

The determination of physical activity, nutrition and self-sufficiency levels of sedanter individuals of fitness club member

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Abstract

Purpose: This study was planned to determine the physical activity (PA), nutrition and self-efficacy levels of sedentary individuals who have long been members of fitness clubs.

Material: A total of 80 participants were divided into two groups according to body mass index (BMI) according to their obesity status: Group 1 (overweight obesity (OW)) and Group 2 (Normal Weight (NW)). All participants were watched for a year. The study includes questionnaires on PA, eating habits, nutrition knowledge and self-efficacy. Descriptive statistics including frequency, percentiles, mean and Standard deviation were used. The T test was used to examine differences between PA, eating habits, nutrition knowledge and self-efficacy. Statistical significance was accepted as $P < 0.05$.

Results: Regarding participants' eating habits, the OW group was less frequent breakfast ($P < 0.05$) and snack ($P < 0.01$), ate more meals ($P < 0.01$). When compared with the NW group, they showed less desirable behavior during the meal ($P < 0.05$ for men). OW men spent less time ($P < 0.01$) during weekdays or weekends while doing less PA ($P < 0.01$). OW women sat more in the weekdays or weekends ($P < 0.01$) and spent less time walking or riding a bicycle ($P < 0.05$) than the NW group. The nutritional information of the OW and NW groups was not significantly different. Especially PA self-efficacy in OW was significantly lower than in NW group ($P < 0.01$).

Conclusions: This study revealed differences between PA, eating habits and self-efficacy between OW and NW individuals. Sedentary individuals who are members of fitness clubs should exercise programs to prevent obesity and to increase the confidence about exercise or physical activity.

Keywords: obesity, fitness club member, physical activity, nutrition information, self-sufficiency.

Introduction

Physical activity has a positive effect on the individual's both physical and functional capacity and health. When the benefits of physical activity are taken into account, optimal exercise provides individuals with healthier communities [1]. Research has shown that physical activity and exercise are essential for health [2-5]. The International Association of Health, Racquet and Sports Club estimates that 151 million people exercise in 187,000 sports and fitness centers worldwide [6]. Exercising in a fitness room exhibits three different forms of behavior on the individual: participation behaviors (when a person enters facility), continuation (an individual participates in a particular program), and eventual exercise (individual time, intensity, true) [7]. Participation in fitness clubs and research on exercise behavior are limited [8], but preliminary studies have identified low exercise sessions in sports clubs with an average of 1.1 sessions per month over a 24-month period. Only 25% of the 259,000 old members were regularly exercised for six months in the 10% and 2.3% did not stop in two years [9]. These frequencies will not affect health well [2, 3].

Self-sufficiency is the belief in one's ability to overcome personal, social, and environmental barriers. There are two important aspects that will influence confidence in adopting and maintaining exercise behavior. The first is activity expectations; belief about their competencies. Second, beyond expectations; beliefs

about the results of one's own practice or the results of exercises. According to the self-efficacy theory, human behaviors are strongly influenced by self-regulation, for example, by self-regulation of exercise activities and self-determinative exercise goals [10]. Higher (perceived) self-efficacy further increases the likelihood that the individual will initiate and maintain behavior. A practice habit, for example, makes a call to enter a specific habit to remain motionless. It is conceptually related to self-sufficiency.

There is limited research on exercise behaviors of members of sports clubs [8]. According to [11], 46% of women participate in cardio programs only and 51% of them participate in cardio and strength programs. 60% of men prefer to participate in strength training and cardio programs if only cardio is 33%. In addition, while men (60%) and women (45%) were involved in group exercises, only 31% of women did not participate in group exercise programs. This participation is suggested to be a sign of exercise behavior. In a study of program participation and exercise behavior in fitness clubs, [12], reported a 17% to 100% change in participation in programs. A study of members of the US sports clubs by DellaVigna and Malmendier [13] on attendance and attendance at the fitness club was conducted. A large number of 7.752 active members attendance have reported dropping from 5.46 to 4.32 in the first 6 months of to fitness clubs.

For this reason, it is very important to actively control obesity in individuals who are members of fitness clubs. Although the cause of obesity is complex, eating habits

or lifestyle play an important role in the development of obese conditions [14, 15]. Physical activity deficiency and malnutrition are accepted as an important risk factor. Physical activity may continue at any time of life [16, 17]. In particular, it is emphasized that as individuals age, they experience a significant decline in sedentary lifestyle and a significant decrease in their physical activity [18]. Physical inactivity is among the most important causes of the increase in the number of obese people. In addition, there is a close relationship between obesity and cardiovascular diseases, diabetes, osteoporosis, some types of cancer, mental problems and many health problems [19, 20]. Increased physical activity has a positive effect on obesity, and therefore, it is suggested that there are many studies that emphasize the effect of treatment with the preventive effect of the above mentioned diseases [21]. Factors related to eating or physical activity should also be identified to help sedentary individuals adopt healthy behaviors [22]. Knowledge of eating or physical activity is necessary to conduct the behavior, but it must be combined with these skills. Self-efficacy represents the ability to perform behavior and is known to be important in describing health behaviors such as eating and physical activity [14, 23]. This study was designed to determine the physical activity (PA), nutrition and self-efficacy levels of sedentary individuals who have long been members of fitness clubs

Material and Methods

Participants

Before starting to work, necessary legal permissions were taken, the rules to be complied with were signed in detail, clarified to the individual, and an informed consent form. The study was conducted in accordance with the Helsinki declaration. The inclusion criteria are not a chronic disease, and the absence of chronic drug use means that there are no musculoskeletal problems that could affect physical activity. There is also a group

of exercise programs already prepared to provide equal quality between the staff and group exercise programs that will carry out the group exercise sessions. This study was initiated by 129 sedanter individuals between 19-42 years of age. The study ended with a total of 80 participants, 35 female and 45 male, who were trying to improve their physical fitness levels in the fitness halls for a year. Body mass indexes (BMI) of 80 participants attending fitness clubs at the end of the first 2 months were divided into two groups according to their obesity status: Group 1 (Overweight Obese (OW)) and Group 2 (Normal Overweight (NW)). At the end of the study, groups were asked about PA, eating habits, nutrition knowledge and self-efficacy.

Procedure

In this study, the same exercise programs were used for both groups. These programs were selected because they were prepared in advance and follow a standard format by the instructors. Exercise program sessions were planned as 3 days a week, 1 hour a day. Exercise programs include frequency and intensity of exercise as well as training [24, 25]. The study questionnaire was based on sedanter individual' eating habits, physical activity and nutrition knowledge, and literature review to determine self-efficacy levels [26-28]. General features include the items of age, gender, height, weight, body mass index (BMI). The body mass index was calculated based on the weight and the dye reported. Participants' height measurements were measured by the millimetric height scale and body weight measurements by electronic scales. Body weight and height measurements were formulated by adding them to personal information forms. BMI = Body Weight (kg) / Boy² (m). BMI values were obtained by dividing the body length by body weight after taking the length of the body length. Overweight-obese (OW) with BMI ≥ 25 and BMI 18.5 <BKI <25 were determined as those with normal weight (NW).

Data Collection Tools

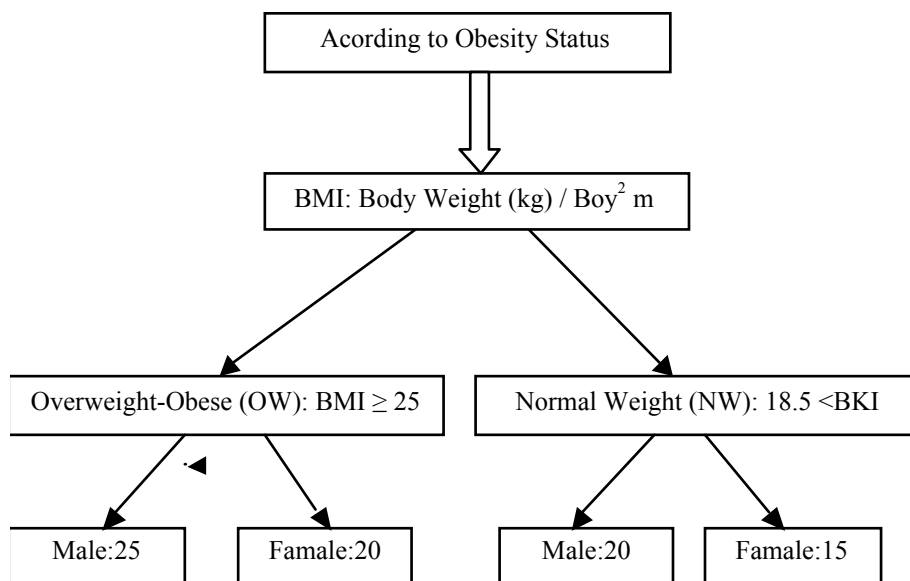


Figure 1. Participation in the study according to obesity status

Eating Habits

Eating habits included diverse foods, regular meals, size of food, frequency of breakfast meals, eating and snacks, behavior during meals, unbalanced diet and unfavorable food [29,30]. These variables were measured using 5-point scales or by asking them to record the frequency of their behavior or to check the categories.

Physical Activity

Physical activity is measured based on seven factors: the frequency of physical activity for at least 30 minutes per day, the frequency of walking or cycling, the frequency of exercise, weekday or weekend walking times, weekday or weekly moving time, by the number of activities they have performed [31,32]. The time spent walking was measured using four categories: "less than 30 minutes a day" or "more than 2 hours a day." The inactive time spent was measured using the categories "from less than one hour a day" to "no more than 4 hours a day".

Nutrition Knowledge

Nutrition knowledge was measured on 10 items, including general nutrition (six items) and information about obesity (four items) [29,30]. Information about obesity, definition of obesity, adequate weight control, fruit and energy and the effects of regular exercise. For each nutritional information item, the number and percentage of correct answers of the subjects were examined. The total score of the nutrition knowledge was the total score of the correct answers for 10 nutrition knowledge items.

Self-Efficacy

Self-efficacy obesity status in eating or physical activity was assessed using 10 items [27,30,33]. Self-efficacy in physical activity was measured using four items. They regularly participate in sports exercises, perceived efficacy on tired or bad weather conditions, driving at short distances, exercising at lunch or in the malls. Each item was measured on a 4-item scale between 'very difficult' (1) and 'very easy' (4). The total score for self-efficacy was calculated as a total of 10 item points.

Statistical Analysis.

SPSS (PASW Statistics 18.0; SPSS Inc., Chicago, IL, USA) was used for statistical analyses. Descriptive statistics including frequency, percentages, mean and standard deviation were calculated. Body weight and

height measurements were formulated by adding them to personal information forms. BMI = Body Weight (kg) / Boy2 (m). BMI values were obtained by dividing the body length by body length after taking the body length. In this study T-test was used for parametric variables to examine the differences between the eating habits, physical activity, nutrition knowledge and self-efficacy according to obesity status. Chi-square analyses were conducted for non-parametric variables. Statistical significance was examined at $P < 0.05$.

Results

Sedanter Individuals Who Are Members of Fitness Clubs were found to be included in the age group 26.3 ± 6.5 Normal Weight (NW) and 28.1 ± 7.6 in the Overweight & Obesity (OW) group. The groups were significantly different according to their obesity status; OW group weight and BMI was higher than NW group while the height length was found to be lower ($P < 0.01$) (Table 1).

The frequency of breakfast with sedentary individuals who were members of Fitnis clubs was average in male OW group (5.6 ± 1.4) and female OW group (5.7 ± 1.6). OW group values were higher than NW group men and women ($P < 0.05$). while the frequency of eating outside did not vary among men OW women ate more food than NW women ($P < 0.01$). The average snack frequency from both sexes was significantly higher in the OW group in males and females ((1.6 ± 1.3) ; (1.6 ± 1.2)). In the NW group men and women, the average frequency of snacks was 1.2 ± 0.8 times daily, OW group (1.6 ± 1.3) per day in men and (1.6 ± 1.2) in women ($P < 0.01$). OW reported that about 12% of men did not eat a wide variety of foods, and 28% said that a wide variety of foods were eaten too often. Approximately 10% of OW women reported that they did not eat a wide variety of foods, and 30% reported that a wide variety of foods were eaten too often. Approximately 20% of OW men and 35% of women were fed with very irregular food, while the rate of regular eating was 28.7% in total participants. The proportion of respondents who responded as 'small' or 'very small' according to the size of the food ratio was 48% in the OW group male, 55% in the OW group women ($P < 0.001$). Participants were observed to exhibit similar behaviors in

Table 1. General Descriptive Characteristics of Sedanter Individuals Who Are Members of Fitness Clubs

Variables	Obesity Status ¹⁾		
	Normal (n = 35)	Overweight & Obesity (n = 45)	Total (n=80)
Age	26.3 ± 6.5	28.1± 7.6 ²⁾	27.2±7.05
Weight (kg)	66.4 ± 14.8	77,2 ± 11.6**	71.8±13.2
Height (cm)	179,1 ± 8.72	168,8 ± 6.65**	173,9±7.68
BMI	22.6 ± 4.1	28.2 ± 3.4**	25.4±3.7
Male	20 (44.5)	25 (55.5)	45 (100.0)
Famale	15 (42.8)	20(57.2) ³⁾	35(100.0)

* $P < 0.05$, ** $P < 0.01$; 1) BKİ ≥ 25 overweight - obesity (OW) ve BKİ $18.5 < BKİ < 25$ normal weight (NW); 2) Mean \pm SD; 3) n (%).

eating. Approximately 68% of men in OW group and 75% of OW women were fed an unbalanced diet ($P < 0.001$) (Table 2). No significant difference was observed between the participants regarding the unfavorable foods (Table 2).

It was found that 24% of men in the OW group and 40% of the women in the OW group did not do any physical activity at least 30 minutes per day during the week. OW group reported that 40% of men and 35% of women walked no day or did not ride bicycles. 40% of men in NW group and 46.8% of women walked at least 1-2 days per week ($P < 0.05$). During weekday OW group found that 36% of men and 40% of women and during the weekend 32% of OW group men and 50% of women were

walking less than 30 minutes a day ($P < 0.05$) ($P < 0.01$). OW and NW group men and women were on weekdays and weekend time spent during was between 30 minutes and 1 hour. The ratio of male and female OW group who had less physical activity on weekdays and weekends than three hours was higher than NW group (Table 3). Approximately 40% of women in the OW group never participated in physical activity in a week. The proportion of OW women exercising more than three hours a week (10%) is lower than NW women. The rate of NW group men and OW group men exercising every other day was significantly similar (Table 3).

Table 2. Eating habits according to obesity status in Sedanter Individuals who are Members of Fitness Clubs

Variables	Male (n=45)		Female (n=35)		Total (n= 80)
	Normal (n= 20)	Overweight & Obesity (n =25)	Normal (n= 15)	Overweight & Obesity (n =20)	
Breakfast frequency (times/ week)	4.5 ± 1.6	5.6 ± 1.4 ³⁾ *	4.4 ± 1.7	5.7 ± 1.6*	5.0 ± 1.6
Frequency of eating out (times/ week)	1.1 ± 0.8	1.3 ± 1.1	1.1 ± 0.8	1.4 ± 0.7**	1.2 ± 0.8
Frequency of eating snacks (times/day)	1.2 ± 0.8	1.6 ± 1.3**	1.2 ± 0.8	1.6 ± 1.2**	1.4 ± 1.0
Variety of foods					
Do not eat a variety of foods at all	2 (10.0)	3 (12.0) ⁴⁾ *	1 (6.7)	2 (10.0)*	8(10.0)
Do not eat a variety of foods	3 (15.0)	4 (16.0)	2 (13.3)	2 (10.0)	11(13.9)
Average	6 (30.0)	5 (20.0)	6 (40.0)	5 (25.0)	22(27.4)
Eat a variety of foods	6 (30.0)	6 (24.0)	4 (26.7)	5 (25.0)	21(26.2)
Eat a variety of foods very often	3 (15.0)	7 (28.0)*	2 (13.3)	6 (30.0)*	18(22.5)
Regular meals					
Very irregular	1 (5.0)	6 (24.0)	1 (6.7)	7 (35.0)**	15(18.7)
Irregular	3 (15.0)	7 (28.0)**	2 (13.3)	4 (20.0)	16(20.0)
Neither irregular nor regular	5 (25.0)	4 (16.0)	3 (20.0)	3 (15.0)	15(18.7)
Regular	8 (40.0)	5 (20.0)	6 (40.0)	4 (20.0)	23(28.7)
Very regular	3 (15.0)	3 (12.0)	3 (20.0)	2 (10.0)	11(13.9)
Size of meals					
Very small/ small	6 (30.0)	12 (48.0)**	5 (33.3)	11 (55.0)**	34(42.5)
Adequate	8 (40.0)	8 (32.0)	7 (46.7)	5 (25.0)	28(35.0)
Large/very large	6 (30.0)	5 (20.0)	3 (20.0)	4 (20.0)	18(22.5)
Behavior during meals					
Just eating	5 (25.0)	8 (32.0)	4 (26.7)	7 (35.0)	24(30.0)
Conversation with family members	5 (25.0)	6 (24.0)	5 (33.3)	6 (30.0)	22(27.4)
Playing games or watching TV	6 (30.0)	6 (24.0)	3 (20.0)	4 (20.0)	19(23.9)
Reading a book or others	4 (20.0)	5 (20.0)	3 (20.0)	3 (15.0)	15(18.7)
Unbalanced diet					
Yes	6 (30.0)	17 (68.0)*	5 (33.3)	15 (75.0)**	43(53.7)
No	14 (70.0)	8 (32.0)	10 (66.7)	5 (25.0)	37(46.3)
Foods that they dislike¹⁾					
Grains and starches	1(5.0) ⁵⁾	3 (12.0)	1 (6.7)	1 (5.0)	6(21.4)
Meat	2 (10.0)	3 (12.0)	2 (13.3)	2 (10.0)	9(13.2)
Fish	3 (15.0)	2 (8.0)	3 (20.0)	2 (10.0)	10(6.3)
Eggs	3 (15.0)	2 (8.0)	2 (13.3)	3 (15.0)	10(9.5)
Beans	1 (5.0)	3 (12.0)	1 (6.7)	3(15.0)	8(15.5)
Vegetables	2 (10.0)	2 (8.0)	2 (13.3)	3 (15.0)	9(10.0)
Fruits	3 (15.0)	3 (12.0)	2 (13.3)	3 (15.0)	11(8.6)
Dairy products	2 (10.0)	3 (12.0)	1 (6.7)	2 (10.0)	8(6.9)
Seaweeds ²⁾	3 (15.0)	4 (16.0)	1(6.7)	1 (5.0)	9(8.6)

* $P < 0.05$, ** $P < 0.01$; 1) Multiple answers; 2) Shellfish, soy bean paste, greasy foods, spicy foods, etc.; 3) Mean ± SD; 4) n (%); 5) The number in parentheses is the percentage of total subjects in each group.

Table 3: The level of physical activity according to obesity status of Sedanter Individuals who are Members of Fitness Clubs

Variables	Male (n=45)		Female (n=35)		Total (n= 80)
	Normal (n= 20)	Overweight & Obesity (n =25)	Normal (n= 15)	Overweight & Obesity (n =20)	
At least 30 minutes of physical activity per day (days/week)					
No	3(15.0)	6(24.0) ^{1*}	1(6.6)	8(40.0)**	18(22.5)
1-2	8(40.0)	8(32.0)	6(40.0)	6(30.0)	28(35.0)
3-4	5(25.0)	5(20.0)	4(26.8)	3 (15.0)	17(21.3)
5-6	3(15.0)	4(16.0)	3(20.0)	2 (10.0)	12(15.0)
7	1(5)	2 (8.0)	1(6.6)	1 (5.0)	5(6.2)
Walking or riding a bicycle (days/week)					
No	3(15.0)	10(40.0)*	2(13.3)	7(35.0)*	22(27.5)
1-2	8(40.0)*	4 (16.0)	7(46.8)*	5(25.0)	24(30.0)
3-4	5(25.0)	5 (20.0)	3(20.0)	4(20.0)	17(21.3)
5-6	3(15.0)	4 (16.0)	2(13.3)	3(15.0)	12(15.0)
7	1(5.0)	2(8.0)	1(6.6)	1(5.0)	5(6.2)
Time spent walking during weekdays (hours/day)					
< 30 min	4(20.0)	9(36.0)*	3(20.0)	8(40.0)**	24(30.0)
30 min ≤ < 1 hour	8(40.0)	10(40.0)	6(40.0)	6(30.0)	30(37.5)
1 hour ≤ < 2 hours	5(25.0)	4(16.0)	4(26.7)	4(20.0)	17(21.3)
2 hours ≤	3(15.0)	2(8.0)	2(13.3)	2(10.0)	9(11.2)
Time spent walking during the weekend (hours/day)					
< 30 min	3(15.0)	8(32.0)*	4(26.7)	10 (50.0)**	25(31.3)
30 min ≤ < 1 hour	9(45.0)	10(40.0)	6(40.0)	6 (30.0)	31(38.7)
1 hour ≤ < 2 hours	5(25.0)	5(20.0)	3(20.0)	3 (15.0)	16(20.0)
2 hours ≤	3(15.0)	2(8.0)	2(13.3)	1 (5.0)	8(10.0)
Sedentary activity during weekdays (hours/day)					
< 3	12(60.0)	16(64.0)**	7(46.8)	13(65.0)**	48(60.0)
3 ≤	8(40.0)	9(36.0)	8(53.2)	7(35.0)	32(40.0)
Sedentary activity during the weekend (hours/day)					
< 3	11(55.0)	18(72.0)**	7(46.8)	14(70.0)**	50(62.5)
3 ≤	9(45.0)	7 (28.0)	8(53.2)	6 (30.0)	30(37.5)
Number of days for exercise (times/ week)					
No	2(10.0)	5 (20.0)	2(13.3)	8(40.0)**	17(21.3)
1	8(40.0)	10 (40.0)	6(40.0)	7(35.0)	31(38.7)
2	6(30.0)	6 (24.0)	4(26.7)	3(15.0)	19(23.7)
3 ≤	4(20.0)	4 (16.0)	3(20.0)	2(10.0)	13(16.3)

* P < 0.05, ** P < 0.01; 1) n (%).

There was no significant difference between OW and NW groups in terms of general nutrition knowledge score, obesity knowledge score, and nutrition knowledge total score in both genders. Similarly, there was no significant difference in eating self-efficacy scores between OW and NW groups. OW groups men and women were found to have lower physical activity self-efficacy scores (P < 0.01). However, no significant difference was found in physical activity self-efficacy scores of male and female NW group. OW male and female physical activity self-efficacy scores were significantly lower than NW women (P < 0.01). However, the OW group was found to be significant in the total self-efficacy score (P < 0.01) in women (Table 4).

Discussion

Nowadays industrialization and modern lifestyle reduce physical mobility, which in turn affects the

individual in every age and brings serious health problems to the agenda. Physical inactivity, defined as the most insidious disease of our time, is a major public health problem

[34]. Research on different populations of physical activity and exercise (USA and Europe) has shown that less than 5% of adults exercise a minimum amount [35,36]. Moreover research has shown that 50% of those participating in exercise programs in the fitness centers split in the first six months [37]. This study was designed to determine the physical activity (PA), nutrition and self-efficacy levels of sedentary individuals who have long been members of fitness clubs. Sedanter Individuals Who Are Members of Fitness Clubs were found to be included in the age group 26.3 ± 6.5 Normal Weight (NW) and 28.1 ± 7.6 in the Overweight & Obesity (OW) group. The groups were significantly different according to their obesity status; OW group weight and BMI was higher

Table 4: Nutritional knowledge and self-efficacy levels according to obesity status in Sedanter Individuals who are Members of Fitness Clubs

Variables	Male (n=45)		Female (n=35)		Total (n= 80)
	Normal (n= 20)	Overweight & Obesity (n =25)	Normal (n= 15)	Overweight & Obesity (n =20)	
Nutrition Knowledge					
General nutrition knowledge score ¹⁾	4.1 ± 0.6	3.6 ± 0.5	4.2 ± 0.7	3.6 ± 0.5	3.8 ± 0.6
Obesity knowledge score	3.3 ± 0.7	3.1 ± 0.6	3.2 ± 0.6	3.0 ± 0.6	3.1 ± 0.6
Nutrition knowledge total score	7.6 ± 1.3	7,7 ± 1.1	7.8 ± 1.4	7.7 ± 1.1	7.7 ±1.2
Self-efficacy					
Eating self-efficacy score	18.1 ± 2.7	18.2 ± 2.6	18.5 ±3.0	19.0 ± 3.1	18.4±2.8
Physical activity self-efficacy score	13.2 ± 2.1	11.3 ± 2.6**	13.1 ±2.3	11.2 ± 2.6**	12.2±2.4
Self-efficacy total score	32.4 ± 4.2	31.9 ± 4.1	31.8 ±4.1	30.7 ± 3.7**	31.7±4.0

Mean ± SD, ** P < 0.01

than NW group while the height length was found to be lower.

According to our research results; the frequency of breakfast with sedentary individuals who were members of Fitnis clubs OW group values were higher than NW group men and women. While the frequency of eating outside did not vary among men OW women ate more food than NW women. The average snack frequency from both sexes was significantly higher in the OW group in males and females. OW reported that about 12% of men did not eat a wide variety of foods, and 28% said that a wide variety of foods were eaten too often. Approximately 10% of OW women reported that they did not eat a wide variety of foods, and 30% reported that a wide variety of foods were eaten too often. Approximately 20% of OW men and 35% of women were fed with very irregular food, while the rate of regular eating was 28.7% in total participants. The proportion of respondents who responded as ‘small’ or ‘very small’ according to the size of the food ratio was 48% in the OW group male, 55% in the OW group women 68% of men in OW group and 75% of OW women were fed an unbalanced diet. No significant difference was observed between the participants regarding the unfavorable foods. In a study [38], it was found that the proportion of individuals with regular eating patterns in young Japanese was low. Skipping breakfast is associated with low nutritional status and the risk of cardiovascular disease. It has been reported that inadequate breakfast habits may contribute to the development and further development of obesity [29]. According to many research results; suggest that eating habits, eating disorder, unbalanced diet, and sedentary lifestyle may lead to overweight and obesity [28,40,41].

This study revealed that 24% of men in the OW group and 40% of the women in the OW group did not do any physical activity at least 30 minutes per day during the week. OW group reported that 40% of men and 35% of women walked no day or did not ride bicycles. 40% of men in NW group and 46.8% of women walked at least

1-2 days per week. During weekday OW group found that 36% of men and 40% of women and during the weekend 32% of OW group men and 50% of women were walking less than 30 minutes a day. OW and NW group men and women were on weekdays and weekend time spent during was between 30 minutes and 1 hour. The ratio of male and female OW group who had less physical activity on weekdays and weekends than three hours was higher than NW group. Approximately 40% of women in the OW group never participated in physical activity in a week. The proportion of OW women exercising more than three hours a week (10%) is lower than NW women. The rate of NW group men and OW group men exercising every other day was significantly similar. There is a consensus on whether regular and appropriate physical activity and lifelong exercise can have a great positive impact on health and well-being [42,43]. The current recommendation of the World Health Organization [44] states that adults should collect physical activity for at least 150 minutes per week for at least 10 weeks at medium intensity (or at least 75 minutes for intense intensity). In addition, it is recommended that children and adolescents have moderate physical activity for at least 60 minutes each day [44]. However, despite these recommendations and the adverse effect of inactivity, the data on study indicate that the vast majority of participants did not achieve the recommended daily and weekly physical activity levels. Physical inactivity is among the most important causes of the increase in the number of obese people. In addition, there is a close relationship between obesity and cardiovascular diseases, diabetes, osteoporosis, some types of cancer, mental problems, and many health problems in studies conducted [19,20]. Increasing physical activity has a positive effect on obesity, and therefore it is suggested that there are many studies emphasizing the effect of treatment with the preventive effect on the above mentioned diseases [21].

This study shows that; There was no significant difference between OW and NW groups in terms of

general nutrition knowledge score, obesity knowledge score, and nutrition knowledge total score in both genders. OW male and female physical activity self-efficacy scores were significantly lower than NW women. However, the OW group was found to be significant in the total self-efficacy score in women. Middelkamp et al. [7] reported that only 18% of the members of the fitness clubs continued to exercise. The effects on fitness behaviors of fitness coaches have been suggested to be terminated quickly after the end of the program, even when the coaching protocol stimulates significantly more participants to continue exercising in the same fitness clubs. This indicates that the exercise behaviors of the members of the fitness clubs are gradually declining and the exercise fit is very weak. Other studies that performed similar self-efficacy based interventions with significant results did not test the long term effects of the fitness program after the end of the program [45,46]. Contrary to our expectation, perceived confidence in eating behavior was not significantly different from obesity in was no significant difference between OW and NW groups. This was finding unlike a previous study of self-efficacy for nutritional behavior.

As a result, it was determined that regarding participants' eating habits, the OW group was less frequent breakfast and snack, ate more meals. When compared with the NW group, they showed less desirable behavior during the meal for men). OW men spent less time during vweekdays or weekends while doing less PA. OW women

sat more in the vweekdays or weekends and spent less time walking or riding a bicycle than the NW group. The nutritional information of the OW and NW groups was not significantly different. Especially PA self-efficacy in OW was significantly lower than in NW group. Sedanter individuals are at risk due to lack of nutrition information, TV and peer interaction and so on. Sedanter members who are members of fitness clubs should exercise exercise programs to prevent obesity and to increase the confidence about exercise or physical activity.

Conclusions

Fitness exercise programs should focus on increasing obesity management programs, self-efficacy, changing eating habits, and increasing PA. In this context, fitness exercise programs should include adequate methods of body image, body satisfaction and weight control, and awareness should be created by conveying information to the related individuals. Conclusion: This study revealed differences between PA, eating habits and self-efficacy between OW and NW individuals. Sedanter individuals who are members of fitness clubs should exercise exercise programs to prevent obesity and to increase the confidence about exercise or physical activity.

Conflicts of Interest

There isn't any conflict of interest to be declared regarding the manuscript.

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