

# Lifestyle Factors and Eating Habits Associated With Overweight and Obesity Among Male and Female Students At KFU

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**Abstract:** Obesity was defined as a state of abnormal and excessive lipid accumulation in adipose tissue with adversely affected on the health. Overabundance bodyweight is the sixth most critical hazard calculate adding to the general weight of diseases around the world. Because of metabolic complications that associated with obesity the risk of cardiovascular disease and diabetes mellitus type 2 increased. Obesity is a multifactorial condition affected by numerous factors, including hereditary, and lifestyle factors including stationary practices, physical dormancy and unfortunate dietary decisions. Undergrads are exceptionally presented to unfortunate dietary patterns prompting to increase the body weight .

**Objective:**To study the prevalence of obesity and overweight among students in king faisal university and its relation with lifestyle and diet habits.

**Methods:** This cross-sectional study was conducted on 300 samples of students in King Faisal University in Ahsa, eastern Saudi Arabia in 2016. Self-administered questionnaire containing many questions about diet habit and lifestyle in addition to demographic data was made and completed by each participant. BMI (body mass index) has been calculated.

**Results:** out of 290 participants who participated in the study. 18.6 % and 23.4% are overweight and obese respectively. 53.8% have irregular weight. 59% spend more than 3 three hours daily in sedentary lifestyle. 70.7% didn't underwent any exercise in last three months consistently. 49% rarely Getting around on foot or bicycle. 67.9% have irregular meal. Only 31% eat breakfast daily. 50.7%, 53.4%, 42.4% eat and drink fast food, soft drinks and sweet diet once weekly respectively. 57.9% eat late at night. 17.9% and 19% eat vegetables and fruit daily respectively. 77.9% never smock.

**Conclusion:** In general, sedentary life style is widely prevalent among students in king Feisal university. There is an obvious relation between increasing BMI and life style and eating habit. Increasing the awareness among students about appropriate lifestyle and diet habit is highly recommended to decrease the incidence of obesity.

**Keywords:** Obesity; Overweight; Lifestyle; dietary habits.

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## 1. INTRODUCTION

Obesity was defined as a state of abnormal and excessive lipid accumulation in adipose tissue with adversely affected on the health [1]

Overabundance bodyweight is the sixth most critical hazard calculate adding to the general weight of diseases around the world. 1.1 billion Of adult and 10% of kids are consider as overweight or obese [2]. In Saudi Arabia, a nation that has encountered checked wholesome changes and fast urbanization in late decades, it was assessed that 26.6% and 10.6% of youths matured 13–18 years are overweight or corpulent, separately [3] because of metabolic complications that associated with obesity the risk of cardiovascular disease and diabetes mellitus type 2 increased in childhood[4] .Current

proof demonstrates that obesity is a multifactorial condition affected by numerous factors, including hereditary, and lifestyle factors [4]. Truth be told, past research has demonstrated that obesity in childhood is connected with lifestyle factors, including stationary practices, physical dormancy and unfortunate dietary decisions [4,5]. current information about obesity in adolescents in Saudi Arabia and relation with lifestyle factors are limited, furthermore, the accessible information showed that unfortunate dietary decisions and latency were for the most part related with BMI in Saudi youngsters and youths [6, 7, 8,9]

Undergrads are exceptionally presented to unfortunate dietary patterns prompting to increase the body weight [10]. As per WHO, obesity is for the most part more regular among ladies than men [1]. Be that as it may, ponders on understudies uncovered higher rates of obesity in male than in females [10, 11]. In KSA, Rasheed et al [12] reported that 30.6% of female wellbeing undergrads were either overweight or obese.

This study aimed to study the prevalence of obesity and overweight among students in King Faisal University in Ahsa, Saudi Arabia and its relation with lifestyle and diet habits.

## 2. METHODOLOGY

### Sample:

This cross-sectional study was conducted on 300 samples of students in King Faisal University in Ahsa, eastern Saudi Arabia in 2016. These samples were selected randomly at break time during one month.

### Material:

Self-administrated questionnaire was made containing three parts. First one was asking about demographic data and in was containing questions about age, gender, marital status and family income, also questions about height, weight and whether the participant have Diabetes Mellitus nor Hypertension have been added to this part. In second part, fourteen questions about eating habits. And eight questions for life style in the third part.

From height and weight, BMI (body mass index) has been calculated [as  $BMI = \text{Weight in kilogram}/(\text{height in meter})^2$ ]. Regarding to National Institution of Health (NIH), adult is classified into four categories according to BMI, <18.5 is classified as underweight, while BMI from 18.5-24.9 is normal, adult will be Overweight if BMI from 25-29.9 and obesity start from BMI 25 and more [13].

### Statistical Analysis:

Data have been entered and analyzed using IBM SPSS Statistics Version 24. P value < 0.05 is considered as significant.

### Ethical consideration:

An approval of study protocol was obtained from the Research and Ethic Committee of King Faisal University in Ahsa. All participants gave an informed consent for participation into the study.

## 3. RESULT

Out of 300 students participated in this study, 290 students filled the questionnaire (response rate 96.67%) with mean age 23 years. Male gender was the large percent of our participants (72.4%), while only 80 students (27.6%) were female. Around 233 students (80.3%) are single marital state, while 57 students (19.7%) are married. Regarding to income of our participants we categorized income to four categories, either 1000 – 3000 Saudi Riyal (SR), 3500-9000 SR, 9500-1500 SR and more than 15000 SR, and income of our participants were (37.9%,25.9%,20% and 14.8%) respectively.

Regarding to BMI, most of participants were in optimum range as they are 124 students (42.8%), 28 students are underweight (9.7%), in overweight category there are 54 students (18.6%), and 68 students (23.4%) are obese. Weight of 156 (53.8%) participants is irregular, while 134 (46.2%) denied any irregularities.

Most of our participants which are 199 students (68.6%) have a family history of either Obesity, Diabetes or hypertension.

When we start asking about sedentary life style, we found that most of participants (59%) spend more than 3 hours daily in sedentary life style such as television (TV) viewing, video games, and computer and internet use ... etc., 78 students (26.9%) spend 1-2 hours, while only 41 students (14.1%) spend one hour per day. For the last three months, 205 participants (70.7%) haven't been any exercising consistently. Only 42 students (14.5%) always organize their time to include exercise in their daily activity, while 49 (16.9%) do that often, and 125 (43.1%) do it sometimes, also small

percent (25.5%) never do it at all. Getting around on foot or bicycle among participants is rare regarding to 142 participants (49%), while only 51 (17.6%) do that most of the week, 35 (12.1%) do it 3-4 times per week, and 62 (21.4%) do it 1-2 times per week .

Regularity of meals is very weak among our participants, as 197 (67.9%) approved that their meals are not regular, while only 93 (32.1%) have regular meals. When participants have been asked about taking breakfast weather they take it daily, 1-2 times weekly, 3-4 weekly and rarely, their answers were different in these percentage (31%, 23.1%, 23.8% and 22.1%) respectively. 147 students (50.7%) eat Fast food once weekly, while 107 (36.9%) eat them 2-4 times per week, and small percent (12.4%) eat more than four times weekly. Regarding to Soft Drinks, 155 students (53.4%) drink them once weekly, 63 (21.7%) drink 2-4 times weekly, while 72 (24.8%) drink them more than four times per week. When we asked about eating sweet diet either once, 2-4 times or more than four weekly, their answers were (42.4%, 36.6% and 21%) respectively. Most of our participants (57.9%) eat late at night, while remaining don't do. Only 102 people (35.2%) eat three meals per day, while most of them (50.3%) eat only two, small percentage (10.3% and 4.1%) eat one and four meals daily respectively. Around 25% of participants eat snacks apart from regular meal and the same percentage of them eat 3-4 times weekly, 27% eat 1-2 times and 21% eat rarely. Only 17.9% of our participants eat vegetable daily, while 31% of them eat rarely and same percentage eat 1-2 times weekly, remaining (20%) eat 3-4 times per week. Eating fruits is less popular than vegetables, as 33% of participants rarely eat them, 27% eat them 1-2 times weekly, 25% eat 3-4 times per week, while only 13% of them eat daily. Most of participants (77.9%) never smock, and only 15.9% of them are current smoker, while remaining (6.2%) are ex-smoker.

#### 4. DISCUSSION

As our research study the relation between lifestyle and diet habit and obesity, first we study the status of our participants regarding to obesity. We found that there is a percentage of overweight and obesity that we cannot ignore. Also irregularity in Wight which takes the largest portion of participants. By looking at these result we assume that we can get the real outcome when we study the diet habits and lifestyle of our participants. As we compare these results and other results, such as those in Lebanon obesity 12.5% and overweight 37.5% [7], in Kuwait it is 32% and 8.9% overweight and obesity respectively [14], only 35% is the account of obesity and overweight among male college students in United states and united Arab Emirate [10,15,16].

It Is expected that we will find a sedentary lifestyle when we look at the prevalence of obesity and overweight of our participants. Most of participants spend more than 3 hours in sedentary lifestyle such as television (TV) viewing, video games, and computer and internet use ... etc., and also most of them haven't been any exercising consistently for the last three months, most of them doesn't include the exercise in their daily activity, getting around on foot or bicycle among participants is rare. So, results were as expected.

Also regarding to our study objectives, we expected that diet habit will be inappropriate when we look at the result of obesity evaluation. Meals are irregular among most of participants, most of them don't take their breakfast daily, most of them eat fast food, sweet diet and drink soft drinks whatever the frequencies, most of them eat late at night, most of them don't eat three meals daily, small percentage of them daily eat vegetables and fruits.

#### 5. CONCLUSION

In general, sedentary life style is widely prevalent among students in king Feisal university. There is an obvious relation between increasing BMI and life style and eating habit.

If we want to decrease the incidence of obesity among students, we need to evaluate the awareness of them about optimum life style. And we need also to increase their awareness. It is highly recommended to include the awareness in their study curriculum. Parents and Primary health care providers are also included in this mission.

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