

## **BMI and Eating Habits for Preservice Teachers at the Faculty of Education, Lebanese University**

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### **Abstract**

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*A Mixed study was conducted on 222 students, all females enrolled in all semesters at the faculty of Education. The aim of this study was to evaluate how far the Health Education course taken by students in all majors, is influencing their eating habits and their awareness of a good health.*

*Data were collected from 1) a self-administered questionnaire on BMI and eating habits, 2) on-site administering BMI questionnaire, and 3) a Post-Questionnaire administered in 3 classes, who participated in the Healthy Food Day. To increase the validity of results, a focus group member checking was used. Results showed that, preservice teachers have a normal BMI but they have bad eating habits. The more students are in high semester, the more they do not exercise regularly and they consume more time on the internet and less time on reading. As for smoking, it varied from one major to another.*

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**Keywords:** BMI, Eating and Life habits, Health Education, Pre-service teachers

### **1. Introduction**

As teachers at the Faculty of Education, we are concerned mostly with student's knowledge acquisition more than their health well-being. I noticed during breaks that students prefer to stay sitting in class because they do not want to go ups and downs the stairs each time they want to buy snacks; they give money to one friend who went to buy food for them. One day, I noticed that many students who get to their classes in the 3<sup>rd</sup> and 4<sup>th</sup> floors, stopped in the second floor to rest because they are tired on their half-way to their class!

The Faculty of Education is the oldest Faculty of the Lebanese University, a state university scattered in different regions of the country. The Faculty of Education consists of 3 branches. During the academic year 2015-2016, the total number of classes was 75, 37 sections at the Faculty, Branch I, distributed on four disciplines (science and Math education, language education, humanities education and early childhood education). The total number of students enrolled at the Branch I, was 807. Note that the Faculty of Education I is a quite old building made of 4 floors with no lift. Teachers and students use the stairs to go to their classes.

Besides, I used to teach the course Health Education and one of the primary goals of this course taught for all majors at the Faculty of Education, is to provide students with knowledge that permits him/her to make right choices, adopt responsible behaviors for one-self as well as for the environment.

### **2. Literature Review and Theoretical Background**

In 2000, WHO defined obesity as an epidemic worldwide, regarding it as one of the ten factors leading to serious diseases. In recent years, obesity in universities has increasingly caught public attention. According to WHO (2000), obesity is generally more common among women than men.

One of the major causes of obesity is the changes in the diet, in terms of quantity and quality, which has become more "Westernized" (Antonio, 2005). For instance, in the Kingdom of Saudi Arabia (KSA), recent studies revealed increasing consumption of animal products and refined foods in the diet at the expense of vegetables and fruits (Amin, 2008 and Mahfouz, 2007).

These dietary changes were accused for increasing the prevalence of both overweight and obesity observed among Saudi children, adolescences and adults in the last few decades (Al-Nuaim, 1997 and El-Hazmi, 2002). College students are highly exposed to unhealthy eating habits leading to body weight gain (Huang, 2003).

However, studies on college students revealed higher rates of obesity in males than in females (Yahia, 2008 and Huang, 2003). In KSA, Rasheed et al (1994) documented that 30.6% of female health college students were either overweight or obese. In KSA too, a study done by Al-Shehri et al (2016) on 300 undergraduate students attending 2<sup>nd</sup> to 5<sup>th</sup> years of the degree course in Medical Sciences at Najran University, showed that these students have relatively alarming prevalence of overweight/obesity, unhealthy dietary practices, and lifestyle behaviors have unhealthy dietary and lifestyle; the majority of the students did not smoke, with 17.2% of the students being regular smokers. In addition, 62% of the students have normal body mass index, 14.2% are underweight, 11% are overweight, and 12% are obese. As for the physical activities, 29% of the students engaged in regular exercise while 25% stated that they never or hardly ever perform physical exercise.

In a cross sectional study conducted by Al-Rethaiaa et al in 2010 on obesity and eating habits among 357 male students aged 18-24 years randomly chosen from College of Health Sciences at Rass, Qassim University in Saudi Arabia, demonstrated that more than one third of the students were above the normal body weight. Overweight students represented 21.8% of the sample whereas, 15.7% were obese. These findings were consistent with the results of similar studies in other Middle East and some Western countries. In Kuwait the corresponding percentages were 32% and 8.9% (Al-Isa, 1999), while in the United States and the United Arab Emirates overweight and obese accounted for about 35% of the male college students (Huang, 2003, Lowry, 2000 and Musaiger, 2003).

In contrast, only 7.9% of Iranian male college students were above the normal body weight (Nojomi, 2006). That rate decreased to 2.9% among Chinese college students with a percentage of obesity as low as 0.4 (Salamaki, 2005).

Most of Saudi students (63.3%) eat irregular meals while 64.6% of Lebanese and 81.6% of Chinese male students take regular meals. About half of Saudi students have breakfast daily compared to one third of Lebanese and two thirds of Chinese students. In KSA and Lebanon most of students (55.7% and 47.9% respectively) eat only two meals per day. In contrast, the vast majority of Chinese students (74.3%) eat meals thrice a day. Eating snacks was a daily habit in about one third of Saudi, half of Lebanese and only about one tenth of Chinese college students. Vegetables and fruits consumption was uncommon habit among Saudi students. On the other hand, 83.5% of Chinese and 56.3% of Lebanese male students consume vegetables three times or more per week. Moreover, 49% of Lebanese students eat fruits at the same rate.

In Lebanon, the prevalence of overweight and obesity among male college students was 37.5% and 12.5%, respectively (Yahia, 2008).

BMI (body mass index) recommended by WHO is a simple and convenient way to judge overweight and obesity of adults and has been proved to be more reliable than weight index. The formula of BMI is:  $BMI = \frac{\text{weight (Kg)}}{\text{height (m}^2\text{)}}$ . BMI lower than 18.5 indicates that the person is underweight; a BMI between 18.5 and 24.9 indicates a normal weight and a BMI between 25 and 29.9 indicates overweight and a BMI above 30 suggests obesity.

### 3. Purpose of the Study

Based on literature on BMI and eating habits, the present study aims to collect and to assess overweight and obesity rates among female students at the Faculty of Education. Hence, this study is a survey on collecting the BMI of 222 female students at the Faculty of Education, section I during the academic year 2015-2016. The aim of this study was to evaluate how far the Health Education course taken by students in Semester 3, 4, 5 and 6 for all majors, is influencing their habits of eating and their awareness of a good health. So that to put forth some suggestions for the LMD Committee of the Faculty of Education regarding the Health Education course.

#### 3.1 Research Questions

The research questions are:

1. What are pre-service students' BMI and their eating habits?
2. What are pre-service students' sedentary as well as their physical activities?
3. Did the yearly activity such as Healthy Food Day, organized by students on the occasion of the World Health Day, at the Faculty of Education, increase their awareness of having a healthy daily diet?

## 4. Methodology

### 4.1 Participants

A mixed research was conducted on 222 students, all females, in all majors.

The Food Fair was organized during the winter semester by students in their 3<sup>rd</sup> and 5<sup>th</sup> semester (2<sup>nd</sup> and 3<sup>rd</sup> year), enrolled in their initial teacher education program during the academic year 2015-2016 (Table 1). Students prepared home-made food and they had to sell it on the Wednesdays break on the occasion of the World Health Day.

### 4.2 Research Design and Data Collection

Qualitative and quantitative data were collected from 1) a self-administered BMI and eating habits questionnaire (please see Annex), 2) on-site administering the BMI questionnaire during the Healthy Food Day taken place at the Faculty of Education I. The administration of the questionnaire was at different time of the day. Moreover, some science and Math students were freely distributing and helping students on the Food Day to fill in the BMI questionnaire.

The self-administered BMI questionnaire consists of 11 questions, 2 of them are open-ended. It aims to study the distribution of underweight, overweight and obesity, the sedentary activities, as well as the food and eating habits of these students, and 3) a Post-Questionnaire administered in 2 classes for Science and Math enrolled in Semester 4 and 6, who participated in the Healthy Food day activities. The study duration was during 2 semesters. One day before the Healthy Food Fair, students who were present at the Faculty, were distributed a one-sheet questionnaire during their regular class. One day before the Healthy Food Day 222 out of 272 students, present at the Faculty filled in the BMI questionnaire in their class. The questionnaire was designed by the researcher, discussed and piloted by the science department. Students have the freedom to participate to the study and many classes filled in the questionnaire during the morning sessions while others were administered the questionnaires in the afternoon sessions. The questionnaire was distributed and supervised by the science and Math department teachers.

To increase the validity of results, a member checking was used the following semester, after completion of the Health education Course and who participated in the Food Day at the Faculty of Education I. These 2 groups were Science students and Math students in their 4<sup>th</sup> Semester their 6<sup>th</sup> Semester respectively. Students' age, involved in the focus group sample, ranged between 18 and 30 years old.

The focus group graduated in 2016. After data related to their group was displayed, a post-questionnaire was administered. It included the following 2 questions:

1. Did you like the Healthy Food Day? Please explain
2. What changes in your eating habit did you make after participating to this day?
3. What do you like to tell me? Your suggestions!

Finally, data were analyzed using Excel and SPSS 20.0. The independent variables are: age, major. The dependent variable was BMI.

## 5. Results and Discussion

### 5.1 To answer the Research Question 1: What are students' BMI and their eating habits?

Table 2 displays the BMI of the 222 students. The BMI mean is 21.93 which means that on the average, students at the Faculty of Education I presented a normal BMI.

Across the Faculty majors, students who participated in the study have a normal BMI (Table 3).

Table 4 shows that 46.8% considered themselves as having a healthy weight and 26.6% believed that they are overweight. 64.4% of students are concerned about their weight compared to 16.2% who said no. In addition, 91.4% said that they do not take non-prescription slim pills.

Table 5 indicates that only 2.3% do not eat the whole day, while 42.3% eat sometimes. On the day of the questionnaire administration, 60.4% took their breakfast, while 49.5% take rarely their breakfast and only 23% took their breakfast daily. Moreover, 45.5% do not take their meals regularly.

Table 6 shows that daily, 56.3% have an intake of vegetables, 45% consume high fat and sugary food, and 27.1% drink cola and sugar-containing drinks. On the other hand, only 6.9% do not take at all vegetables, while 10.4% do not consume high fat and sugary products and 32% do not drink at all cola and other drinks containing sugar. When asked about smoking, 64.9% do not smoke at all, 3.6% are ex-smokers, while 31.5% are current smokers. When asked, what you smoke, 30.6 % mentioned the water pipe or Nargila and 2.3% consume cigarettes (Table 7).

## **5.2 To answer the Research Question 2: What are pre-service students' sedentary as well as their physical activities?**

Table 8 displays that, in a day, 42.3% spent up to 5 hours on talking and texting on the mobile, compared to only 3.2% who spend their time on non-Faculty computer tasks and 21.2% spent 3 hours watching TV.

Many students at the Faculty are not enrolled in any organized sport (50.5%) or participating in any outside play (41%), as shown in Table 9. But 55% come to the Faculty by walking and 27.5% do regular indoor exercises such as aerobics or dance.

Overall,

- Although students have a normal BMI, but it does not mean that they have a healthy life style, especially that many students are not enrolled in any organized sports, and do not take their meals regularly.
- Their eating habits is poor, because they consume Cola, high-fat and sugar products more than they consume vegetables and they do not take their breakfast regularly.
- The more students are aging, the more they are concerned with their weight!
- The more students are enrolled in higher semester, the more they spend their time on talking and texting on the mobile!
- As for smoking, it is an alarming situation, because students who smoke water pipe or Nargila are increasing! Moreover, students in higher semesters tried to smoke or are actually smoking. Even worse, many students hold wrong perceptions about the water pipe; they believed that water pipe is not smoking.
- The more students are in higher semester, the more they consume high fat and sugar foods, but they stop drinking Cola and other sugar-containing drinks!
- Many students have actually a normal body mass index but they believe that that are overweight. This is maybe due to nowadays perceptions about beauty (from society values and the movie stars image..). Especially that, their distorted view about their weight, may lead in the future to eating disorders. Future studies are important for delineating this.

## **5.3 To answer the Research Question 3: Did the yearly activity such as Healthy Food Day, organized by students on the occasion of the World Health Day, at the Faculty of Education, increase their awareness of having a healthy daily diet?**

Data were disseminated from a representative sample of students who participated in the Food Day event. The focus group is formed of 45 students who participated in the healthy Food Day in the winter semester. The sample consists of 25 Science students (9 students in 4<sup>th</sup> semester and 16 students in 6<sup>th</sup> semester) and 20 Math students in 6<sup>th</sup> semester.

### **5.3.1 Results from the focus group**

Table 10 shows 62.2% have a normal BMI, and equal number of 8 students, or 17.7% are underweight and overweight.

In Table 11, the total numbers of students, who consider themselves underweight are 5 (11.1%), have a healthy weight 8 (17.7%) and overweight 19 (42.2%), compared to their actual BMI displayed in Table 9. In addition, 23 students (51.1%) stayed the whole day without eating and 30 students or (66.6%) have concerns about their weight despite that 28 (62.2%) students have a normal weight.

Table 12 depicts the focus group eating habits, the consumption of chips, fried fish & potatoes, snacks, desserts and candy, 18 (40%) of students took high fat and sugary products daily, and 8 (17.7%) drink cola and sugar-containing drinks per day, compared to 24 students (53.3%) who do not drink cola at all and 10 (22.2%) do not consume vegetables. Moreover, 21 students (46.6%) do not take their meals regularly and 20 (44.4%) take their meals sometimes regularly.

As for the focus group breakfast habits, 30 students (66.6%) took breakfast the day of administering the questionnaire, while 14 students (31.1%) did not take their breakfast. Moreover, 10 students (22.2%) take daily their breakfast while 21 (46.6%) said that they rarely take breakfast before coming to the Faculty (Table 12).

Table 13 highlights students' answers about smoking; 31 students (68.8%) do not smoke at all: 8 students out of 9 in their 4<sup>th</sup> semester do not smoke at all compared to 6<sup>th</sup> science semester (2 students who smoke the Nargila) and 9 students out of 20 Math students in their 6<sup>th</sup> semester.

Table 14 shows that 15 (33.3%) spend up to 5 hours on talking and texting on the mobile. In addition, 28 (62.2%) spend less than 2 hours watching TV and 24 students (53.3%) spend less than 2 hours on non-faculty time on a computer.

As highlighted in Table 15, students who walk to the Faculty are 21 or 46.6%, only 13 students do indoor exercises (28.8%) such as dance and aerobics, while 3 science students (6.6%) do sometimes outside play and 2 Math students (4.4%) from 6<sup>th</sup> semester, do organized sports, such as basketball.

For the focus group, it is concluded the followings:

- Although students have a normal BMI, but they do not have a healthy life style, especially that many students are not enrolled in any organized sports, and do not take their meals regularly.
- Their eating habits is poor, because they consume Cola, high-fat and sugar products more than they consume vegetables and they do not take their breakfast regularly.
- The more students are aging, the more they are concerned with their weight!
- All the smoker students from the focus group, smoke Nargila. Moreover, they do believe that Nargila is not smoking. It is nowadays smoking Nargila popular among the Lebanese population and especially the young generation. It is alarming that this bad habit becomes also common among university students.
- The more students are enrolled in higher semester, the more they spend their time on talking and texting on the mobile!
- The more students are in higher semester, the more they consume high fat and sugar foods, but they stop drinking Cola and other sugar-containing drinks!
- Many Math students are current smokers and they smoke more than Science students.
- Science students were the most who have a healthy food diet with least smoking. This result needs to regular checks with a more representative sample.

### **5.3.2 Member checking**

At the end of the academic year, a total number of 38 students from the focus group were present at the Faculty, on the days of realizing the 3 member checking sessions; 9 students from Science in their 4<sup>th</sup> semester and 29 students in 6<sup>th</sup> semester (16 Science and 13 Math). After watching the PowerPoint displaying the researcher analysis and interpretation of the data, students were asked to answer the following questions:

1. Please comment on the PPT and the findings!
2. Are you aware of your poor eating and life habits?
3. What would you do in order to change towards a healthier diet?
4. Did you like the Healthy Food Day? Please explain
5. What changes in your eating habit did you make after participating to this day?
6. What do you like to tell me? Your suggestions!

The majority of students liked the display of the findings of their class; they were surprised of their actual poor eating habits and lifestyle. In addition, they liked how their class data were compared with other classes. After the data display, they wrote that they are aware of their poor eating habits. Also, 3 students wrote that they stopped smoking and one student consulted a dietician after the Healthy Food Day. Four students wrote that healthy food can be delicious and tasty too! Many students set a goal to enroll in sport activities in Summer time after they finish the university. On the other hand, only 2 students wrote that even they are aware of their overweight and their bad eating habits, they will not change because they are used to their lives, as it is.

All students liked the healthy Food Day a lot, and they ask to do it twice per semester. They suggest having a fixed place, a Faculty cafeteria where they can buy healthy food and to have enough time to eat. Moreover, students complain of the courses sessions load and the lack of time during the day for eating too. That's why they ask to have during breaks between sessions.

Also, many students suggest including a sport session in their weekly program and the Faculty to facilitate their participation in organized sports outside the Faculty, such as hiking and swimming.

Here are some excerpts of students' comments:

One student in Science 4<sup>th</sup> semester wrote: *I'm aware of my poor eating and life habits but because of the Faculty schedule, we are obliged to have such habits.*

Many students set goals like this student in 6<sup>th</sup> Science semester, who declared: *I would follow a healthy diet and stop eating chips and drink Cola. So, the first step is to reduce eating sugar-food and drinking Cola.*

One student in Math 6<sup>th</sup> semester wrote: *I used to eat chips during the breaks, but since the Food Day, I stopped to eat it and now I'm really happy because my skin is clean with no pimples as I used to have before!*

Another student in Science 4<sup>th</sup> semester wrote: *It is true that we sold food, we enjoyed a lot the day and we have pretty sum of money, but health is fortune too!*

## 6. Limitations

The results of this study are limited to this sample. It is true that this sample consists solely of female students at one branch of the Faculty of Education, but it shed the light on the eating habits among a representative sample of students at the Faculty.

Due to the lack of a permanent medical personnel at the Faculty and enough relevant measuring equipment, the researcher has to rely on the teachers who were present in classes during the administration of the questionnaires, as well as on the student for knowing the height and weight.

## 7. Conclusions and Recommendations

The present study aimed at increasing the awareness among young students who will become teachers and future mothers of the dangers of overweight and obesity on their health and subsequently on their future careers.

1. The Healthy Food Day was a success. For this reason, it was agreed in the science and Math Department to keep this occasion yearly in the spring semester. During the last academic year, another group of teachers from the Science and Math Department led the day with another concept of the Healthy Food Day 2 and more classes (4 sections of the Sport Education, 1<sup>st</sup> year) joined the Food Day 2. Students gained more money, a larger audience from outside the Faculty joined and students put their pictures on the official Facebook site of the Faculty.
2. To repeat the Healthy Food Fair twice per semester at the Faculty of Education.
3. It is hoped that this Day will occur yearly and it will expand on the other two branches of the Faculty of Education.
4. In Lebanon, the traditional Mediterranean diet rich in olive oil and vegetables is enrooting in the Lebanese daily eating practices. This study reveals that students' unhealthy eating habits are shifting away from the Lebanese culinary and this would expose them to weight and dietary disorders.
5. The Science and Math Department of the Faculty of Education aims that other Faculties of the Lebanese University will join this event and that it will take place at the main campus too.
6. The Health Education Course is mandatory for all majors. The Science and Math Department proposes for the LMD reform committee to include outdoor physical activities at the Faculty of Education.
7. It is hoped that future studies will take into account BMI and eating habits across the Faculty majors and semesters.

## 8. Acknowledgments

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## List of Tables

Table 1. Students' sample

Students	Semester/ Year	Number of students	Total
Science (English+ French)	2 <sup>nd</sup> (1 <sup>st</sup> year)	12	28
	4 <sup>th</sup> (2 <sup>nd</sup> year)	16	
Math (English+ French)	2 <sup>nd</sup> (1 <sup>st</sup> year)	7	59
	4 <sup>th</sup> (2 <sup>nd</sup> year)	16	
	6 <sup>th</sup> (3 <sup>rd</sup> year)	36	
Humanities	2 <sup>nd</sup> (1 <sup>st</sup> year)	3	6
	6 <sup>th</sup> , 3 <sup>rd</sup> year)	3	
Language (English, French, Arabic)	English (2 <sup>nd</sup> , 1 <sup>st</sup> year)	19	69
	English (6 <sup>th</sup> , 3 <sup>rd</sup> year)	14	
	Fr (6 <sup>th</sup> , 3 <sup>rd</sup> year)	24	
	Arabic (4 <sup>th</sup> , 2 <sup>nd</sup> year)	12	
Early Childhood Education	2 <sup>nd</sup> (1 <sup>st</sup> year)	25	60
	4 <sup>th</sup> (2 <sup>nd</sup> year)	32	
	6 <sup>th</sup> (3 <sup>rd</sup> year)	3	
<b>Total</b>			222

Table 2. Students' BMI

	N	Mean	Std. Deviation
BMI	217	21.934	3.694
Valid N (list wise)	217		

Table 3. Students' BMI across majors

Major	BMI	
	Mean	Standard Deviation
	21.93	.
Science (E+F)	21.60	2.65
Math (E+F)	22.57	4.46
Humanities	21.53	4.40
Language (English, French, Arabic)	21.76	3.19
Early Childhood Education	22.21	3.77



Table 4. Students' concerns about their weight

<b>I consider myself</b>	Frequency	Percent
obese	10	4.5
overweight	59	26.6
underweight	15	6.8
healthy weight	104	46.8
I do not know	25	11.3
Total	213	95.9
Missing	9	4.1
Total	222	100.0
<b>Are you concerned about your weight?</b>	Frequency	Percent
yes	143	64.4
no	36	16.2
sometimes	35	15.8
Total	214	96.4
Missing	8	3.6
Total	222	100.0
<b>Do you take any non-prescription slim pills?</b>	Frequency	Percent
yes	6	2.7
no	203	91.4
sometimes	9	4.1
Total	218	98.2
Missing	4	1.8
Total	222	100.0

Table 5. Students' eating habits

<b>I stay without eating the whole day</b>	Frequency	Percent
yes	5	2.3
no	121	54.5
sometimes	94	42.3
Total	220	99.1
System	2	.9
Total	222	100.0
<b>Did you take today your breakfast?</b>	Frequency	Percent
yes	134	60.4
no	86	38.7
Total	220	99.1
Missing	2	.9
Total	222	100.0
<b>Do you take your breakfast before coming to the Faculty?</b>	Frequency	Percent
daily	51	23.0
three or four times per week	39	17.6
once or twice per week	19	8.6
rarely	110	49.5
Total	219	98.6
Missing	3	1.4
Total	222	100.0
<b>Do you take your meals regularly?</b>	Frequency	Percent
yes	53	23.9
no	101	45.5
sometimes	66	29.7
Total	220	99.1
Missing	2	.9
Total	222	100.0

Table 6. Students' answers to: Do you eat or drink daily

<b>Vegetables</b>	Frequency	Percent
yes	125	56.3
no	15	6.8
sometimes	78	35.1
Total	218	98.2
Missing	4	1.8
Total	222	100.0
<b>High fat and sugar food</b>	Frequency	Percent
yes	100	45.0
no	23	10.4
sometimes	98	44.1
Total	221	99.5
Missing	1	.5
Total	222	100.0
<b>Cola or other sugar-containing drinks</b>	Frequency	Percent
yes	62	27.9
no	71	32.0
sometimes	88	39.6
Total	221	99.5
Missing	1	.5
Total	222	100.0

Table 7. Smoking habit

<b>Do you Smoke?</b>	Frequency	Percent
Current smoker	70	31.5
Ex-smoke	8	3.6
never smoke	144	64.9
Total	222	100.0
<b>Type</b>	Frequency	Percent
cigarettes	5	2.3
water pipe (nargila)	68	30.6
Total	73	32.9

Table 8. Students' sedentary activities

<b>Watching TV</b>	Frequency	Percent
less than 2 hours	160	72.1
3 hours	47	21.2
up to 5 hours	6	2.7
Total	213	95.9
Missing	9	4.1
Total	222	100.0
<b>Non-Faculty time on a computer</b>	Frequency	Percent
less than 2 hours	165	74.3
3 hours	22	9.9
up to 5 hours	7	3.2
Total	194	87.4
Missing	28	12.6
Total	222	100.0
<b>Talking and texting on the mobile</b>	Frequency	Percent
less than 2 hours	49	22.1
3 hours	73	32.9
up to 5 hours	94	42.3
Total	216	97.3
Missing	6	2.7
Total	222	100.0

Table. 9. Students’ physical activities

Table	<b>Walking to the Faculty</b>	Frequency	Percent	<b>Outside play</b>	Frequency	Percent
	yes	122	55.0	yes	45	20.3
no	49	22.1	no	91	41.0	
sometimes	38	17.1	sometimes	57	25.7	
Total	209	94.1	Total	193	86.9	
Missing	13	5.9	Missing	29	13.1	
Total	222	100.0	Total	222	100.0	
	<b>Indoor exercises</b>	Frequency	Percent	<b>Organized sports</b>	Frequency	Percent
yes	61	27.5	yes	27	12.2	
no	69	31.1	no	112	50.5	
sometimes	71	32.0	sometimes	43	19.4	
Total	201	90.5	Total	182	82.0	
Missing	21	9.5	Missing	40	18.0	
Total	222	100.0	Total	222	100.0	

Description of the Focus Group

Semester	Age	Height (m)	Weight (Kg)	BMI			
				BMI lower than 18.5	BMI between 18.5 and 24.9	BMI between 25 and 29.9	BMI above 30
Science (4 <sup>th</sup> semester) N= 9	18-19= 8 20= 1	150-160= 3 161-170= 5 171-175= 1	40-50= 3 51-60= 3 61-70= 3	2	4	3	-
Science (6 <sup>th</sup> semester) N= 16	20-25= 16 26-30= 0	150-160= 2 161-170= 13 171-175= 1	40-50= 2 51-60= 6 61-70= 10 71-80= 0 81-90= 0	3	11	2	-
Math (6 <sup>th</sup> semester) N=20	20-25= 18 26-30= 1 unknown = 1	150-160= 6 161-170= 10 171-175= 4	40-50= 2 51-60= 10 61-70= 4 71-80= 3 81-90= 1	3	13	3	1
<b>Total (N=45)</b>				8(17.7%) underweight	28(62.2%) normal weight	8(17.7%) overweight	1(2.2%) obese

Table 11. The Focus Group weight concerns

Semester	I stay without eating the whole day	Are you concerned about your weight?	I consider myself
Science (4 <sup>th</sup> semester) N= 9	Yes: 5 No: 0 Sometimes: 4	Yes: 5 No: 3 Sometimes: 1	Underweight: 1 Healthy weight: 2 Overweight: 0 Obese: 0 I do not know: 6
Science (6 <sup>th</sup> semester) N= 16	Yes: 6 No: 3 Sometimes: 7	Yes: 12 No: 2 Sometimes: 2	Underweight: 3 Healthy weight: 4 Overweight: 8 Obese: 1 I do not know: 0
Math (6 <sup>th</sup> semester) N=20	Yes: 12 No: 0 Sometimes: 8	Yes: 13 No: 5 Sometimes: 2	Underweight: 1 Healthy weight: 2 Overweight: 11 Obese: 1 I do not know: 5

Table 12. The Focus Group eating habits

Do you eat or drink daily	Yes				No				Sometimes			
	Science 4 <sup>th</sup> S.	Science 6 <sup>th</sup> S.	Math 6 <sup>th</sup> S.	T	Science 4 <sup>th</sup> S.	Science 6 <sup>th</sup> S.	Math 6 <sup>th</sup> S.	T	Science 4 <sup>th</sup> S.	Science 6 <sup>th</sup> S.	Math 6 <sup>th</sup> S.	T
Cola or other sugar-containing drinks	4	2	2	8	2	14	8	24	3	3	15	21
High fat and sugar	5	9	4	18	2	5	2	9	2	-	7	9
Vegetables	5	9	2	16	1	-	9	10	3	1	16	20
Do you take your meals regularly?	3	2	8	13	4	8	9	21	2	6	3	11
Did you take today your breakfast?	4	9	17	30	5	6	3	14				
Do you take any non-prescription Slim pills	1	-	1	2	8	-	19	27				
Do you take breakfast before coming to the Faculty?	Science 4 <sup>th</sup> S	Science 6 <sup>th</sup>	Math 6 <sup>th</sup> S	T								
Daily	2	3	5	10								
Once or twice per week	2	2	2	6								
Three or four times per week	1	4	3	8								
Rarely	4	7	10	21								
<b>Total</b>	9	16	20	45								

Table 13. The Focus Group smoking habit

	Current smoker				Ex-smoker				never smoke			
	Science 4 <sup>th</sup> S.	Science 6 <sup>th</sup> S.	Math 6 <sup>th</sup> S.	T	Science 4 <sup>th</sup> S.	Science 6 <sup>th</sup> S.	Math 6 <sup>th</sup> S.	T	Science 4 <sup>th</sup> S.	Science 6 <sup>th</sup> S.	Math 6 <sup>th</sup> S.	T
Do you smoke?	1	2	9	12	-	2	-	2	8	12	11	31
Specify	Water pipe	Water pipe	Water pipe		-	Used to smoke Water pipe	-	2				

Table 14. The Focus Group inactive activities

	Less than 2 hours				3hours				Up to 5 hours			
	Science 4 <sup>th</sup> S.	Science 6 <sup>th</sup> S.	Math 6 <sup>th</sup> S.	T	Science 4 <sup>th</sup> S.	Science 6 <sup>th</sup> S.	Math 6 <sup>th</sup> S.	T	Science 4 <sup>th</sup> S.	Science 6 <sup>th</sup> S.	Math 6 <sup>th</sup> S.	T
Watching TV	8	12	8	28	-	-	-	-	-	-	-	-
Non-faculty time on a computer	4	12	8	24	2	-	1	3	-	-	-	-
Talking and texting on the mobile	2	4	8	14	3	2	-	5	1	10	4	15

Table 15. The Focus Group physical activities

	Yes				No				Sometimes			
	Science 4 <sup>th</sup> S.	Science 6 <sup>th</sup> S.	Math 6 <sup>th</sup> S.	T	Science 4 <sup>th</sup> S.	Science 6 <sup>th</sup> S.	Math 6 <sup>th</sup> S.	T	Science 4 <sup>th</sup> S.	Science 6 <sup>th</sup> S.	Math 6 <sup>th</sup> S.	T
Walking to the faculty	1	10	10	21	-	1	-	1	1	3	2	6
Indoor exercise	4	6	3	13	-	1	-	1	1	3	1	5
Outside play	-	-	-	-	-	1	-	1	-	3	-	3
Organized sports	-	-	-	-	-	1	-	1	-	-	2	2

## Annex

Lebanese University  
Faculty of Education I

## Questionnaire on BMI and Eating Habits

Please fill-in the following questionnaire

Time:

Date:

Major:

Age:

Semester:

Height:

Weight:

BMI =  $\frac{\text{Mass (kg)}}{\text{Height (m)} \times \text{Height (m)}}$  =

Height (m) × Height (m)

(NB: BMI lower than 18.5 indicates that the person is underweight; a BMI between 18.5 and 24.9 indicates a normal weight and a BMI between 25 and 29.9 indicates overweight and a BMI above 30 suggests obesity)

1. I stay without eating the whole day      yes       no       sometimes   
Details: \_\_\_\_\_
2. Are you concerned about your weight?    yes       no       sometimes
3. I consider myself:  
Obese     overweight     underweight     healthy weight     I do not know
4. Do you do any physical activities?
  - Walking to the faculty                      yes       no       sometimes
  - Indoor exercise                                yes       no       sometimes
  - Outside play                                    yes       no       sometimes
  - Organized sports                              yes       no       sometimes
  - Others: please specify \_\_\_\_\_
5. How many hours/ a day do you spend on the sedentary (inactive or sitting) activities?
  - Watching TV:                                  less than 2 hours       3hours       up to 5 hours
  - Non-faculty time on a computer:    less than 2 hours       3hours       up to 5 hours
  - Talking and texting on the mobile:    less than 2 hours       3hours       up to 5 hours
  - Others: please specify \_\_\_\_\_
6. Do you eat or drink daily:
  - Cola or other sugar-containing drinks    yes       no       sometimes
  - High fat and sugar foods such as:        yes       no       sometimes   
(chips, fried fish & potatoes, snacks, desserts & candy)
  - Vegetables                                      yes       no       sometimes
7. Do you take any non-prescription Slim pills    yes       no       sometimes
8. Do you take your meals regularly?            yes       no       sometimes
9. Do you take breakfast before coming to the faculty?      Daily       Three or four times per week  
 Once or twice per week     Rarely
10. Did you take today your breakfast?        yes       no
11. Do you smoke?    Current smoker     Ex-smoker     never smoke   
If yes,    Cigarettes     Water pipe (Nargila)