

**ORIGINAL PAPER****Determination of some Nutritional Habits and Healthy Life- Style Behaviours of Workers****Gülendam Karadağ, PhD RN**

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**Correspondence:** Gülendam Karadağ, Department of Public Health Nursing, Faculty of Health Sciences, University of Gaziantep, 27310 Gaziantep, Turkey. Email: karadag@gantep.edu.tr**Abstract****Objective:** The lifestyle indicators that traditionally have been associated with a lesser quality of life a diet rich in fat and low in fruit and vegetables.**Methods:** This cross-sectional was conducted determining some nutritional habits and healthy life-style behaviours of workers working at a textile factory in the Southeastern Anatolia Region with 276 workers. A questionnaire form and Healthy Life-Style Behaviours Scale were used for collecting data. Analysis of the data was using percentage, arithmetic average, One Way Anova and Independent Sample t test.**Results:** It was determined that 81.2% workers worked for 45 hours a week, 92.4% worked during day hours and 47.5% worked in the department of sewing. It was also found that 84.4% of workers ate three meals a day, 50.0% had vegetable and meat-based diet, 43.8% had family members with chronic diseases, 85.5% did not have their blood pressure measured regularly, 67.4% did not weigh regularly, 29.0% did not do regular sports/physical exercise.**Conclusions:** It was determined that total HLSB score of workers was at mid-level in general. It was found that there was a significant relation between nutritional habits, number of meals and physical activity levels of workers and their HLSB scores.**Key Words:** Healthy life-style behaviour, Worker, Worker's nutrition, Nutritional habits, Nutritional status**Introduction**

Being healthy in physical and mental terms in all phases of life and to maintain health are possible with adequate and balanced nutrition (Tanır et al., 2001). While millions of people fight against the death and diseases brought by hunger and inadequate nutrition in the world, many people die at an early age due to excessive and wrong

nutrition or they become disabled. Inadequate and unbalanced nutrition is one of the most important health problems particularly among workers in our country. Considering the matter in terms of the worker's health, wrong nutrition style that results in an inadequate and unbalanced diet decreases working capacity of the workers, reduces their resistance against

diseases, affects their continuance to work and individual initiative, increases on-the-job accidents, thus affecting job efficiency negatively (Tanır et al., 2001; Sözen et al., 2009; Loeppke et al., 2010).

According to World Health Organization data (WHO), 70-80% of deaths in developed countries and 40-50% of deaths in underdeveloped countries result from diseases that occur in association with life-style (Linn et al., 2009). Infectious diseases that caused mass deaths in the past have left their places to chronic diseases originating from life-style of the individual such as hypertension, obesity, diabetes, coronary health diseases, etc (Cürçani et al., 2010; Çelik et al., 2009; Türkol & Güneş, 2012). These chronic illnesses have been decreased substantially owing to changes made in life-style including increasing physical activity and assuming adequate and balanced nutrition habits (Kolbe-Alexander et al., 2008; Jonsdottir et al., 2011). Therefore, current health approach aims at maintaining, protecting and improving the public health (Beyhan, 2008).

Starting from 1970s, improvement of health has been an important matter that has drawn attention of the public health professionals (Huang et al., 2010). In improvement of the health, what matters is using the potential and energy of the individual efficiently, maintain a satisfactory life, being productive and using health-related abilities to the full extent. Healthy life-style behaviours include taking responsibility of health behaviours, doing adequate and regular exercise, avoiding smoking, taking health responsibility, hygienic measures, establishing positive interpersonal relations and stress management. Individuals turning these behaviours into practice may not only maintain the state of being healthy but also may take their health status to a better level (Türkol & Güneş, 2012; Tambağ & Şimşek, 2012; Yalçınkaya et al. 2007; Ünalın et al., 2007).

Although work health nurses exist for a period of more than 100 years, their exact roles have been defined in the last 30 years and efficiency of their practices has been demonstrated (İşçi & Esin, 2009). However, nurses still execute their tasks which are limited solely to infirmary services in many workplaces and factories. In fact, nurses have important roles and responsibilities for maintaining and improving

health of workers and developing healthy life-style behaviours (İşçi & Esin, 2009).

A limited number of studies are available on nutrition levels and healthy life-style behaviours of workers in our country. While one of these studies examined only nutritional habits (Sözen et al., 2008), another study focused on healthy life-style habits (Beşer et al., 2007). However, there is not any study in our country which investigated both nutrition levels and healthy life-style behaviours of workers. This study was conducted with the aim to determine sociodemographic characteristics, anthropometric measures and some nutritional habits and healthy life-style behaviours of workers working at a textile factory in the Southeastern Anatolia Region.

## Subjects and Methods

### *Study design and sample*

This cross-sectional study was conducted with 276 workers working at a textile factory and who accepted to participate in the research between the dates of 6 April- 23 May 2009. Population of the study included all workers working at the factory (n=430). Workers who were on leave (7), who refused to participate in the study (90) and questionnaires that were not filled or left incomplete (57) were excluded from the study. Thus, study sample comprised of 276 workers in total who accepted to participate in the research.

### *Data collection*

For the study, literature was reviewed and a questionnaire form related to sociodemographic characteristics, work features and nutritional habits of workers generated by researchers (Sözen et al., 2009; Yalçınkaya et al., 2007; Ünalın et al., 2007; Beşer et al., 2007; Al-Kandari et al., 2008) and the Healthy Life-style Behaviours Scale (Walker et al., 1987; Esin, 1997) were used for data collection. Height and body weight measurements of workers were done and recorded in the questionnaire form.

### *Procedure*

Workers had been briefly informed by the same researcher on the purpose and methods of the research as well as on the questionnaire and the scale. The questionnaire and the scale were administered by face to face interviews after obtaining written and verbal consent from the workers. The questionnaire took approximately 10-12 minutes to complete. Questionnaire forms were collected from workers on the same day during shift change.

### ***Instruments***

#### ***Questionnaire for sociodemographic and work characteristics***

The questionnaire form generated by researchers after reviewing the literature consisted of two parts with a total of 19 questions related to sociodemographic and working characteristics (8 questions) and nutritional habits (11 questions) of workers. In the first part, sociodemographic data including age, gender, marital status, education level, years of working, department of work, weekly working hours and economic status of workers were obtained. In the second part, nutritional habits (daily number of meals, nutrition style, regular weighing, taking care of diet, doing exercise, presence of obesity and chronic illnesses in the worker and his/her family) were evaluated. For assessment of body-mass index of workers (BMI, kg/ m<sup>2</sup>); limit values of <18,5 kg/m<sup>2</sup> lean, 18,5- 24,9 kg/m<sup>2</sup> normal, 25,0-29,9 kg/m<sup>2</sup> slightly fat, 30,0-39,9 kg/m<sup>2</sup> fat and >40,0 kg/m<sup>2</sup> excessively fat were adopted. Body weight measurement of workers was performed during the change of shift, with light clothes and shoes off using a scale sensitive to 0.5 kg; and height measurement was made after taking shoes off, using a tape measure while standing against the wall, with the feet side by side.

#### ***Healthy Life-style Behaviour Scale (HLSB)***

HLSB was developed by Walker, Sechrist and Pender in 1987 (Walker et al., 1987). A study for the validity and reliability of the scale was made by Esin in 1997 (Esin, 1997). in Turkey and Cronbach Alpha value was found as 0.91. Questions in the scale are used to measure an individual's health-promoting behaviours in relation to his/her healthy life-style. Consisting of 48 items, the scale has 6 subgroups. Each subgroup may be used on its own independently. Subgroups include self-realization, health responsibility, exercise, nutrition, interpersonal support and stress management. **Self-realization** consists of 13 items with the lowest possible score of 13 and highest score of 52. **Health responsibility** consists of 10 items, with the lowest possible score of 10 and the highest score of 40. **Exercise** consists of 5 items, with the lowest possible score of 5 and the highest score of 20. **Nutrition** consists of 6 items, with the lowest possible score of 6 and the highest score of 24. **Interpersonal support** consists of 7 items, with the lowest possible score of 7 and the highest score of 28. **Stress management** consists of 7 items, with the lowest possible

score of 7 and the highest score of 28. The total score of the scale constitutes HLSB total point. All items of the HLSB are positive. Marking is made on a 4- point Likert scale. 1 point is assigned to the answer "never", 2 points are assigned to the answer "sometimes", 3 points are assigned to the answer "frequently" and 4 points are assigned to the answer "regularly". The lowest score for the whole scale is 48 and the highest score is 192. Higher scores obtained in the scale indicate that the individual applies stated health behaviours at a high level (Walker et al., 1987; Esin, 1997).

#### **Ethical considerations**

Oral consent was obtained from the managers of the factory in order to conduct the study.

#### **Statistical analyses**

Sociodemographic characteristics of workers and features of their nutritional habits were considered as independent variables and scores obtained at Healthy Life-style Behaviour Scale as dependent variables. Statistical analyses for evaluation of the data were performed using a statistics software package, SPSS 14.0 percentages, arithmetical average, One Way Anova and Independent Sample t test analysis were used for data analysis. P values smaller than 0.05 were considered significant.

### **Results**

#### ***Sociodemographic and work characteristics***

Average age of the workers participating in the study is 27.0±5.29 years (Min: 17-Max: 50). It was found that 69.9% of workers were male, 64.1% were married, 62.0% were primary school graduates and 60.1% stated that their financial status was at middle level. It was also determined that 47.1% of workers had been working for 1-3 years, 81.2% worked for 45 hours a week, 92.4% worked during daytime and 47.5% worked in the department of sewing (Table 1).

#### ***Workers' dietary habits and BMI***

84.4% of the workers reported that they ate three meals a day and 50.0% had vegetable and meat-based diet. 62.7% of workers stated that they did not have any chronic disease and 43.8% had family members with chronic illnesses. It was found that 83.7% of the workers knew that fatness was a symptom of ill-health, 83.3% did not have obese individuals in their families, 85.5% did not have their blood pressure measured regularly, 67.4% did not weigh

regularly, 87.3% did not take care of their diets and 29.0% did not do regular sports/physical exercise. Body-mass index of workers (BMI) was  $23.7 \pm 3.47$  (Min: 15.4; Max: 35.7) and 54.0% had BMIs within normal BMI range (Table 2).

**Table 1. Sociodemographic and Working Characteristics of Workers**

Variables	n	%
<b>Gender</b>		
Female	83	30.1
Male	193	69.9
<b>Level of Education</b>		
Literate	18	6.5
Primary education (age 7 to 12)	171	62.0
High school /university	87	31.5
<b>Marital status</b>		
Married	177	64.1
Unmarried	99	35.8
<b>Economic status</b>		
Good	20	7.2
Medium	166	60.1
Poor	90	32.6
<b>Years of working</b>		
1-3 years	130	47.1
4-6 years	76	27.5
7-9 years	35	12.7
10 years and ↑	35	12.7
<b>Working section</b>		
Sewing	131	47.5
Manufacturing Line	75	27.2
Ready made garments	32	11.6
Textile	38	13.7
<b>Weekly working hours</b>		
45 hours	224	81.2
50 hours and ↑	52	18.8
<b>Working Style</b>		
Daytime	255	92.4
Night	15	5.4
Shift	6	2.2
<b>Total</b>	<b>276</b>	<b>100.0</b>

**Healthy Life-style Behaviour Scale by certain characteristics of workers**

HLSB scores and average subgroup scores of workers are shown in Table 3. Average scores for subgroups were  $36.70 \pm 8.71$  for the self-realization subgroup,  $21.70 \pm 6.24$  for the health responsibility subgroup,  $9.39 \pm 3.63$  for the exercise subgroup,  $16.79 \pm 4.40$  for the nutrition subgroup,  $19.14 \pm 4.55$  for interpersonal support subgroup,  $17.66 \pm 4.92$  for the stress management subgroup and total average score was  $121.31 \pm 25.17$ .

**Table 2. Nutritional Habits and Certain Features of Workers**

Variables	n	%
<b>Number of Meals per Day</b>		
2 meals	35	12.7
3 meals	233	84.4
4 meals and more	8	2.9
<b>Nutrition Style</b>		
Rich in Vegetables and Meat	138	50.0
Rich in Cereals and Meat	80	29.0
Rich in Pastry and Cereals	58	21.0
<b>Presence of Chronic Illness</b>		
Yes	12	4.3
No	173	62.7
Does not know	91	33.0
<b>Presence of a Chronic Illness among Family Members</b>		
Yes	121	43.8
No	155	56.2
<b>Knows that obesity is a sign of ill-health</b>		
Yes	231	83.7
No	45	16.3
<b>Presence of an Obese Family Member</b>		
Yes	46	16.7
No	230	83.3
<b>BMI</b>		
Lean	37	13.4
Normal	149	54.0
Slightly overweight	76	27.5
Overweight	14	5.1
<b>Regular Blood Pressure Measurement</b>		
Yes	40	14.5
No	236	85.5
<b>Regular Weighing</b>		
Yes	90	32.6
No	186	67.4
<b>Takes Care of Diet</b>		
Yes	35	12.7
No	241	87.3
<b>Regular Exercise</b>		
Frequently	23	8.3
Occasionally	109	39.5
Rarely	64	23.2
None	80	29.0
<b>Total</b>	<b>276</b>	<b>100.0</b>

It was found that total score HLSB of workers was at middle level in general. Cronbach's Alpha coefficient of internal consistency for HLSB sub-scales of workers ranged between 0,71 and 0,75 and sum of HLSB coefficients was found as 0,86. It was observed that there was a statistically significant difference between total average score of health responsibility subgroup of healthy life-style behaviours scale and education level of workers and between total average score of exercise subgroup and economic status ( $p < 0.05$ ). (Table 3).

**Table 3. Breakdown of Workers by Average Score of Healthy Life-Style Behaviour Scale**

HLBS Subscales	Min-Max	Mean $\pm$ SD	Cronbach's Alpha
Self-Actualization	10-52	36.70 $\pm$ 8.71	0.713
Health Responsibility	10-40	21.70 $\pm$ 6.24	0.749
Exercise	5-20	9.39 $\pm$ 3.63	0.779
Nutrition	6-30	16.79 $\pm$ 4.40	0.767
Interpersonal Support	7-29	19.14 $\pm$ 4.55	0.762
Stress Management	7-34	17.66 $\pm$ 4.92	0.755
Total HPLP	48-189	121.31 $\pm$ 25.17	0.836

When HLSB total score and average subgroup scores were considered in relation to nutrition style of workers; it was identified that while average scores of self-realization and interpersonal support subgroups were highest among workers consuming cereals and meat products, health responsibility, average and total scores for exercise, nutrition, stress management subgroups were highest among workers consuming vegetables and meat products. A statistical difference was found between health responsibility, nutrition, stress management and total average score in relation to nutrition style ( $p < 0.05$ ) (Table 4).

It was observed that average and total scores for all HLSB subgroups were highest among workers who had three meals a day and there was a statistical difference between average and total scores for all other subgroups excluding exercise subgroup ( $p < 0.05$ ). When difference between HLSB total score and average subgroup scores was examined in relation to the variable of exercise frequency of workers; it was found that self-realization, health responsibility, exercise subgroup scores and total average scores of workers doing regular exercise were the highest, whereas average scores for nutrition subgroup were the highest for workers consuming food rarely and average scores for interpersonal support and stress management subgroups were the highest among workers who nourished frequently. Also, there was a statistical difference between average and total scores of all the other subgroups excluding health responsibility and interpersonal support subgroups in relation to the exercise frequency of worker ( $p < 0.05$ ) (Table 4).

It was determined that average and total scores for all HLSB subgroups were higher among workers who stated that fatness is a sign of illness, except average score of nutrition subgroup and there was a statistical difference only between average scores for health responsibility and stress management subgroups in relation to this variable ( $p < 0.05$ ). HLSB subgroup and total point averages of workers who weighed regularly were higher compared to workers who did not weigh regularly and there was a statistical difference between all subgroup and total point averages and nutrition excluding average score for interpersonal support subgroup in relation to this variable ( $p < 0.05$ ) (Table 4).

As result of the research, it was determined that there was not a significant difference between gender, education level, economic status, regular blood pressure measurement, BMI, having a chronic illness and HLSB subgroup and total point averages among workers ( $p > 0,05$ ).

**Discussion**

Currently, many illnesses related to life-style occur throughout the world such as obesity, diabetes and hypertension (Jonsdottir et al., 2011; Nigg et al., 2010; Allman-Farinelli et al., 2010). The main cause of many diseases is the

wrong nutrition practices and lack of physical activity (Rao et al., 2012, Segar et al., 2012; Van Domelen et al. 2011). As an important public health problem, obesity has been increasingly seen all over the world and in our country in recent years. Obesity predisposes the individuals to several many chronic diseases including arthritis, hypertension, hypercholesterolemia, some cancer types and diabetes (Escoffery et al., 2011). In our study, it was determined that BMI values of the majority of workers were within normal limits and they did not have obese individuals in their families. Additionally, the fact that the majority of workers stated obesity as a sign of ill-health in our study signifies that individuals in the community are aware of obesity. In addition, scores for HLSB sub-scales of health responsibility and stress management were significantly higher among workers who were aware of the fact that obesity is an indicator of illness compared to workers who lacked such awareness ( $p < 0.05$ ). However, several sources have reported that as in the case of the workers in our study who did not weigh and exercise regularly, did not take care of their diets and consumed a pastry and cereal-based diet, these unhealthy life-style practices pose a risk for developing obesity and certain chronic illness in the future Nigg et al., 2010; Previdelli et al., 2010).

In our study, it was determined that majority of workers did not have any chronic diseases and a substantial percentage of workers (33.3%) did not know whether they had a chronic condition or not. Also, about half of the workers actually had a chronic disease in their families. Although having a family member with a chronic disease constitutes a risk factor for the workers themselves, the majority of workers do not have their blood pressures checked and do not exercise regularly, which leads us to think that they did not attach adequate importance to their health.

It was shown that physical activity increases the quality of life for all individuals in the community (Rao et al., 2012; Segar et al., 2012; Van Domelen et al., 2011). Therefore, promoting an active life-style constitutes an important component of national and international public health guidelines. Considering benefits of physical activity, it is necessary to encourage people for adopting the most appropriate level of physical activity for healthier individuals and healthier societies

(Zhang et al., 2011). It was determined that majority of individuals studied within the scope of research trials did not exercise regularly (Previdelli et al., 2010; Ulaş & Genç, 2010). In our study, it was found that the majority of workers did exercise occasionally, but number of workers doing regular exercise was very low. It was determined that doing exercise had a significant effect on HLSB average total score and HLSB average total scores were highest among workers who exercised regularly and lowest for workers who did not do any exercise.

The lifestyle indicators that traditionally have been associated with a lesser quality of life are the consumption of alcohol and tobacco, lack of physical exercise, and a diet rich in fat and low in fruit and vegetables (Bioxados et al., 2010). Actually nutrition and exercise are two important behaviours which play an important role in health (Beşer et al., 2007). As result of our study, it was determined that health behaviours that workers had adopted for improving their health were generally at a moderate level based on HLSB subgroup and total score averages. In several studies, while the highest average score differed between subgroup and total point averages for HLSB, the lowest average score was generally observed in exercise subgroup (Türköl & Güneş, 2012; Yalçınkaya et al., 2007; Beşer et al., 2007; Al-Kandari et al., 2008; Aal Ma'aitah et al., 1999; Özkan & Yılmaz, 2008; Chen et al., 2010). In our study, consistent with other studies, the highest average score was observed in the self-realization subgroup, whereas the lowest average score was observed in the exercise subgroup. This result shows us that our society does not have the habit of doing exercise.

It was found that nutritional habits of workers had a significant effect on HLSB total average score and HLSB total average scores were higher among workers who had the habit of consuming a diet rich in vegetables and meat products compared to workers who consumed a diet rich in cereals, meat and flour. The World Health Organization states that the incidence of chronic illnesses in developing and developed countries could be decreased with diet and lifestyle modifications (Beşer et al., 2007; Vinholes et al., 2012; Bansal et al., 2010). Increased consumption of vegetables and fruits is recommended to reduce the risk of chronic diseases which could develop particularly in adulthood (Bandoni et al., 2011).

For individuals to have an adequate and balanced diet, it is necessary to consume 3 main meals regularly (Sözen et al., 2009; Ulaş & Genç, 2010; Aksoydan & Çakır, 2011). In the present study, it was found that HLSB total average scores were highest among workers who had three meals a day. This shows that workers take care of their meals for a healthy life. Additionally, this finding makes us think that this may be associated with the fact that meals at the factory are served regularly three times a day. Similarly, nurses who were nourished regularly were found to have significantly high HLSB scores in the study of Özkan and Yılmaz (Özkan & Yılmaz, 2008), and a significant difference was found between the nutrition style and HLSB in the study by Beşer et al (Beşer et al., 2007).

As a result of the research, it was determined that healthy life-style behaviours of workers were at mid-level and they obtained the lowest score of HLSB from the exercise subgroup and the highest score from the self-realization subgroup. In addition, it was observed that workers who had a diet rich in vegetables and meat, consumed three meals a day, weighed regularly and exercised at all times had high HLSB scores. A significant difference was not found between duration and type of work, BMI, frequency of eating outside, regular weighing and habit of having their blood pressure checked regularly and HLSB. Based on these results, planning of educational activities may be recommended, directed at contributing to improvement of healthy life-style behaviours of workers both in their workplace and social environments and increasing awareness on this issue. In addition, social and political targets should be set in order to turn healthy nutrition into life-style by increasing nutritional consciousness to ensure workers achieve at a desired quality of life, and programmes to promote behaviour change should be developed. Particularly, it is important to employ workplace nurses who have an important role in promoting healthy nutrition of workers and development of healthy life-style in factories all over the country.

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**Table 4.** Comparison of Average Scores of Healthy Life-Style Behaviours Scale Scores by Certain Characteristics of Workers

Variables	Scores of HLSB													
	Self-Actualization		Health Responsibility		Exercise		Nutrition		Interpersonal Support		Stress Management		Total Scores	
	X±SD	P-value	X±SD	P-value	X±SD	P-value	X±SD	P-value	X±SD	P-value	X±SD	P-value	X±SD	P-value
<b>Education Level</b>														
Literate														
Primary	36.33±10.47	0.393	22.94±6.61	<b>0.034</b>	8.88±2.16	0.648	17.05±5.58	0.606	18.55±6.33	0.747	18.27±5.23	0.498	122.05±30.59	0.336
High school	37.25±8.42		22.29±6.45		9.45±3.80		16.96±4.46		19.08±4.50		17.85±5.06		122.90±25.31	
	35.70±8.88		20.28±5.51		9.06±3.54		16.40±4.02		19.39±4.26		17.17±4.58		118.02±23.64	
<b>Economic Status</b>														
Good	36.80±8.05		19.95±5.38		8.25±2.51		16.05±5.07		18.65±3.75		17.05±4.52		116.75±22.36	
Medium	37.32±8.86	0.296	22.14±6.30	0.247	9.74±3.82	<b>0.034</b>	17.16±4.34	0.227	19.33±4.66	0.688	18.15±4.75	0.126	123.86±25.20	0.116
Poor	35.54±8.53		21.28±6.25		8.68±3.38		16.27±4.34		18.91±4.52		16.90±5.24		117.61±25.36	
<b>Nutrition Style</b>														
Vegetables and meat	37.03±8.86	0.714	22.72±6.34	<b>0.005</b>	9.65±3.65	0.167	17.16±4.78	<b>0.049</b>	19.35±4.63	0.262	18.57±5.02	<b>0.002</b>	124.51±25.99	<b>0.025</b>
Cereals and meat	37.71±8.99		21.51±5.86		9.16±3.83		17.06±3.88		19.41±4.36		17.32±5.04		121.18±24.63	
Pastry	35.91±8.00		19.55±6.00		8.60±3.24		15.53±3.94		18.27±4.58		15.98±3.98		113.86±22.62	
<b>Number of Meals/Day</b>														
2 meals	32.97±6.78	<b>&lt;0.001</b>	18.94±5.43	<b>&lt;0.001</b>	9.22±3.67	0.323	13.48±3.92	<b>&lt;0.001</b>	18.08±4.67	<b>0.016</b>	16.34±4.44	<b>0.013</b>	109.05±20.16	<b>&lt;0.001</b>
3 meals	37.58±8.68		22.33±6.20		9.36±3.66		17.46±4.13		19.42±4.43		18.00±4.90		124.18±24.65	
4 and more	27.37±7.99		15.62±4.27		7.37±2.19		11.62±4.62		15.62±5.87		13.62±5.15		91.25±26.81	
<b>Frequency of Exercise</b>														
Always	42.00±6.01	<b>0.006</b>	26.50±8.23	0.088	12.70±4.21	<b>&lt;0.001</b>	17.30±3.74	<b>0.021</b>	20.70±4.59	0.062	19.50±5.42	<b>0.003</b>	138.70±24.99	<b>&lt;0.001</b>
Frequently	37.92±7.77		21.76±6.79		11.84±3.80		17.46±4.48		20.76±3.51		19.92±5.33		129.69±26.27	
Occasionally	37.91±9.27		22.02±6.42		10.40±3.58		17.12±4.53		19.43±4.71		18.62±5.26		125.53±26.93	
Rarely	36.51±7.57		22.31±6.10		8.81±2.81		17.68±4.10		19.60±4.41		17.23±4.63		122.17±21.30	
None	34.35±8.72		20.17±5.36		7.32±3.09		15.45±4.31		17.92±4.41		16.11±4.06		111.33±22.39	
<b>Obesity is a sign of illness</b>														
Yes	36.71±8.65	0.988	22.04±6.25	<b>0.042</b>	9.29±3.71	0.993	16.64±4.35	0.205	19.22±4.52	0.509	17.97±4.90	<b>0.019</b>	121.89±25.42	0.389
No	36.68±9.09		19.97±5.91		9.28±3.25		17.55±4.61		18.73±4.72		16.08±4.79		118.33±23.90	
<b>Regular Weighing</b>														
Yes	39.02±8.05	<b>0.002</b>	23.73±6.90	<b>&lt;0.001</b>	10.44±3.99	<b>&lt;0.001</b>	17.37±4.55	0.126	19.78±4.47	0.102	18.91±5.10	<b>0.003</b>	129.27±25.15	<b>&lt;0.001</b>
No	35.58±8.81		20.72±5.65		8.73±3.32		16.51±4.31		18.83±4.57		17.06±4.73		117.45±24.33	