













ORIGINAL ARTICLE / ORIJİNAL MAKALE

The relation of different weight loss methods and of diet compliance with weight loss and weight control

Farklı kilo verme yöntemlerinin ve yöntemlere uyumun kilo verme ve kontrolü ile ilişkisi

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ABSTRACT

Objective: Obesity is one of the most important health problems of our time. Many people use various methods to lose or maintain their weight. In this study, we aimed to evaluate the effectiveness of the methods used for weight control. **Methods:** In total, 861 participants were interviewed face-to-face and electronically. **Results:** In the questionnaire it was found that the various differences in weight loss methods had no significant effects on weight control; however, variables such as body mass index (BMI) at onset of the diet and duration of it, marital status, age and occupation have different repercussions on weight control. In addition, targeted weight loss over a period of time was found to be adequate on dietary success. **Conclusion:** Our study revealed that different types of diets used for weight loss did not have an effect on reaching the targeted weight or maintaining the weight control.

Keywords: Body weight maintenance, obesity, weight reduction programs

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ÖZ

Amaç: Obezite, çağımızın en önemli sağlık sorunlarından biridir. Birçok insan kilo vermek veya korumak için çeşitli yöntemler kullanır. Bu çalışmada kilo kontrolü için kullanılan yöntemlerin etkinliğini değerlendirmeyi amaçladık. **Yöntem:** Toplam 861 katılımcı ile yüz yüze ve elektronik olarak görüşüldü. **Bulgular:** Çalışmamızda kilo verme yöntemlerindeki çeşitli farklılıkların kilo kontrolü üzerinde önemli bir etkisinin olmadığı; ancak diyetin başlangıcındaki vücut kitle indeksi (VKİ) ve süresi, medeni durum, yaş ve meslek gibi değişkenlerin kilo kontrolü üzerinde farklı etkileri olduğu bulunmuştur. Ek olarak, belirli bir süre boyunca hedeflenen kilo kaybının diyet başarısı üzerinde yeterli olduğu bulunmuştur. **Sonuç:** Çalışmamız kilo vermek için kullanılan farklı diyet türlerinin hedeflenen ağırlığa ulaşmada veya kilo kontrolünü sürdürmede etkisi olmadığını ortaya koymuştur.

Anahtar kelimeler: Kilo kontrolü, obezite, kilo verme programları

Introduction

Obesity is a complex disease involving an excessive amount of body fat which isn't just a cosmetic concern but cause several medical problems such as high blood pressure, Diabetes Mellitus, Acute Coronary Syndrome... Obesity results from a combination of inherited factors, combined with the environmental and personal diet and exercise choices.^{1,2} Nowadays traditional eating habits are almost lost; the consumption of ready-to-eat industrial foods with high energy content has increased tremendously. In addition, rapid progress in science and technology makes individuals stationary and increases the risk of obesity by reducing energy consumption.^{3, 4} Especially in children and in the young population, the use of computers and tablets increases the sedentary lifestyle and obesity which may become a problem for the younger age population. Diet programs and attempts to bring healthy eating habits became important for younger ages.⁵ Compared to the previous generations, sedentary lifestyle and minimal muscle activity, and the consequences of this lifestyle lead some diseases such as obesity, Insulin Intolerance and finally Diabetes Mellitus which become the most important public health problems in developed countries.^{1,6} In addition, nowadays, obesity is increasing in low- and middle-income class countries, especially in their urban areas.⁷

The reasons aforementioned above or due to physical fitness concerns, people from all professions start to diet every day and set goals to lose weight by different levels of targets.

There is significant evidence that losing excess body fat is difficult for most individuals and the risk of regaining lost weight is unfortunately high.² This study was conducted to evaluate the approaches of diet programs for weight loss in the society, their effectiveness in reaching the target weight and the data regarding the maintenance of the weight reached.

Methods

The questionnaire was prepared from a doctorate thesis which was used at Hacettepe University Institute of Health Sciences Dietetics Program, but later it was modified as a template for the goal of our study.⁸

A cross-sectional analytical questionnaire was applied. The population of the study consisted of individuals who applied a slimming program according to the research purpose, especially in Isparta and Tokat provinces. Convenience non-probability sampling method is used in this study. All individuals who meet the conditions appropriate for the purpose of the study, who can be reached and who agree to participate in the study are included. The sample size of

the research is planned to be more than 10 times the number of variables to be examined based on experience.

The survey was conducted face-to-face in the provinces of Isparta and Tokat and also on the internet. Participants were accessed electronically via e-mail lists randomly. Online application of the questionnaire was done with surveymonkey survey software. The survey was conducted with 1200 people, but 339 questionnaires were excluded due to insufficient answers.

Determining the criteria for achieving the target

When the literature is examined in order to determine which criteria will be used in the evaluation of the success of the weight loss program, it is stated that a 5% decrease in body weight causes a significant decrease in disease risks.^{9,10} In the guideline 'The Management of Overweight and Obesity in Adults' which was published in 2013 by American Heart Association (AHA) and American College of Cardiology (ACC), weight loss by 5% -10% of body weight over a period of 6 months was recommended as an initial target.¹¹ In a different study, to be able to maintain the weight achieved for at least 1 year in terms of long-term weight loss success was suggested as a success criterion.¹² The variables such as the body mass indexes, targeted weights, ideal body weights, diet durations etc. of the people who want to lose weight, make it difficult to give a clear answer to the question 'How is the success of weight loss diets are evaluated?' and there is no standard criterion put forward in this field in the scientific world. Therefore, in our study we implemented the status of achieving the target body weights of the participants, as a criterion instead of 'dietary success' definition. In this way, we aimed to discuss the appropriateness of the objectives set by the participants. By doing this, the participants who could give at least 80% of the weight they wanted to lose via the slimming program implemented in our study was accepted as 'reached the goal'. The other variables were compared each other whether the weight loss target was reached or not.

Statistical Analysis

SPSS v.15 program was used for statistical analysis. First, it was measured whether the participants completed the diet till the end or not. Then, the participants were grouped according to their duration of diet (0-6 months, 6-12 months and > 12 months) and also another group was setup according to the [targeted weight loss/initial body weight x 100] ratio (5-10%, 10-20% and > 20%). For the participants who completed the diet to the end, the achievement of the target in each group was evaluated separately and the data were compared with Pearson Chi-square or Fisher's Exact tests. The relationship between the other questions in the questionnaire and including the achievement of the goal was evaluated either by Chi-Square tests or t-test. Diet duration, weight loss targets and other parameters of dietary discontinuation were also investigated. Moreover, duration of maintaining the body weight reached with slimming program, and the parameters that may have had an effect on this situation have been examined.

Results

Characteristics of the participants

42.6% (n=367) of the participants were males and 57.4% (n=494) of them were females. The mean age of the participants was 34.9 ± 12.3 years and the mean height was 167 ± 8 cm. Among the participants, 37.9% (n = 326) were never married, 57.1% (n = 492) were married and 4.6% (n = 39) whose spouse died or divorced. 79.6% of the participants lived in the city center, 16.8% lived in the districts and 3.6% lived in the town or village. 31% of the participants (n = 266) lived in Isparta and 69% (n = 583) lived in Tokat. When the participants were examined in terms of educational status, the rate of those who did not have any education was 2.7% (n = 23), while the primary school graduates was 12.2% (n = 105), the proportion of high school graduates was 20.2% (n = 174), and the proportion of university-college graduates was 49.8% (n = 429) and the rate of postgraduate graduates was 15.1% (n = 130). When the occupations were examined, we found that 15% of the participants (n = 131) were self-employed, 33.9% (n = 292) of them were public employees and 23.6% (n =

203) of them were students. While the rate of homemakers was 17.9% (n = 154), the rate of self-employed was 4.4% (n = 38). The mean body mass index (BMI) of the participants at the beginning of the diet was 28.3 ± 5.3 . This value was 29.1 ± 4.2 for men and 27.7 ± 6.0 for women. While the proportion of normal weight of individuals (BMI 18-24.9) was 28.3% (n = 244), the proportion of overweight of individuals (BMI 25-29.9) was 37.9% (n = 326) and the proportion of obese (BMI ≥ 30) was 33%.6 (n = 289). According to the methods used by the participants to lose weight, 60.7% (n = 523) created their own diet program, 24.2% (n = 208) got assistant through dieticians or physicians, 9.4% (n = 81) used a specific diet program (Karatay, Dukan, Calorie diet, etc.) and 5.7% (n = 49) tried to lose weight by only other methods (sports or interventional procedures such as liposuction, carboxytherapy etc..) except dietary approaches. In addition, the ratio of the patients who received drug support to lose weight was 4.5% (n = 39) in all participants and 1.4% (n = 12) of those who had interventional procedures. The rate of sports was 28.2% (n = 243) in all participants.

Dietary completion rates

Overall, the rate of completion of the diet until the end of the planned period was 49.1% (n = 423).

Achieving the target goal status of those who completed the diet until the end

In order to accurately analyze the effect of diet types, durations and other variables, statistical analysis in this study were performed on 423 people (n=423) who completed the diet program to the end. The variables that may be related to dietary interruption are discussed in the following section. The rate of achieving the target goal was 43.7% (n = 185) in those who completed the planned weight loss to the end of the program. When the effect of other factors on the goal of achievement status was examined, it was found that the 'marital status', 'contacting a specialist (physician or dietitian) for slimming', 'receiving drug

support for slimming', 'BMI at the beginning of the diet', 'duration of the diet' and the 'targeted weight loss percentage' were related to the achievement of the target. The relevant results are given in Table 1. Accordingly, the rate of achieving the target was significantly higher in those who did not receive specialist support to lose weight compared to those who received, single ones compared to those who were married, and the ones who didn't receive a drug support compared to those who did receive drug support to slim down (p <0.05). The mean BMI (31.2 ± 5.8) of those who had an expert support was significantly higher (p<0.01) than those who did not ask for a specialist's help (27.3 ± 4.8). Again, the rate of reaching the target goal was significantly higher in patients with normal (BMI=18-24.9) and overweights (BMI=25-29.9) than those in the obese group (BMI ≥ 30), p <0.05. In terms of the duration of the diet program, the rate of reaching the target goal was significantly higher in the groups who went through the diet program between 6-12 months and over 12 months as compared to the groups who followed the diet programs for 6 months or less (p <0.05). At the end of the each program, the rate of reaching the target goal for 5-10% weight loss was found to be statistically significant as compared to those target goals for 10-20% and more than 20% weight losses (p <0.05).

In order to determine how realistic the target weight loss percentage is determined according to the diet duration, the relationship between the target weight loss percentage and the achievement of the target status was evaluated separately in 3 groups covering different diet periods. In line with this, 32.6% of those who were in the diet schedule for 0-6 months that was targeted for 5-10% weight loss, 51.2% was targeted for 10-20% weight loss, and 16.1% was targeted for more than 20% weight loss. (Table 2). The rate of achieving these schedules were found to be 52.7% in the group, which were in the diet program for six months or less. Their goal was 5-10% weight loss and this ratio

Table 1. Factors associated with achieving the goal in participants who completed the diet to the end of the program.

Category		Rate of Reaching Goal		Chi-Square Test
		%	n	p value
Expert Support	Took	33.7 ^a	30	p<0.05
	Did not take	46.4 ^b	155	
Marital status	Never Married	54.1 ^a	92	p<0.05
	Married	36.1 ^b	83	
	Divorced-death	45	9	
Drug Support	Took	14.3 ^a	2	p<0.05
	Did not take	44.7 ^b	183	
BMI	Normal Weight (BMI 18-24.9)	55 ^a	71	p<0.05
	Overweight (BMI 25-29.9)	45.6 ^a	77	
	Obese (BMI≥ 30)	29.8 ^b	37	
Diet Duration	0-6 months	37.6 ^a	115	p<0.05
	7-12 months	57.5 ^b	50	
	>12 months	66.7 ^b	20	
Targeted Weight Loss	%5-%10	56.4 ^a	62	p<0.05
	%10-%20	34.6 ^b	73	
	>%20	38 ^b	30	

^{a,b} : Different letters display statistically significant differences between groups.

was revealed to be significantly higher than the other groups (p <0.001). The success rates of the goals were found to be 25.3% and 21.7% for the 10-20% and more than 20% weight losses, respectively. (Table 3).

In the other two groups that dieted for more than six months, it was found that the targeted weight loss percentage had no effect on the achievement of the target goal (p> 0.05).

Additionally, no statistical relationship was found between compliance with the diet and

reaching the target rate (p>0.05). Again, in the absence of expert support, there was no meaningful statistical relationship between weight loss method and reaching the target rate (p>0.05).

Weight maintenance after the weight loss program

Regardless of the interruption of diet and achievement of the goal, the weight maintenance achieved in the participants were as shown in Table 4. Accordingly, 12.5% of the participants were able to maintain the weight without regain for at least 1

Table 2. Distribution of groups with respect to diet duration and percentage of weight loss targets

Dietary Period	Targeted Weight Loss Rate							
	5-10%		10-20%		> 20%		Total	
	%	n	%	n	%	n	%	n
0-6	32.6	93	51.2	146	16.1	46	100.0	285
7-12	17.6	15	54.1	46	28.2	24	100.0	85
>12 months	6.7	2	63.3	19	30.0	9	100.0	30

Table 3. Relationship between target weight loss and achievement in different diet duration groups

Dietary Period	Target weight loss rate (%)	Rate of Reaching Goal		Chi-Square Test p value
		%	n	
0-6 months	5-10	52.7 ^a	49	p<0.001
	10-20	25.3 ^b	37	
	>20	21.7 ^b	10	
7-12 months	5-10	73.3	11	p>0.05
	10-20	54.3	25	
	>20	54.2	13	
>12 months	5-10	100.0	2	p>0.05
	10-20	57.9	11	
	>20	77.8	7	

^{a,b}: Different letters display statistically significant differences between groups.

year. The rate of maintaining weight for at least 1 year was found to be 16.3% of those who continued and finished the weight loss program without reaching the target goals, and 26.5% of those who had completed the program and reached its target goals.

The factors associated with maintaining the achieved weight for at least 1 year were examined on 185 participants who completed the program and achieved their goals. Parameters such as gender, age, marital status, place of residence, education, occupation, diet compliance, mental well-being during the diet, smoking, alcohol consumption, application to a specialist to lose weight, type of diet applied, sports, drug support in order to obtain weight loss, interventional procedures, diet duration, sleep duration, targeted weight loss percentage, actual weight loss percentage and BMI category at the beginning of the diet were analyzed statistically.

In the examined categories, the average age of those who can maintain weight for at least 12 months and those who cannot maintain varies (35.3 ± 11.78 vs. 30.4 ± 10.89 (mean \pm SD), $p < 0.01$). In addition, marital status, occupation and dietary compliance parameters had an effect on the rate of maintaining weight for at least 12 months (Table 5). In single participants, the rate of maintaining the reached weight for at least 12 months was found to be significantly lower than the other groups (married, divorced, widow) ($p < 0.01$). In terms of occupational group, the rate of students' 12 months weight maintenance was found to be significantly lower than that of self-employed, public employees and housewives ($p < 0.05$). On the other hand, the rate of maintaining weight for at least 12 months was found to be significant, which was higher than those who did not interrupt their diet frequently and those who did not fit into the diet program ($p < 0.01$).

Table 4. Distribution of weight maintenance among participants.

Weight protection duration	%	n
Could not maintain	44.3	381
Able to maintain for 1-3 months	20.9	180
Able to maintain for 4-6 months	16.1	139
Able to maintain for 7-11 months	6.2	53
Able to maintain for 12 months or more	12.5	108
Total	100.0	861

Investigation of factors related to discontinuation of diet

When various demographic characteristics and the discontinuation of the diet were compared, it was found that the rate of completing the diet program was significantly higher in males than females ($p < 0.05$). Marital status, place of residence, smoking and alcohol use, occupational and educational status did not have any significant effect on diet completion ($p > 0.05$). Among the other parameters examined, it was found that compliance with diet, mental well-being during the diet program, whether to receive expert support and doing sports were related to completing the diet. (Table 6). However, no significant relationship was found between the types of diets administered. This is either to receive drug support, interventional procedures, BMI at the beginning of the diet, duration of the diet, average daily sleep time, and percentage of weight difference targeted and completion rate of the diet ($p > 0.05$).

Dietary success

As it mentioned before, a 5% reduction in body weight leads to a significant reduction in health risks in general. We wanted to see this generic acceptance in our study. Thus, we investigated the success rate of 5% in all participants and compared with the rate of completion of the diet program and reaching target goal. (Table 7). 71.9% ($n = 619$) of all participants, who participated in the diet program, lost at least 5% of their body weight at the end of the weight loss program. This rate was found to be 65.8% ($n = 288$) in 438 participants who did not complete their diet schedules. In 238 people who completed their diet program fully but did not reach their target goals, the success rate of 5% was 68.5%. These results indicated that, individuals who wanted and attempted to lose weight can improve their health status significantly by 71.9% at average, regardless of whether they follow the diet program fully or not.

Table 5. The effect of selected factors on maintaining weight for at least 12 months

Category		Weight preservation rate for at least 12 months		Chi-Square Test
		%	n	p value (Fisher's Exact)
Marital status	Never married	17.4 ^a	16	p<0.01
	Married	32.5 ^b	27	
	Divorced	75.0 ^b	3	
	Widow	60.0 ^b	3	
Occupation	Self-employment	31.2 ^b	10	p<0.05
	Public Personnel	36.4 ^b	20	
	Student	13.1 ^a	8	
	Not working	16.7	1	
	Housewife	36.0 ^b	9	
Diet Compliance Status	Never interrupted	40.0 ^a	22	p<0.01
	Occasionally interrupted	25.5	27	
	Often interrupted	0.0 ^b	0	
	I can't say I fit into the program	0.0 ^b	0	

^{a,b}: Different letters indicate statistically significant differences between groups.

Table 6. Parameters associated with diet completion

Category		Diet completion rate		Chi-Square Test
		%	n	p value
Diet Compliance Status	Never interrupted	80.0 ^a	108	p<0.0001
	Occasionally interrupted	49.6 ^b	243	
	Often interrupted	24.1 ^c	27	
	I can't say I fit into the program	30.8 ^c	32	
Mental well-being during the diet	Excellent	57.3 ^a	94	p<0.01
	Good	49.1	136	
	Average	43.9 ^b	126	
	Bad	33.8 ^b	24	
	Very bad	54.5	6	
Expert Support	Doesn't take	51.1	334	p<0.05
	Takes	42.8	89	
Sports	Does	51.3	317	p<0.05
	Doesn't	43.6	106	

^{a,b,c}: Different letters indicate statistically significant differences between groups.

Discussion

Our questionnaire was conducted with randomly selected participants from different age groups and genders. We aimed to investigate the dietary forms, dietary success, dietary completion and sustainability. We discussed our data in several categories.

Variables related to the achievement of the target goal

In our study, when the variables of the participants who reached the targeted weight were examined; it included marital

status, drug and/or expert support, BMI at the beginning of the diet, duration of diet, and targeted weight loss were found to be related to the achievement of the target goal. 24.2% of all participants got an assistance from a specialist to lose weight (n=208). It can be seen that as an unexpected result of the rate of achieving the target goal was higher in those who did not acquire an expert support. However, the mean BMI of those who had an expert support was significantly higher than those who didn't (p<0.01), and this fact may be responsible for the significant difference between who had specialist support and

Table 7. Comparison of 5 % achievement status among participants.

Category		5% Success status					
		% Successful	n Successful	% Unsuccessful	n Unsuccessful	% total	n total
All Participants		71.9	619	28.1	242	100	861
Diet completion status	Completed	78.3	331	21.7	92	100	423
	Quit	65.8	288	34.2	150	100	438
Diet Completed	Reached the goal	90.8	168	9.2	17	100	185
	Couldn't reach the goal	68.5	163	31.5	75	100	238
Quitted the diet	Reached the goal	93.2	55	6.8	4	100	59
	Couldn't reach the goal	61.5	233	38.5	146	100	379

who applied their own diet. There is a statistically significant relationship between the achievement of target and BMI. It is also possible that those who applied to a specialist to lose weight had a history of failed diet attempts. While the rate of obese individuals was 33.6% in all participants, 57.5% of those who applied to a specialist to lose weight were in the obese category. Therefore, the low rate of achieving the target of the specialist applicants can be explained by the fact that people applying to the specialist are mostly obese or overweight individuals and were not able to lose weight on their own previously and are more resistant to lose weight. This data is mostly supported by the literature that weight loss success in weight management is widely studied among obese persons and it is demonstrated that the pattern of weight change for adults with obesity who took part in a diet during different period of time (a 12-week, internet-based behavioral weight loss program- more than 6 months) showed that weight regain occurred in 4-6 months after weight loss.^{8, 13-15} Those unsuccessful attempts led the obese individuals to get professional support in their following diet attempts. When the onset of the BMIs of the diet program is examined, it was found that obese individuals had lower target achievement rates as compared to the normal and overweight individuals. This data is again consistent with the literature as Hadziabdic et al reported that adhering to the weight loss programme is a very difficult task for most obese people, with one-third of the study participants being successful (weight reduction by more than 5%) and another two-thirds either dropping out or finishing the programme without accomplishing the target weight loss goal yet.¹³ The success rates of the patients receiving medication support for weight loss were lower than those who did not request any medications. It is possible to establish a similar relationship with this variable in the case of acquiring a specialist. Taking medication to lose weight is more advanced procedure than first-line interventions, such as changing diet or doing sports. 92.3% of that receiving drug support are in the overweight and obese category, and it can be interpreted, as these

people are more resistant to lose weight and trying every possibility which may help to lose weight easier. In our study, the rate of achieving the target of single participants was found to be statistically higher than those who were married. This is consistent with the study of Hadziabdic, et al. as they reported that being married was a negative predictor for attempting a diet and losing weight.¹³

The rate of achieving the target goals of those who were in the diet schedule for six months or less was statistically lower than the two groups of those who were in their schedule more than 6 months. As the participants were grouped according to the targeted weight loss percentage, the achievement of the target was found to be significantly higher in the group aiming to give 5-10% of body weight compared to the other groups. However, in addition to the targeted weight loss, the duration of the diet to be applied for this target is also important. Therefore, we categorized the participants by means of the both the targeted weight loss percentage and the diet duration. Regarding this classification, 32.6% of the participants who applied for a 0-6 months diet targeted 5-10% weight loss, 51.2% of them targeted 10-20% weight loss and 16.1% of them targeted over 20% weight loss. Again, the rate of achieving their target goals in the group that aimed at 5-10% weight loss among individuals who were on diet schedules between 0-6 months was found statistically more significant than the groups that targeted 10-20% and those who were more than 20% (Table 3). This result shows that it is unrealistic to target a weight loss of more than 10% for a planned diet duration of 6 months or less. Drop-out rate and percentage weight loss were identified after 12 months of the weight loss programme in Hadziabdic's study. This shows us that the diet period may depend on motivational factors and it is important that the targeted weight loss has to be determined at the beginning of the diet programme and has to be aimed and believed by the participants. In a study by Resnicow et. al, overweight children whose parents received motivational interview counseling showed a

significant reduction in BMI percentages for 2 years compared to other children.¹⁶ There was no relationship found between the type of diet applied and the achievement of the goal (Table 5). There was no significant contribution of a specific diet program in reaching the target weight.

Variables associated with the successful weight loss maintenance

The rate of maintaining body weight for at least 12 months was 26.5% among the participants who completed the program and reached their target. Considering that the rate of reaching the target is 43.7% for those who complete the program by the end, it is seen that maintaining it for this period is a bigger problem than reaching the target goal. In the study of Stunkard & Mc Lauren, who followed 100 obese individuals referred to a nutritional weight loss program found that 2 years after treatment, only 2% maintained a weight loss of at least 20 lb (≈ 9.07 kg).¹⁷

In this study, the factors that were associated with the successful weight loss maintenance for at least 12 months were determined as marital status, occupation and diet compliance. In single participants, maintaining the weight loss achievement for at least 12 months was statistically lower than the other groups (married, divorced, spouse passed away) ($p < 0.05$). However, when the target achievement rates were examined, the rates of the single participants were significantly higher than the rate of the married ones. These contradictory results shows the differences in dieting of the married and the single participants. Nevertheless, some of the previous research results showed that there is a moderately strong relationship between diet and slimming success. In a study conducted by Karfopoulou et al. in 2017, it was found that eating at home was associated with maintaining the weight loss, especially in male gender, and prevented regain the weight after diet.¹⁴ In a study by Ross et al., it was stated that being married or living with a partner reduces the rate of weight regain after losing weight.¹⁵ In our study, in terms of occupational group the rate of

maintaining the weight loss in students was found to be significantly lower than the other 3 occupational groups (self-employed, public employees, housewife). When this result is considered with the marital status, it can be inferred that the students are mostly single. Therefore, it can be expressed that 'married and nonstudent' individuals all differ from single and/or student individuals by nutrition and age. Finally, the rate of maintaining the weight loss that reached at least for 12 months in participants who answered the question such as 'how did you applied your diet?' as 'never interrupted' is found to be statistically significantly higher than those who answered as 'often' or 'occasionally interrupted'. Even though compliance with the program was not found to be related to the achievement of the target goal, and it was found to be important in maintaining the weight goal achieved.

Limitations

Firstly, because of the nature of the survey study, all answers of the participants was subjective and could not been checked for righteousness. Especially body weights, diet durations and diet types were the base parameters in this study. So, we have aimed to increase the number of the participants in order to decrease the imperfection and overcome this limitation.

Secondly, we realized that we had missing details such as the timings of the diet programmes (when was it applied...).

Nevertheless, our findings were mostly concordant with the literature. This accordance showed us that our study can help researchers to find out the right slimming approaches and diet programs.

Conclusion

In our study, we found that different types of dieting programs implemented to lose weight did not have an effect on reaching the target goals or maintaining the weight loss. The rate of maintaining the weight loss achieved for at least 12 months was found to be lower than the rate of achieving a specific target; therefore, sustaining the weight in the

program successfully is turned out to be more important than losing weight. In addition, we found that marital status, age and occupation parameters have different levels of effect on achieving and maintaining the weight goals. We also discovered setting a weight loss goal of more than 10% of body weight in diets for 6 months or less diminishes the rate of reaching the target. Moreover, 60.4% of the participants did not receive any expert assistance. This is considered as a factor that cuts down success dramatically. For the future study the effect of age, occupation, marital status and keeping up with regular nutrition may provide benefits to experts who recommend different dietaries in order to categorize individuals for their right diet programs.

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Ethical Declaration: This study is approved by Suleyman Demirel University, Faculty of Medicine, Clinical Researches Ethical Committee (Date: 11.12.2013, Decision no. 231).

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