 and table 48 of individuals with BMI 30-40.

Table 47. Total HEI score and mean score for components of HEI in BMI 25-30

	N	Minimum	Maximum	Mean	Std. Deviation
Grain	39	0,00	10,00	4,8718	4,79682
Vegetables	39	0,00	5,00	3,2564	1,76125
Fruits	39	0,00	10,00	2,0154	2,48263
Dairy products	39	0,00	13,00	2,6077	3,87586
Total fatty acids	39	1,20	10,00	6,0974	2,69185
Others	39	0,00	10,00	3,2590	3,90315
Total HEI	39	7,60	69,40	48,0974	12,54320
Valid N (list wise)	39				

Table 48. Total HEI score and mean scores for components of the HEI in BMI 30-40

	N	Minimum	Maximum	Mean	Std. Deviation
Grain	41	0,00	10,00	3,8780	4,62236
Vegetables	41	0,00	5,00	3,1056	1,78084
Fruits	41	0,00	9,70	2,1122	2,46852
Dairy products	41	0,00	10,00	2,9024	3,83402
Total fatty acids	41	1,60	10,00	6,1683	2,14341
Others	41	0,00	10,00	3,3463	4,05241
Total HEI	41	7,60	81,60	52,4805	13,91670
Valid N (list wise)	41				

In Figure 2, there is a pie chart for the distribution of HEI groups. 54% of the data are below 51 HEI, 45% are at 51-80 HEI, and 1% is over 80 HEI.

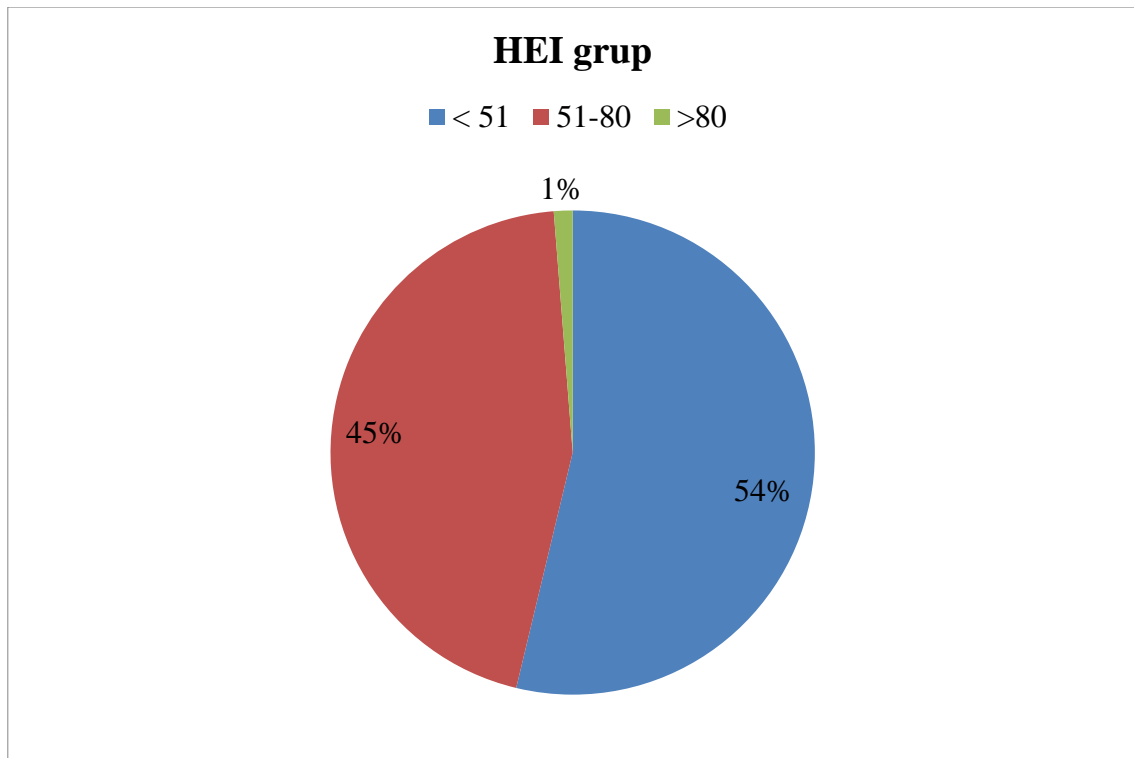


Figure 2. Distribution of Hei groups

4.5. Comparisons with Healthy Eating Indexes

Table 49 contains a chi-square analysis for comparison of HEI groups according to BMI. As a result of the analysis made, it is seen that HEI groups do not differ significantly according to BMI ($\chi^2=1.085$, $p>0.05$).

Table 49. Comparison of HEI groups according to BMI

	HEI_group			Total	χ^2	p
	< 51	51-80	>80			
BMI grup						
25-30 BMI	22 (%56,4)	17 (%43,6)	0	39		
30-40 BMI	21 (%51,2)	19 (%46,3)	1 (%2,4)	41	1.085	0.58
Total	43 (%53,8)	36 (%45)	1 (%1,3)	80		

4.6. Comparison with Healthy Eating Index Scores

Table 50 shows the t test to determine whether the total HEI score differs according to the BMI values. As a result of the analysis made, it is seen that the HEI scores do not differ according to the BMI values ($t=-1.477$, $p>0.05$).

Table 50. Comparison of HEI score by BMI

	BMI	N	Mean	Ss	Std error mean	t	P
HEI score	25-30	39	48.09	12.54	2.00		
	30-40	41	52.48	13.91	2.17	-1.477	0.14

In Figure 3, there are averages of total HEI scores according to BMI. Individuals with 25-30 BMI have a HEI means 48.09 while those with a BMI of 30-40 have a HEI means 52.48.

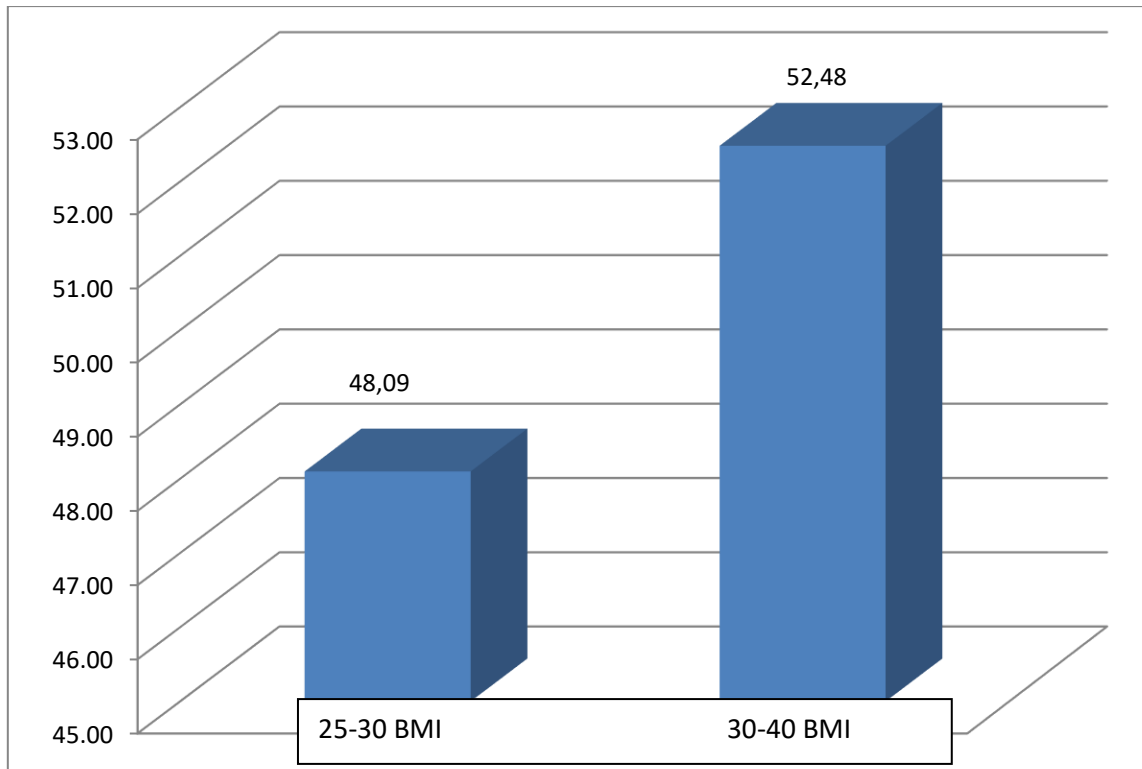


Figure 3. Average HEI scores according to BMI

4.7. Comparisons with Healthy Eating Index Groups

Table 51 shows the chi-square analysis for comparison of HEI groups according to marital status. As a result of the analysis made, there was no significant difference between HEI groups according to marital status ($\chi^2=0.493$, $p>0.05$).

Table 51. Comparison of HEI groups according to marital status

Marital status	HEI group			Total	χ^2	P
	< 51	51-80	>80			
Single	14 (%53.8)	12 (%46.2)	0 (%0)	26	0.493	0.78
Married	29 (%53.7)	24 (%44.4)	1 (%1.9)	54		
Total	43 (%53.8)	36 (%45.0)	1 (%1.3)	80		

Table 52 shows the chi-square analysis for comparison of HEI groups according to menopause age. As a result of the analysis made, there was no significant difference between HEI groups according to menopause age ($\chi^2=2.529$, $p>0.05$).

Table 52. Comparison of HEI groups according to menopause age

Menopause age	HEI group			Total	χ^2	P
	< 51	51-80	>80			
Not entered	33 (%53.2)	28 (%45.2)	1 (%1.6)	62	2.529	0.64
Before age of 45	4 (%40.0)	6 (%60.0)	0 (%0)	10		
46 years and later	6 (%75.0)	2 (%25.0)	0 (%0)	8		
Total	43 (%53.8)	36 (%45.0)	1 (%1.3)	80		

Table 53 contains chi-square analysis for comparison of HEI groups according to menarche age. As a result of the analysis made, there was no significant difference between the HEI groups according to the age of menarche ($\chi^2=4.837$, $p>0.05$).

Table 53. Comparison of HEI groups by age of menarche

Age of Menarche	HEI group			Total	χ^2	P
	< 51	51-80	>80			
11	4 (%66.7)	2 (%33.3)	0 (%0)	6	4.837	0.77
12	11 (%47.8)	12 (%52.2)	0 (%0)	23		
13	14 (%48.3)	14 (%48.3)	1 (%3.4)	29		
14	13 (%68.4)	6 (%31.6)	0 (%0)	19		
15	1 (%33.3)	2 (%66.7)	0 (%0)	3		
Total	43	36	1	80		

Table 54 contains chi-square analysis for comparison of HEI groups according to smoking status. As a result of the analysis made, no significant difference was observed between HEI groups according to smoking status ($\chi^2=1.546$, $p>0.05$).

Table 54. Comparison of HEI groups according to smoking

Smoking	HEI group			Total	χ^2	P
	< 51	51-80	>80			
Never used	31 (%54.4)	25 (%43.9)	1 (%1.8)	57	1.546	0.82
Valid Used to smoker	8 (%61.5)	5 (%38.5)	0 (%0)	13		
Smoker	4 (%40.0)	6 (%60.0)	0 (%0)	10		
Total	43 (53.8)	36 (%45.0)	1 (%1.3)	80		

Table 55 contains the chi-square analysis for the comparison of HEI groups according to the total number of pregnancies. As a result of the analysis made, there was no significant difference between the HEI groups according to the total number of pregnancies ($\chi^2=3.039$, $p>0.05$).

Table 55. Comparison of HEI groups according to the total number of pregnancies

Total number of pregnancy	HEI group			Total	χ^2	p
	< 51	51-80	>80			
Not pregnant	13 (%54.2)	11 (%45.8)	0 (%0)	24	3.039	0.80
Only once	10 (%66.7)	5 (%33.3)	0 (%0)	15		
Two time	14 (%46.7)	15 (%50.0)	1 (%3.3)	30		
Three and more	6 (%54.5)	5 (%45.5)	0 (%0)	11		
Total	43 (%53.8)	36 (%45.0)	1 (%1.3)	80		

Table 56 contains chi-square analysis for comparison of HEI groups for alcohol use. As a result of the analysis made, there was no significant difference between HEI groups according to alcohol use ($\chi^2=2.749$, $p>0.05$).

Table 56. Comparison of HEI groups according to alcohol use

	HEI group			Total	χ^2	P
	< 51	51-80	>80			
Never used	39 (%55.7)	30 (%42.9)	1 (%1.4)	70	2.749	0.60
1-7 glass/week	4 (%50)	4 (%50)	0 (%0)	8		
8 glass/week and more	0 (%0)	2 (%100)	0 (%0)	2		
Total	43 (%53.8)	36 (%45.0)	1 (%1.3)	80		

Table 57 contains the chi-square analysis for the comparison of HEI groups according to the number of main meals. As a result of the analysis made, there was no

significant difference between the HEI groups according to the number of main meals ($\chi^2=1.271$, $p>0.05$).

Table 57. Comparison of HEI groups by number of main meals

Main meal	HEI group			Total	χ^2	P
	< 51	51-80	>80			
2	21 (%50.0)	20 (%47.6)	1 (%2.4)	42	1.271	0.53
3	22 (%57.9)	16 (%42.1)	0 (%0)	38		
Total	43 (%53.8)	36 (%45.0)	1 (%1.3)	80		

Table 58 contains the chi-square analysis for the comparison of HEI groups according to the number of snacks. As a result of the analysis, there was no significant difference between the HEI groups according to the number of snacks ($\chi^2=5.445$, $p>0.05$).

Table 58. Comparison of HEI groups by number of snacks

Number of snacks	HEI group			Total	χ^2	P
	< 51	51-80	>80			
-	1 (%16.7)	5 (%83.3)	0 (%0)	6	5.445	0.49
1	15 (%53.6)	13 (%0)	0 (%0)	28		
2	20 (%57.1)	14 (%40.0)	1 (%2.9)	35		
3 and more	7 (%63.6)	4 (%36.4)	0 (%0)	11		
Total	43 (%53.89)	36 (%45.0)	1 (%1.3)	80		

Table 59 contains chi-square analysis for comparison of HEI groups according to the skipped meal. There was no significant difference in HEI groups according to skipped meals ($\chi^2=5.000$, $p>0.05$).

Table 59. Comparison of HEI groups according to skipped meals

Skipped meals	HEI group			Total	χ^2	P
	< 51	51-80	>80			
Never	5 (%62.5)	3 (%37.5)	0 (%0)	8	5.000	0.54
Breakfast	24 (%63.2)	14 (%36.8)	0 (%0)	38		
Lunch	13 (%41.9)	17 (%54.8)	1 (%3.2)	31		
Dinner	1 (%33.3)	2 (%66.7)	0 (%0)	3		
Total	43 (%53.8)	36 (%45.0)	1 (%1.3)	80		

Table 60 presents chi-square analysis for comparing HEI groups according to educational status. As a result of the analysis made, HEI groups do not differentiate according to education level ($\chi^2=12.014$, $p>0.05$).

Table 60. Comparison of HEI groups according to education level

	HEI group			Total	χ^2	P
	< 51	51-80	>80			
Primary	7 (%41.2)	10 (%58.8)	0 (%0)	17	12.014	0.28
Middle-school	6 (%46.2)	7 (%53.8)	0 (%0)	13		
High-school	16 (%61.5)	10 (%38.5)	0 (%0)	26		
Pre-license	5 (%62.5)	2 (%25.0)	1 (%12.5)	8		
License	8 (%57.1)	6 (%42.9)	0 (%0)	14		
High License	1 (%50)	1 (%50)	0 (%0)	2		
Total	43 (%53.8)	36 (%45)	1 (%1.3)	80		

Table 61 contains chi-square analysis for comparison of HEI groups according to their profession. As a result of the analysis made, there was a significant difference between the HEI groups according to their occupation ($\chi^2 = 30.012$, $p < 0.05$). 48.5% of the housewives were under 51 HEI, 51.5% were in the HEI range 51-80; 66.7% of the officers were under 51 HEI, 33.3% were in the 51-80 HEI range; 62.5% of the self-employed are below 51 HEI, 37.5% are at 51-80 HEI; 40% of the pensions are under 51 HEI, 60% are in the 51-80 HEI range; 66.7% of the unemployed are in the range of 51-80 HEI and 33.3% are over 80 HEI. 64.3% of the other occupational health professionals participating in the survey are under 51 HEI and 35.7% are in the 51-80 HEI range. When all the occupants are considered together, it is seen that 53.8% of them are under 51 HEI, 45% of them are in 51-80 HEI range and 1.3% are over 80 HEI.

Table 61. Comparison of HEI groups according to occupaiton

	HEI grup			Total	x^2	P
	< 51	51-80	>80			
Housewife	16 (%48.5)	17 (%51.5)	0 (%0)	33	30.012	0.001
Officer	2 (%66.7)	1 (%33.3)	0 (%0)	3		
Self-employment	5 (%62.5)	3 (%37.5)	0 (%0)	8		
Retired	2 (%40)	3 (%60)	0 (%0)	5		
Unemployment	0 (%0)	2 (%66.7)	1 (%33.3)	3		
Other	18 (%64.3)	10 (%35.7)	0 (%0)	28		
Total	43 (%53.8)	36 (%45.0)	1 (%1.3)	80		

4.8. Correlations

Figure 4 contains the mean values for the component scores. When the values are examined, it is seen that the highest value belongs to the fruit with 6.13 and the lowest value to the fruit with 2.06.

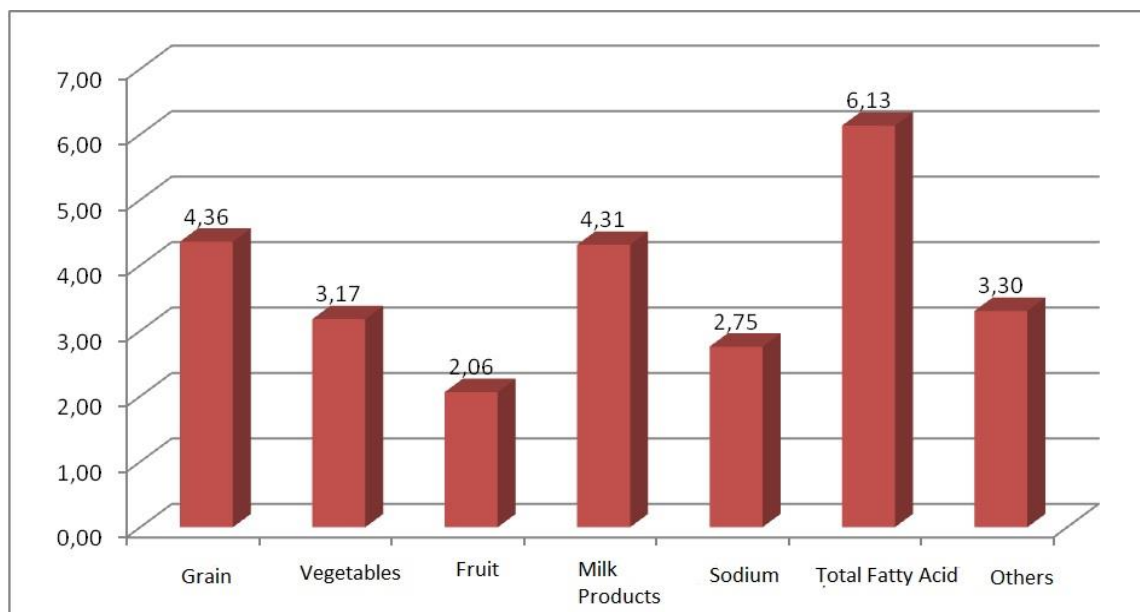


Figure 4. Average scores of compounds

In Table 62 there is a t test to see if the component scores differ according to the BMI's. As a result of analysis, it is seen that all component scores (cereal, vegetables, fruit, milk, sodium, total fatty acid) did not differ according to BMI ($p > 0.05$).

Table 62. Comparison of component scores according to BMI

	BMI	N	Mean	Ss	Std error mean	t	P
Grain	25-30	39	4.87	4.79	0.76	0.944	0.34
	30-40	41	3.87	4.62	0.72		
Vegetable	25-30	39	3.25	1.76	0.28	0.381	0.70
	30-40	41	3.10	1.78	0.27		
Fruits	25-30	39	2.01	2.48	0.39	-0.175	0.86
	30-40	41	2.11	2.46	0.38		
Milk product	25-30	39	4.42	3.36	0.53	0.277	0.78
	30-40	41	4.21	3.27	0.51		
Sodium	25-30	39	2.60	3.87	0.62	-0.342	0.73
	30-40	41	2.90	3.83	0.59		
Total fatty acid	25-30	39	6.09	2.69	0.43	-0.131	0.89
	30-40	41	6.16	2.14	0.33		

5.DISCUSSION and CONCLUSION

It is seen that overweight and obese individuals in the study are generally between the ages of 25-34. 43.6% of overweight individuals and 31.7% of obese individuals are between 25-34 years of age. Individuals over 55 years of age and overweight and obese have the least number of participants. 2.6% of overweight and 7.3% of obese individuals are 55 years of age or older. The mean age for overweight individuals is 34.64, while for obese individuals the mean age is 35.68.

When the groups are examined anthropometrically, there are some differences. When we look at length, it is seen that the average weight of overweight is 162.65 cm and obesity is 159.74. The average BMI is 25.76 for overweight and 33.49 for obese. Waist-hip ratios are 0.84 for overweight and 0.99 for obese. Body fat percentage is 34.96 in overweight and 40.46 in obese. The body water mass is 34.31 in overweight and 36.67 in obesity.

Most overweight and obese individuals participating in the study are seen to be housewives (41.0-41.5% respectively). Overweight individuals have at least a proportion (2.6%) retired, and obese individuals have at least a proportion (2.4%) civil servants. In our work, it is also seen that individuals are mostly married. 69.2% of overweight individuals and 65.9% of obese individuals are married. Overweight individuals have an average pregnancy rate of 1.38 and obese individuals are 1.48. When the pregnancy numbers are examined; 41% of the overweight and 34.1% of the obese patients had 2 pregnancies.

A Fisher's Exact test was used in a study of 195 individuals who worked to determine the obesity frequency and the affecting factors of the employees of the Public Health Directorate located in the eastern Anatolian region in May-June 2013. 62.6% of the participants were married, 83.6% were married, 38.5% were in the age range of 20-35 years and 42.6% were overweight. As a result of the research; Age, male sex, marital status, duration of study, presence of diagnosed disease, number of births, self-definition, time spent at table, sitting time were found to be important factors affecting obesity frequency (29).

Among the participants, the menarche age of overweight individuals was 38.5% with 12 years of age and 41.5% with obesity were 13 years old. Of the overweight, 2.6% with 15 years menarche and of obese individuals 4.9% are 15 years

menarche.76.9% of the overweight and 75.6% of the obese individuals did not enter the menopause yet.

A prospective cohort study of 63,805 participants between 1993 and 2010 suggests that postmenopausal women using a diet based on the preliminary diet quality index in the Women's Health Initiative Observational Study, who completed a food frequency study during enrollment, may have a lower risk of developing chronic disease (30).

When evaluated in terms of educational status; our participants are general high school graduates. It was determined that 25.6% of those who are overweight and 39.0% of those who are obese are high school graduates. 2.6% of the overweight individuals have a bachelor's degree, 2.6% have a master's degree, and 9.8% of obese individuals are associate degree graduates. Among those who are obese, there is no undergraduate or graduate degree.

Worldwide, 12% of women smoke and in developing countries, smoking habits among young girls and women are increasing (31). In our study, 71.8% of overweight and 70.7% of obese individuals do not smoke. 20.5% of the overweight and 12.2% of the obese people had already left it. It was also determined that 84.6% of overweight and 90.2% of obese individuals did not use any alcohol.

According to the nationwide cigarette screening results of the 1990s, 18.9% of the women were smokers (32).The TUIK 2008 data shows that 15.2% of 15 year old and over women in Turkey use daily or interhalable tobacco and tobacco products; it is determined that in urban areas, 14.5% of the women who smoked every day, while this ratio is 5.0% in the rural areas (33).

In a study conducted in 2000, it was found that alcohol use problems did not increase with increasing social roles of women (e.g. being married and working women); but it is reported that sudden changes in their social roles (e.g. divorce, leaving work, loss of maternal role, etc.) increase the risk of alcohol use (34).In a journal published in 2006, it was found that 11.6% of the students who have used alcohol at least once in the last month in their study on high school students and 72.6% of the girls who participated in the study that they have done to university students used alcohol (35).

38.5% of the overweight individuals who participated in our study did not have a known illness, 17.9% had a problem with obesity and 10.3% had disorders like ulcer-gastritis-reflux. Of the obese individuals, 24.4% stated that they had only obesity

problem and 12.2% stated that they had other diseases not included in the options.

In a study conducted in Istanbul in 2014 with a total of 520 patients (410 females, 110 males) aged 18 years and older, data were collected from the patients' files regarding their socio-demographic characteristics, lifestyle habits, anthropometric measurements, the section that sent the polyclinic, the diagnoses they received, the medications they used and their biochemical parameters. The average age of the study group was 45.44 ± 13.05 years. According to body mass index grouping, 6.8% of males and 13.4% of females were overweight (BMI = 25.0-29.9 kg / m²), 13.9% of males, 59.0% of females, while infertility was found to be obese (BMI ≥ 30.0 kg / m²). According to the testimonies of the individuals; obesity frequency 89.6%, type 2 DM 24.8%, hypertension 15.8%, hyperlipidemia 24.8%, impaired glucose tolerance 15.2%, sleep apnea 4.6%, hypothyroid 7.3% and anemia of Fe deficiency 11,5% were determined. There was a statistically significant relationship between gender and age and type 2 DM, sleep apnea, hypothyroid and Fe anemia frequency ($p < 0.001$). Negative and statistically significant correlations were found between the smoking cessation and physical activities of the subjects included in this study and the mean values of LDL-cholesterol, hemoglobin, hematocrit and three-month blood sugar. The presence of obesity in the family was positively correlated with type 2 DM, hypertension, impaired glucose tolerance and anemia of iron deficiency anemia. At the same time, there was a positive and statistically significant correlation between the incidence of cardiovascular diseases and hyperlipidemia in the family and the diagnosis of obesity, type 2 DM, hypertension, hyperlipidemia, impaired glucose tolerance, sleep apnea, hypothyroid and iron deficiency anemia (36).

It was determined that 84.6% of the excess pills participating in the study did not use any medication. 51.2% of obese individuals use drugs. 89.4% of overweight, 85.4% of obese individuals do not receive nutritional support and 97.4% of overweight and 97.6% of obese individuals do not use sweeteners. 89.4% of overweight, 85.4% of obese individuals do not receive nutritional support and 97.4% of overweight and 97.6% of obese individuals do not use sweeteners.

In a survey conducted in 2011, 287 women were made with the aim of determining drug use behavior. In the study, data were collected by using the questionnaire form prepared by searching the literature and face-to-face interview technique. The data were evaluated by the number, percentage and χ^2 in the SPSS 15.0 package program. In the study, it was found that 44,6% of the women were between the

ages of 18-28, 67,9% were primary school graduates, 91,3% were married, and nearly all (95,8%) were housewives. It was determined that 30.3% of the women in the scope of the study had the drug that they should use continuously, 42.2% of them used frequent drugs and the most frequently used painkillers. In the study, 13,9% of the women took the drug without a prescription, 40,4% did not read the prescription, 12,5% did not take it at the time of drug use, 24,7% used drugs good for others, 29,6% it has been determined that he has offered medication to another person and that the medicine used by the majority does not pay attention to the shape, smell, coloring, expiry date, the manufacturer. In the study, statistical significance was found to be statistically significant between health insurance, prescription reading, age, education and continuous medication use, taking medication on time, education and continuous medication use, medication accumulation at home and marital status and health insurance ($p = 0.001$) (37).

48.7% of overweight individuals are making 2 main meals and 51.3% are 3 main meals in our study. Obese individuals, 43.9% of the 3 main meals, 56.1% of the 2 main meals are made. In addition, 97.4% of overweight individuals and 87.8% of obese individuals were eating outside the home. Participants' frequency of snack consumption was also examined. According to this; 2.6% of the overweight individuals had 5 snacks and 46.2% had 2 snacks. Obese individuals, 9.8% of the 3 meals, 41.5% of the two meals are made. 14,6% of these individuals do not make any snacks. Among the overweight meals, 51.3% are consumed bagels and 20.5% are obese, 48.8% are obese and 14.6% are sugary foods. Here we can think that some of the obese individuals do not eat meals, but they increase their calorie intake daily. It was also determined that individuals generally skipped morning meal. It is following lunch in the morning. It is observed that 46.2% of overweight individuals and 48.8% of obese individuals skipped morning meals. Lunch time is 43.6% of overweight individuals and 34.1% of obese individuals. 29.3% of the overweight and 29.3% of the other participants stated that they missed the meal due to time insufficiency. 33.3% of the obese subjects also stated that they missed time because of insufficient time and 17.9% of them said that they missed meals because they were late.

A study conducted in 2012 examined the eating habits of 650 adult women aged 20-74 years. The sample was selected by stratified random sampling method. The average of the general characteristics of women are as follows; body weights were determined as 36.7 ± 0.51 years, body weight as 70.6 ± 0.55 kg, height as 156.9 ± 0.23

cm and body mass index (BMI) as 28.7 ± 0.22 kg / m². 63,4% of the participants were found to have three meals a day, two 35,5% and 1,1,1 meals a main meal, and the most skipped meals were morning breakfast (61,0%). Women's BKIs; number of meals, skipping meals and eating style, statistical analyzes were done ($p < 0.01$) (38).

In a study conducted on 424 students (215 males, 209 females) who were 18-28 years old at Erzincan University in 2016, weight, height, skin fold thickness measurements were taken from individuals and body mass endurance (BMI) values of the individuals were calculated. In addition, a nutrition survey was conducted to determine the eating habits of the students. As a result of the survey, it was observed that 86% of the students skipped meals and it was observed that the most important reason was time inability (39).

In 2014, a study conducted with the aim of evaluating health workers' nutritional habits and nutrition knowledge and the effect of health education on nutrition knowledge level was conducted on 321 health workers, 96 males and 225 females actively working in 10 different institutions. Personal characteristics, nutrition habits and nutrition knowledge levels of the individuals were determined by the applied questionnaire. The mean age of the study group was 34.1 ± 9.4 years and the mean BMI was 24.4 ± 4.2 kg / m². When the eating habits of the research group are examined; 73.2% of the participants were eating 3 meals per day or more of the daily main meals, and 74.5% of the respondents frequently skipped meals (n = 259), 46.5% of the time, and lunch meal of 54.8% it was found that the reason of the jump was not found. It was determined that 82.3% of the participants in the study consumed snacks during the day and that they prefer tea / coffee (72.3%) and snacks (28.3%) among the snacks during the day and when eating habits of the individuals were determined. 47.7% preferred meals in medium salinity, and 50.2% were regularly consumed at normal speed. The level of general nutrition knowledge among health workers in women and those who do not skip meals during the day; It was concluded that the knowledge levels of general nutrition and medical nutrition were significantly higher in physicians and health care providers than those of other groups when they were 45 years old or older and those who had nutrition education (40).

Overweight individuals in our study consume 1304.84 calories a day on average. On average, 50.34 grams of protein, 230.57 µg of folic acid, 18.95 grams of life, 590.47 grams of calcium, and 7.64 mg of iron are present in the daily diet. When obese individuals are examined for their daily nutrition, average daily calorie intake of

1424,29 calories, 63 grams of protein, 261,09 µg of folic acid, 19,86 grams of fiber, 625,12 mg of calcium, 9,63 mg of iron.

HEI was proposed by the USDA's Nutrition Policy and Development Center as a useful tool for assessing the nutritional status of Americans. The HEI scores of individual components can be used to determine the adequacy or inefficiency of dietary intake of certain food groups and foods, while the total score is available to rank individuals according to their dietary qualities (41).

In our study, 54% of the population was found to be poorly diagnosed, 51% below the HEI, 45% over the HEI range, 51% over the HEI range, and 1% over the 80% HEI. It is remarkable that the score of HEI components measuring fruits intakes were low in our study population. In particular, the score was 2,06 for fruits component. The low consumption of sodium (mean component score: 2,75), vegetables (mean component score: 3,17), other foods group (mean component score: 3,30), dairy products (mean component score: 4,31) and grains (mean component score: 4,36) observed in our study may contribute to the overall diet quality of overweight and obese females. Highest mean HEI component score was total fatty acids averaging 6,13 on a scale of 10.

Anthropometric measurements and physical activity data of individuals were recorded in a study conducted on 1181 people who applied to 19 Family Health Centers in Edirne between 19 and 65 years of age. A food frequency questionnaire was used to determine diet quality; Short Form-36 quality of life questionnaire and HEI-2005 were used to determine the quality of life. Three groups were divided into Healthy Nutrition Index (HEI-2005) scores, good (more than 80 points), moderate (51-80 points) and poor (50 and less points). The Healthy Eating Score average was 63.8 for women. In this study, there is a strong relationship between quality of life and diet of life. Moreover, individuals had low scores for total vegetable, whole grain milk and dairy consumption, high sodium intake, total grain, meat and legume consumption, and saturated fat intake. This study has shown that improving the quality of the diet can help raise the quality of life of the community (42).

In the 2003-2004 National Health and Nutrition Examination report, it gives the Healthy Eating Index -2005 (HEI-2005) scores for adults 20 years of age and over according to gender, age groups, race and ethnicity and educational status. The survey (NHANES 2003-2004), in the analytical example, has 20 adults from NHANES 2003-2004 and 4,448 adults over. Day 1 diet recall was used to estimate HEI-2005 scores.

Adults were below the maximum standards for all HEI-2005 component scores, excluding total cereals and meat and beans. Teens and elderly age groups, fruit and vegetable components, and voluntary calories were found to be more successful in meeting the 2005 Nutrition Guidelines for Americans and gaining a lower overall quality of life score than their counterparts (43).

In our study, some comparisons were made with the use of HEI groups which were <51, 51- 80 and >80. There were no significant results in comparison made between overweight and obese females. These results also showed that there were no differences in the diet quality of those populations according to their HEI groups. There was a significant difference between the HEI scores only in the participants' occupations ($p < 0.05$). unemployed participants (%33) were found have dietary qualities. No significant differences were found between the HEI scores of the subjects and marital status, age of menopause, age of menarche, cigarette use frequency, total number of pregnancies, frequency of alcohol use, number of main meals, number of snacks, skipped meals, education status ($p > 0.05$). Individuals with high educational status were expected to have better dietary qualities. The lack of significant differences between HEI scores and educational attainment means that individuals with different educational backgrounds are not better than the dietary qualities.

The main aim of this study was to compare the diet quality of overweight females from those attending of obese females. According to our results, compared to dietary qualities in the study, HEI scores did not differ significantly according to BMI ($p > 0.05$). In addition obese females' overall diet quality was better than overweight females' diet quality because mean of total HEI score of obese females was $52,48 \pm 13,92$ and mean of total HEI score of overweight females was $48,09 \pm 12,54$.

In conclusion, if there is no a significant difference in the BMI between the groups between 25-30 and 30-40 according to the total HEI scores, the total dietary quality needs to be changed and improved in both groups.

Comparisons of the other component scores of the HEI between two groups were not found to be statistically significant but there were found some differences. Compared with obese females, overweight females scored lower on the fruit, milk, total fatty acids, other foods components of the HEI: an average of 2,02 on the fruit, 2,61 on the milk, 6,10 on the total fatty acids, and 3,26 on others foods components, compared with 2,11, 2,90, 6,17, 3,35, respectively, for obese females. Compared with obese females, overweight females scored higher on grain and vegetables components of the

HEI: an average of 4,87 on the grain and 3,26 on the vegetables, compared with 3,88 and 3,11, respectively, for obese females.

Micronutrients have a primary function in human metabolism and physiology to protect, improve and prevent disease (44). Although the DRI of iron for females at 19-30 years is 18mg, at 31-50 years is 18 and 51-70 years 8 (45). In our study, mean iron consumption of overweight females was found 10,14 mg and mean iron consumption of obese females was found 9,63 mg which were below the recommendation. In addition, although the DRI of calcium for females at 19-30 years is 1000 mg, at 31-50 years is 1000 and 51-70 years is 1200 mg (45), in our study, mean calcium intakes of overweight and obese females were found below the recommendation: 590,47 mg in overweight females and 625,12 mg in obese females. Moreover, although folic acid both females is 400 μ g (46), in our study, folic acid intakes of both groups were below the recommendation: 230,57 μ g in overweight females and 261,09 μ g in obese females. Furthermore, although the DRI of fiber for females at 19-30 years is 25 g and at 31-50 is 25 g, and at 51-70 is 21 g (47), in our study, mean fiber intakes of overweight females were 18,95 g and mean fiber intakes of obese females were 19,86: were found below the recommendations. The DRI of protein for females at 19-30 years is 46 g per day, at 31-50 years is 46 g per day and 51-70 years 46 g per day (48), in our study, mean protein consumption of overweight females was found 50,34 g and mean protein consumption of obese females was found 63 g which were above the recommendation.

In a study of 209 healthy women, a questionnaire was administered to determine general information, eating habits, feeding frequency, 24-hour recall and attendance to exercise and energy and nutrient intake, and statistical tests using computer software programs (BEBIS 6.1 student version and SPSS 16.0) was applied. Carbohydrate, protein, fat, vitamins A, K, C, phosphorus, vitamin E, D, B1, folic acid, calcium, iron, iodine, fluoride, magnesium, copper and potassium intake is lower than daily values of fiber, manganese and sodium intakes were found to be above the DRI values (49).

In another study conducted in 2015, demographic characteristics, diagnosed diseases and weight change stories were questioned, anthropometric measurements were taken, physical activity levels were determined, and three-day nutrient consumption was recorded and pre-exercise calcium consumption was recorded in 75-overweight and obese women aged 25-50 years. According to the individual applicants, three different groups were assigned randomly (n = 25), randomized diet programs with daily 800, 1000 or 1200 mg calcium according to the assigned group, nutrition education and

nutrition education were given every fifteen days for 8 weeks and anthropometric measurements were repeatedly applied to the controls. As a result of the study, weight loss, change in BMI, decrease in percentage of body fat and decrease in waist circumference were found significant in all groups ($p < 0.05$). In the study, determining the significant effect of the increase in consumption of milk and dairy products on weight loss indicates that this group of products is in a position to support the recommendation to increase the dietary levels (50).

Istanbul University Istanbul Faculty of Medicine was applied to students who had a mean age of 18.4 ± 0.9 years in a study conducted with 878 students whose first grade was 39.4% female and 60.6% male. Anthropometric measurements were made and final Determined by 24-hour food consumption, analysis of nutrients was done using BEBIS program. The data obtained were compared with those of Turkey. Compared with the recommendations, all students were found to have fiber, B1 vitamins, folic acid, calcium and magnesium, and girls had low iron (51).

As a result, in our study, we have stated that women do not consume in their diets, cereals, vegetables, fruits, milk, sodium and some other food groups in the correct amounts. Inadequate intake of micronutrients such as iron, calcium, folic acid and fiber is seen. In addition, the results of this study also found that overweight females were malnourished, while obese females needed to be corrected.

In 2011, a questionnaire was used in a study on 450 people who applied to the Faculty of Medicine, University of Ibn-i Sina Education and Research Hospital, Department of Nutrition and Diet in 2011 and the obesity status was socio-demographic such as gender, age, marital status, education level, occupation, and properties. It has been determined that the duration of marriage, the number of children, obesity in childhood, previous obesity treatment and previous obesity affects dieting and menopausal obesity (52).

Our study had some limitations. Initially, all the data of this study is based on the personal report, so the tendency of the participants to give socially desirable responses is not known precisely. Some overweight and obese individuals may have provided incomplete information about food intake. Full and real answers were expected in the study. In addition, a single daily intake does not represent an individual daily intake, although the 24HDR method is commonly used for dietary considerations. However, both this study and the study population are considered to be the most appropriate and feasible tool. Some participants did not fully fill out the 24HDR section of the survey.

Some explanations were made by the researcher about participant portion sizes, but some participants did not specify the portion sizes of some foods. For this reason, calculations made with the BeBIS program may not reflect actual nutritional purchases. This study also included one 24HDR instead of traditional 3-d diet calls. The HEI scores calculated after recalling from a 1-d diet are lower than the HEI scores calculated from a 3-d diet recall. But it does not mean that it does not yield significant results (53).

Despite the stated limitations, findings can be used to provide basic information for further research intervention development to improve the quality of the diet among women.

As a result, eating habits may change without being coy. For this reason the best solution for health improvement efforts is to go for a sufficient and balanced healthy diet and at the same time to adopt a life style with physical activity can provide a healthy life for a lifetime.

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7. APPENDICES

7.1.Ethical Approval



**BAHÇEŞEHİR ÜNİVERSİTESİ
KLİNİK ARAŞTIRMALAR ETİK KURULU**

Üniversitemiz Klinik Araştırmalar ve Etik Kurulu'na ait 15 Haziran 2016 Tarih ve 2016-05/06 Sayılı Karar Örneğidir.

KARAR:2016-05/06

Yeditepe Üniversitesi Yüksek Lisans Öğrencisi Meryem GÜBÜR'ün “**Özel Bir Hastanenin Beslenme ve Diyet Polikliniğine Başvuran 18-65 Yaş Arası Beden Kitle İndeksi 25-30 ve 30-40 Arası olan Kadın Hastaların Yeme İndekslerinin Karşılaştırılması**” isimli tez araştırma başvuru dosyası görüşüldü.

Görüşmeler sonunda; Yeditepe Üniversitesi Yüksek Lisans Öğrencisi Meryem GÜBÜR'ün “**Özel Bir Hastanenin Beslenme ve Diyet Polikliniğine Başvuran 18-65 Yaş Arası Beden Kitle İndeksi 25-30 ve 30-40 Arası olan Kadın Hastaların Yeme İndekslerinin Karşılaştırılması**” adlı, araştırmaları gerekçe, amaç, yaklaşım ve yöntemleri dikkate alınarak; incelenmiş ve uygun bulunmuş olup araştırmanın/çalışmanın başvuru dosyasında belirtilen merkezlerde gerçekleştirilmesinde etik ve bilimsel sakınca bulunmadığına karar verildi.

**Prof.Dr. Nazire AFŞAR
Etik Kurul Başkanı**

7.2.Questionnaire

BİLGİLENDİRİLMİŞ GÖNÜLLÜ OLUR FORMU

Bu katıldığınız çalışma bilimsel bir araştırma olup, araştırmanın adı ‘Özel Bir Hastanenin Beslenme ve Diyet Polikliniğine Başvuran 18-65 yaş arası Beden Kitle İndeksi 25-30 ve 30-40 arasında olan Kadın Hastaların Yeme İndekslerinin Karşılaştırılmasıdır. Bu araştırmanın amacı beden kitle indeksi 25-30 ve 30-40 arasında olan 18-65 yaş arası kadın hastaların yeme indekslerinin farklılıklarını analiz etmektir. Bu çalışmada size anket yapılacak, 1(bir) günlük besin tüketim kaydı doldurulacaktır. Bu çalışmada yer almanız öngörülen süre 1 saat olup, çalışmada yer alacak gönüllülerin sayısı en az 80’dir.

Bu araştırma ile ilgili olarak anket ve formları doğru doldurmak sizin sorumluluğunuzdadır.

Bu çalışmada sizin için herhangi bir risk ve rahatsızlık söz konusu olmayacaktır. Araştırmaya bağlı bir zarar söz konusu olduğunda, bu durumun tedavisi sorumlu araştırmacı tarafından yapılacak, ortaya çıkan masraflar yine araştırmacı sorumlu tarafından karşılanacaktır. Araştırma sırasında sizi ilgilendirecek herhangi bir gelişme olduğunda, bu durum size veya yasal temsilcinize derhal bildirilecektir. Araştırma hakkında ek bilgiler almak için ya da çalışma ile ilgili herhangi bir sorun, istenmeyen etki ya da diğer rahatsızlıklarınız için 0533 271 30 54 no.lu telefondan Dyt. Meryem GÜBÜR’e başvurabilirsiniz.

Bu çalışmada yer almanız nedeni ile size hiçbir ödeme yapılmayacaktır.

Bu çalışmada yer almak tamamen sizin isteğinize bağlıdır. Araştırmada yer almayı reddedebilirsiniz ya da herhangi bir aşamada araştırmadan ayrılabilirsiniz; bu durum herhangi cezaya ya da sizin yararlarınıza engel duruma yol açmayacaktır. Araştırmacı bilginiz dâhilinde veya isteğiniz dışında, çalışma programını aksatmanız gibi nedenlerle sizi araştırmadan çıkarabilir. Araştırmanın sonuçları bilimsel amaçla kullanılacaktır.

Size ait tüm tıbbi ve kimlik bilgileriniz gizli tutulacaktır ve araştırma yayınlansa bile kimlik bilgileriniz verilmeyecektir.

Çalışmaya Katılma Onayı:

Yukarıda yer alan ve araştırmaya başlanmadan önce gönüllüye verilmesi gereken bilgileri okudum ve sözlü olarak dinledim. Aklıma gelen soruları araştırmacıya sordum, yazılı ve sözlü olarak bana yapılan tüm açıklamaları ayrıntılarıyla anlamış bulunmaktayım. Çalışmaya katılmayı isteyip istemediğime karar vermem için bana yeterli zaman tanındı. Bu koşullar altında, söz konusu araştırmaya ilişkin bana yapılan katılım davetinin hiçbir zorlama ve baskı olmaksızın gönüllülük içerisinde kabul ediyorum.

Gönüllünün, Adı-Soyadı: Adresi: Tel.-Faks: Tarih ve İmza:	Açıklamaları yapan araştırmacının, Adı-Soyadı: Adresi: Tel.-Faks: Tarih ve İmza:
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ÖZEL BİR HASTANENİN BESLENME VE DİYET POLİKLİNİĞİNE BAŞVURAN 18-65 YAŞ ARASI BEDEN KİTLE İNDEKSİ 25-30 ARASI VE BEDEN KİTLE İNDEKSİ 30-40 ARASI OLAN KADIN HASTALARIN BESİN TÜKETİMİ İNDEKSLERİNİN KARŞILAŞTIRILMASI

ANKET NO:.....UYGULAMA TARİHİ:.....

I. GENEL BİLGİLER

1.ADI-SOYADI:.....

2. E-MAIL:.....

3. TEL (Ev):..... (Cep):.....

4. YAŞI(Bitirilen):.....

**5. MESLEĞİNİZ: 1)Ev kadını 2)Memur 3)Serbest Meslek 4)Emekli 5)İşsiz
6)Diğer:...**

6. MEDENİ DURUMU: 1) Evli 2) Bekâr

7.MENARŞ YAŞI:

8. TOPLAM GEBELİK SAYISI:

9.MENOPOZ YAŞI:

10. EĞİTİM DURUMU:

- 1) Okuma-yazma bilmiyor
- 2) İlkokul
- 3) Ortaokul
- 4) Lise
- 5) Ön lisans
- 6) Lisans
- 7) Yüksek lisans

11. SİGARA KULLANMA DURUMU:

- 1) Hiç kullanmıyor
- 2) Önceden içip bırakmış
- 3) 1-4 adet /Gün
- 4) 5-9 adet /Gün
- 5) 10-19 adet /Gün
- 6) ≥ 20 adet /Gün

12. ALKOL TÜKETİM DURUMU:

- 1) Hiç
- 2) ≥ 4 adet /Gün
- 3) 1-7 adet /Hafta
- 4) 8-14 adet /Hafta
- 5) 15-21 adet /Hafta
- 6) 22-28 adet /Hafta
- 7) > 28 adet /Hafta

13. ANTROPOMETRİK ÖLÇÜMLER

- 1) Vücut ağırlığı (kg):
- 2) Boy uzunluğu (m):
- 3) BKİ (kg/m²):
- 4) Bel kalça oranı:
- 5) Vücut yağ kütlesi, kg:
- 6) Vücut yağ kütlesi, %:
- 7) Yağsız vücut kütlesi, kg:
- 8) Vücut su kütlesi, kg:

14. BİREYİN HER HANGİ BİR HASTALIĞI VAR MI?

- 1) Sağlıklı
- 2) Kalp-damar Hastalıkları
- 3) Yüksek tansiyon
- 4) Yüksek kolesterol
- 5) Diyabet (Şeker hastalığı)
- 6) Şişmanlık
- 7) Kemik-Eklem Rahatsızlıkları (Osteoporoz gibi)
- 8) Kanser (belirtiniz)
- 9) Anemi
- 10) Böbrek hastalıkları
- 11) Karaciğer safra kesesi hastalıkları
- 12) Hipotiroidi
- 13) Ülser-Gastrit-Reflü
- 14) Diğer (belirtiniz)

15. BİREYİN SÜREKLİ KULLANDIĞI BİR İLAÇ VAR MI?1)Evet 2)Hayır

İLAÇ ADI	KULLANMA NEDENİ	MİKTARI (...adet/gün/hafta)
1)		
2)		
3)		
4)		
5)		
6)		
7)		

16.SON BİR YILDA HERHANGİ BİR BESİN DESTEĞİ KULLANDINIZ MI?

(Vitaminler, mineraller, aminoasitler, yağ asitleri gibi)

- 1) Evet, düzenli kullanıyorum 2) Evet, düzensiz kullanıyorum 3) Hayır

17. CEVABINIZ ‘EVET’ İSE KULLANDIĞINIZ DESTEĞİN ADI, KULLANMA SIKLIĞINIZ;

Adı	Adedi (gün/hafta/ay/yıl)

18. KULLANDIĞINIZ BESİN DESTEĞİNİ KİM ÖNERDİ?

1) Doktor 2)Eczacı 3)Komşu 4) Arkadaş 5)Diğer...

19. TATLANDIRICI KULLANIYOR MUSUNUZ?

1) Hiç 2) Her gün 3)Haftada 2-3 4) Haftada bir 5) On beş günde 1 6) Ayda bir

II. BESLENME ALIŞKANLIKLARI

20. GÜNDE KAÇ ÖĞÜN YEMEK YİYORSUNUZ?.....ana öğünara öğün

21. ÖĞÜN ATLAR MISINIZ? ATLANAN ÖĞÜN: 1)Sabah 2)Öğle 3)Akşam

1)Evet (.....) 2)Hayır 3)Bazen (.....)

22. ÖĞÜN ATLAMA NEDENİNİZ?

1)Zaman yetersizliği 2) Canı istemiyor, iştahsız 3) Geç kalıyor 4)Hazırlamadığı için
5) Zayıflamak istiyor 6)Alışkanlığı yok 7) Diğer.....

23. ÖĞÜN ARALARINDA BİRŞEYLER YER MİSİNİZ?

1)Evet 2)Hayır 3)Bazen

24.CEVABINIZ ‘EVET’ VEYA ‘BAZEN’ İSE GENELDE HANGİ TÜR YİYECEKLERİ TERCİH EDERSİNİZ?

1)Sandviç, tost, börek 2)Simit, bisküvi, kurabiye 3)Meyve, meyve suları

4)Süt, yoğurt, ayran, peynir 5)Kolalı içecekler 6)Sade ve meyveli gazoz

7)Şeker, çikolata, gofret vb. 8)Çay, kahve

25. EV DIŞINDA YEMEK YER MİSİNİZ? 1)Evet 2) Hayır

26. CEVABINIZ EVET İSE NE SIKLIKLA (GÜN/HAFTA/AY/YIL)

TÜKETİRSİNİZ?

1) Sabah 2) Öğle 3) Akşam 4) Ara öğün

BESİN TÜKETİM KAYIT FORMU

TARİH:../...../20.... GÜN:.....

ÖĞÜN	BESİN ADI - İÇİNDEKİLER	TÜKETİLEN BESİN MİKTARI (PORSİYON)	MİKTARI (GRAM)
SABAHA			
KUŞLUK			
ÖĞLE			
İKİNDİ			
AKŞAM			
GECE			

Not: Kibrit Kutusu:KK, Yemek Kaşığı: YK, Tatlı Kaşığı: TK, İnce Dilim: İD, Su Bardağı: SB, Orta Dilim: OD, Kalın Dilim: KD, Kepçe: K

8. CIRRUCULUM VITAE

Personal Information

Name	Meryem	Surname	Gübür
Birth palace	Erdemli	Doğum Tarihi	18.07.1989
Nationality	T.C.	Tel	05332713054
E-mail	Meryemgubur7@gmail.com		

Education

Derece	Department	Institute	Graduation year
Postgraduate	-	-	-
Master	Nutrition and Dietetic	Yeditepe Üniversitesi	-
License	Nutrition and Dietetic	Yeditepe Üniversitesi	2014
High School	Science	Erdemli Anadolu Lisesi	2007
Foreign language		Institute	
English		High school - University	

Job experience

Task	Workpalace	Duration (Year-Year)
Dietitian	Özel Okmeydanı Hastanesi	2014-2017

Computer skills

Program	Skill
Microsoft Office Word-excel-power point-outlook	Very good
Bebis	Moderate

Other (Projects and Certifications)

VII. International Congress of Nutrition and Dietetics (İstanbul - 2010) Obesity Surgery Course for Dieticians - Advanced Laparoscopy for Bariatric Surgery (İstanbul – 2013) Diyabet Semineri (İstanbul – 2013) Sports Dietetic Course / Role of Nutrition in Sports Performance-Sports Dietician (İstanbul - 2014) Type 1 Nutrition and Carbohydrate Census Course in Childhood and Adolescence - Diabetes Dietetic Association (İstanbul - 2014)
