

# Nutrition, Exercise and Physical Health

## National College Health Assessment

Spring 2003

<b>INTRODUCTION AND METHODOLOGY</b> .....	<b>2</b>
<b>FINDINGS</b> .....	<b>3</b>
<b>WEIGHT PERCEPTION AND BODY MASS INDEX (BMI)</b> .....	<b>3</b>
<i>Weight Perception</i> .....	3
Compared to NCHA .....	3
Gender Comparisons.....	3
Other Comparisons .....	3
<i>Body Mass Index (BMI) (kg/m<sup>2</sup>)</i> .....	4
Compared to NCHA .....	4
Gender Comparisons.....	4
Other Comparisons .....	4
<i>Comparisons of BMI to perceived weight</i> .....	6
Overall OSU .....	6
Gender Comparisons.....	6
<i>Weight Management and Strategies to Lose Weight</i> .....	6
Overall OSU .....	6
Gender Comparisons.....	7
Other Comparisons .....	7
<i>Weight Loss Strategies</i> .....	8
Comparison to National Data.....	8
Gender Differences .....	8
Racial/Ethnic Differences .....	8
On-Campus and Off-Campus Differences .....	8
High-Risk Drinkers.....	9
International and Resident Student Differences .....	9
GLBT Differences .....	9
<b>EXERCISE</b> .....	<b>10</b>
<i>Vigorous Exercise</i> .....	10
High-Risk Drinkers.....	10
Racial/Ethnic Differences .....	11
<i>Exercises to Strengthen or Tone Muscles</i> .....	11
Gender Differences .....	11
High-Risk Drinkers.....	11
International and Resident Students.....	12
Age Categories.....	12
<b>SLEEP</b> .....	<b>13</b>
Comparison to NCHA Sample.....	13
Undergraduate and Graduate/Professional .....	13
On-Campus and Off-Campus.....	13
High-Risk Drinkers.....	14
International and Resident Students.....	14
Age Categories.....	14
<b>SERVINGS OF FRUITS AND VEGETABLES</b> .....	<b>15</b>
Undergraduate and Graduate/Professional .....	15
<b>FUTURE RESEARCH</b> .....	<b>16</b>

\* significant to ≤ .05, \*\* significant to ≤ .01, \*\*\*significant to ≤ .001

## **INTRODUCTION AND METHODOLOGY**

The National College Health Assessment (NCHA) survey instrument is a comprehensive survey designed to assess all aspects of students' health including general health, alcohol and drug use, sexual health and activity, exercise habits, and nutrition. This report pertains to the approximately 15 items regarding body weight perception, attitudes toward weight loss, exercise, sleep, and nutrition.

Reference to the NCHA comparative information refers to the national sample for the spring 2003 survey conducted by the American College Health Association (ACHA), which consists of 19,497 respondents from 33 schools around the country.

Reference to the OSU sample refers to the spring 2003 administration of the survey on the main campus of The Ohio State University. A random sample of 3,000 undergraduate, graduate and professional students were surveyed, 562 responses were collected (18.7%). The sample from The Ohio State University is not exactly comparable to the national sample, primarily in that the OSU sample contains more graduate students, and therefore older students, than the national sample. This is partly accounted for by including analysis by class rank and age, but this difference needs to be considered in interpreting comparisons to the national findings.

In the analysis, various student populations were stratified by gender, age category, class rank, international status and campus residence. Some distinctions were made for ethnicity and sexual orientation; however, caution is recommended in the interpretation of the results given the small sample size.

Comparisons are made between the students' self-reported weight category and the calculated weight categories known as Body Mass Index (BMI). The BMI was developed by the American College Health Association (ACHA) and is calculated by utilizing data about the student's weight and height (see formula below) producing a number that is categorized from underweight (BMI of  $\leq 18.4$ ) to obese category III (BMI of  $\geq 40.0$ ). This rating is then compared to the student's self reported weight category.

$$\text{BMI} = \frac{\text{Weight in Pounds}}{\text{Height in inches}^2} \times 703$$

Distinctions are sometimes made for high-risk drinkers, who are categorized by the definition used in the Spring 2002 CORE Alcohol and Drug survey, an undergraduate study administered by the Core Institute at Southern Illinois University. A high-risk drinker is categorized as someone who drank five or more drinks at one sitting in the past two weeks. Reference to time frames such as, within the last year, within the last month or 30 days, etc. are in relationship to the day the survey was administered in April 2003.

\* significant to  $\leq .05$ , \*\* significant to  $\leq .01$ , \*\*\*significant to  $\leq .001$

## FINDINGS

### Weight Perception and Body Mass Index (BMI)

#### Weight Perception

Respondents were asked to self-describe their body weight status based on the categories of very underweight, slightly underweight, about the right weight, slightly overweight and very overweight. Of the total OSU students, only 48.5% felt that they were at about the right weight, and 41.3% rated themselves as either slightly or very overweight (See Chart 2.1).

#### Compared to NCHA

As compared to NCHA results, OSU students reported no significant differences in self reported weight categories.

#### Gender Comparisons

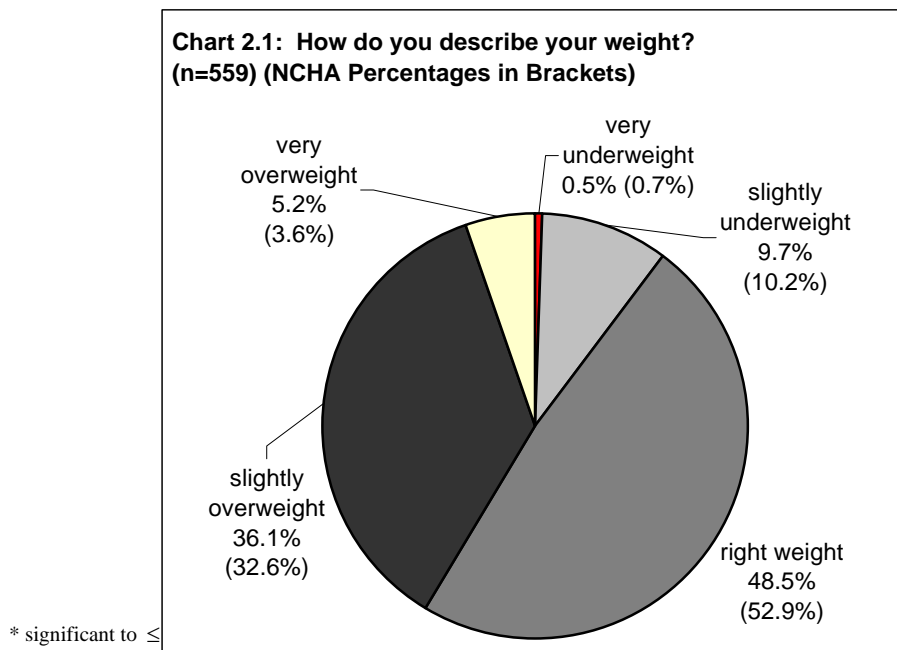
Significant differences were found between OSU men (n=223) and women (n=334) in their self reported descriptions of their body weights,  $\chi^2(4) = 17.503^{**}$ .

- Of OSU men, 16.1% reported themselves to be very or slightly underweight as compared to only 6.0% of OSU women.
- Of OSU women 44.0% reported themselves to be slightly or very overweight as compared to only 37.2% of OSU men.

#### Other Comparisons

There were no significant differences between school status, age categories, campus residence, ethnicity, years and status in school, sexual orientation or international status in perceptions of body weight.

Chart 2.1: How do you describe your weight?(n=559)(NCHA percentages in parentheses)



## **Body Mass Index (BMI) (kg/m<sup>2</sup>)**

Developed by the ACHA to calculate a person's weight category using height, weight and sex, BMI was computed by taking the person's weight in kilograms (kg), divided by the square of height in meters (m<sup>2</sup>). This calculation was adjusted by sex and then recoded into the following categories of body weight,

- ≤ 18.4 was rated **Underweight**
- 18.5 – 24.9 was rated **Healthy Weight**
- 25.0 – 29.9 was rated **Overweight**
- 30.0 – 34.9 was rated **Class I Obesity**
- 35.0 – 39.9 was rated **Class II Obesity**
- ≥ 40.0 was rated **Class III Obesity**

Of the 557 total OSU students, 3.8% had a BMI categorizing them as underweight, 61.9 % as the healthy weight, and 23.9% as overweight. In the obese categories, 5.9% of OSU students were classified Class I, 2.9% as Class II, and 1.6% were classified with Class III obesity (See Chart 2.2).

### ***Compared to NCHA***

- While not meeting statistical significance, it does appear that OSU students average slightly higher measures on the BMI scale. Within the NCHA population, 5.1% were underweight and 65.1% were in the healthy weight category, as compared to 3.8% underweight and 61.9% in the healthy weight categories in the OSU sample.
- In the overweight and obese categories, OSU students had higher percentages with 23.9% (NCHA 20.9%) in the overweight category and 10.4% (NCHA 9.0%) in the obese categories.

### ***Gender Comparisons***

Significant differences were found between OSU men and women in the BMI categories,  $\chi^2(5) = 19.098^{**}$ .

- OSU women had significantly larger percentages in the underweight and healthy weight BMI categories with 5.7% of women (OSU Men 0.9%) in the underweight BMI category and 64.9% of the women (OSU Men 57.6%) in the healthy weight BMI category.
- OSU men had a significantly larger percentage of respondents in the overweight (30.8%) and obese (10.7%), as compared to women with 19.2% in the overweight BMI category and 10.2% in the obese BMI categories.

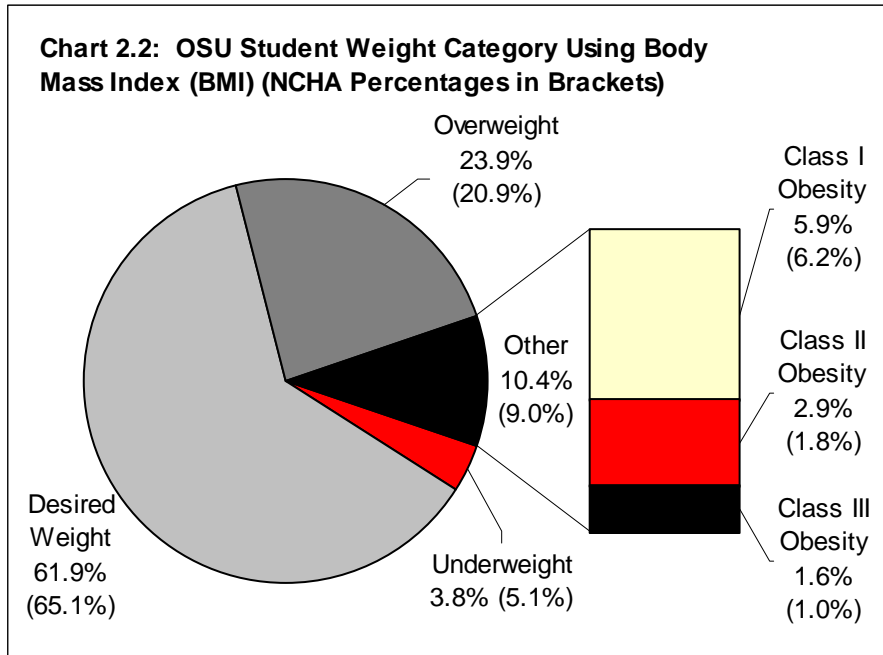
### ***Other Comparisons***

No significant differences were found between ethnicities, student status, international status, year in school, age category, student residence and sexual orientation, and BMI ratings.

\* significant to ≤ .05, \*\* significant to ≤ .01, \*\*\*significant to ≤ .001

Nutrition, Exercise and Physical Health

Chart 2.2: OSU Student Weight Category Using Body Mass Index (BMI)  
(NCHA Comparison in parentheses)



\* significant to  $\leq .05$ , \*\* significant to  $\leq .01$ , \*\*\*significant to  $\leq .001$

## Comparisons of BMI to perceived weight

### Overall OSU

Overall, students tend to rate themselves as being heavier than their BMI categories would indicate, with 61.9% of all students falling in the desired weight BMI category, and only 46.4% falling in the self-reported desired weight category.

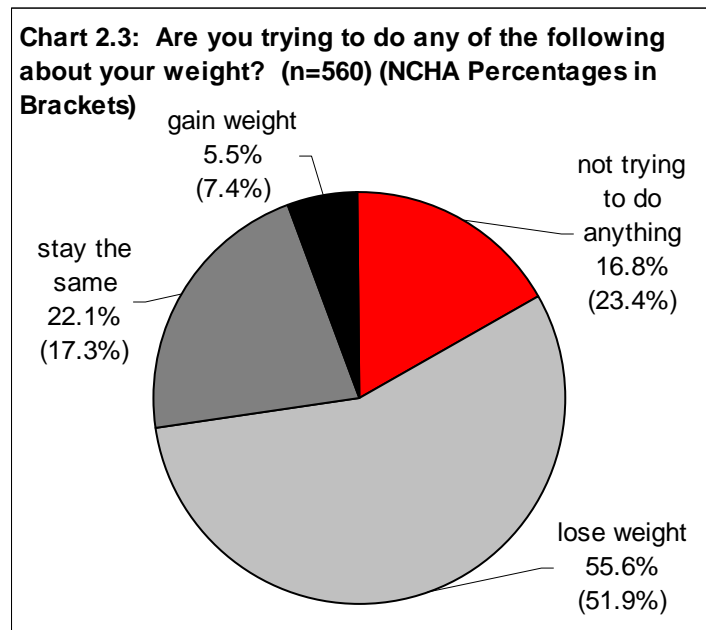
### Gender Comparisons

- Of the women falling in the 'desired weight' BMI category (n=216), 24.5% of them consider themselves to be slightly overweight. Compared to only 10.9% of men falling in the 'desired weight' BMI category (n=128) considering themselves overweight.

## Weight Management and Strategies to Lose Weight

### Overall OSU

Of the total OSU respondents, 55.6% (NCHA 51.9%) reported they were trying to lose weight, as compared to only 22.1% (NCHA 17.3%) wishing to stay the same weight, and 5.5% (NCHA 7.4%) wanting to gain weight (See Chart 2.3).

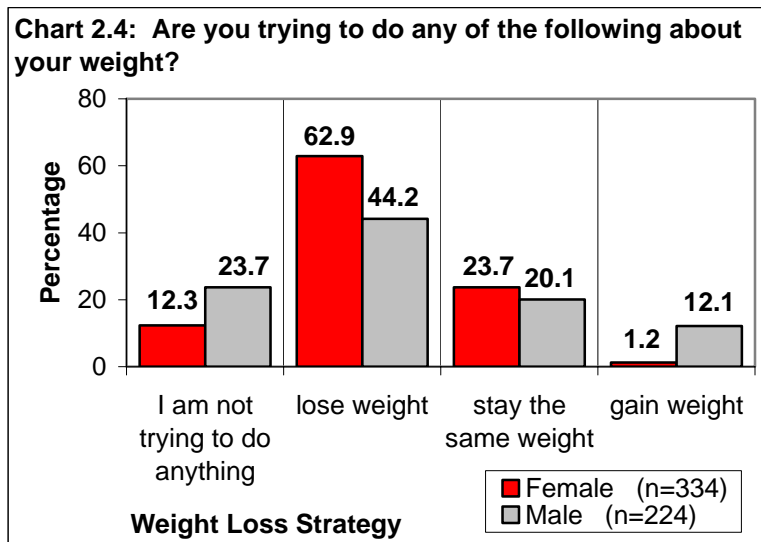


\* significant to  $\leq .05$ , \*\* significant to  $\leq .01$ , \*\*\*significant to  $\leq .001$

### Gender Comparisons

Significant differences were found among OSU men and women in the percentages trying to change their weight.

- A larger percentage of OSU women, 62.9%, were trying to lose weight, as compared to 44.2% of the OSU men
- A smaller percentage of women, 1.2%, were trying to gain weight as compared to 12.1% of men,  $\chi^2(5) = 47.972^{***}$ . (See Chart 2.4)
- In the desired weight BMI category, 56.0% of OSU women wanted to lose weight, as compared to 25.6% of OSU men in the BMI desired weight category who wanted to loose weight.



### Other Comparisons

No significant differences were found between ethnicities, sexual orientations, undergraduate class rank and student residence for trying to do anything about their weight.

\* significant to  $\leq .05$ , \*\* significant to  $\leq .01$ , \*\*\*significant to  $\leq .001$

## **Weight Loss Strategies**

### ***Comparison to National Data***

- Strategies to lose weight among OSU students in the past 30 days included 59.4% exercising to lose weight, as compared to the NCHA population with 55.6% exercising to lose weight in the past 30 days.
- The second most popular method of weight loss was dieting to lose weight, with 39.7% of OSU students reported using that method, compared to 33.7% of the NCHA population.
- Vomiting or taking a laxative as used by 2.1% of OSU students, as compared to 2.5% of the NCHA population.
- Taking diet pills to lose weight was used by 4.6% of OSU students, as compared to 5.8% of the NCHA population.
- Thirty-five percent (35.4%) of OSU students did not use any of the previous methods to lose weight, compared to 36.6% in the national sample.

### ***Gender Differences***

- Some significant differences were found in strategies for weight loss in the last 30 days between OSU women and men, with women significantly more likely to exercise to lose weight, as compared to 43.1% of men,  $\chi^2(1) = 18.240^{***}$ .
- Significant differences were found in strategies for weight loss in dieting to lose weight with 40.5% of women reporting dieting to lose weight, as compared to 20.8% of men,  $\chi^2(1) = 12.601^{***}$ .
- OSU men (47.3%) were significantly more likely than OSU women (27.8%) to not use any of the weight loss methods listed,  $\chi^2(1) = 22.168^{***}$ .

### ***Racial/Ethnic Differences***

- White/Caucasian (n=464) students were significantly more likely to use two of the methods listed to lose weight than Students of Color (n=98).
- White/Caucasian students reported percentages of OSU students exercising to lose weight in the last 30 days as 62.1%, whereas, Students of Color reported 46.9% exercising to lose weight,  $\chi^2(1) = 7.682^{**}$ .
- Dieting to lose weight was used by 42.2% of White/Caucasian students in the last 30 days, as compared to Students of Color with 27.6%,  $\chi^2(1) = 7.295^{**}$ .
- Students of color were significantly more likely to use none of the previously mentioned methods to lose weight in the last 30 days (44.9%), as compared to White/Caucasian students with 33.4%,  $\chi^2(1) = 4.673^*$ .

### ***On-Campus and Off-Campus Differences***

- On-campus students (n=142) were significantly less likely to diet to lose weight in the last 30 days (32.4%), as compared to off-campus students (n=420) with 42.1% dieting to lose weight,  $\chi^2(1) = 4.673^*$ .

\* significant to  $\leq .05$ , \*\* significant to  $\leq .01$ , \*\*\*significant to  $\leq .001$

### **High-Risk Drinkers**

- Using pills to lose weight was reported by significantly more high-risk drinkers (n=223) in the last 30 days with 8.1%, as compared low-risk drinkers (n=335) reporting 2.4% using pills in the last 30 days to lose weight,  $\chi^2(1) = 9.736^{**}$ .

### **International and Resident Student Differences**

- International students (n=38) were significantly more likely to want to stay the same weight or not do anything at all (60.5%), as compared to resident students (n=514) with 37.7% not doing anything at all or wanting to stay the same weight,  $\chi^2(3) = 8.983^{**}$ .
- Over fifty-five percent (55.3%) of international students did not use any of the listed methods to try and lose weight, whereas, only 34.4% of U.S. Residents did not use any of the methods listed to try and lose weight  $\chi^2(1) = 6.672^{**}$ .
- Exercising to lose weight (61.3%) was significantly more likely to be used by U.S. residents, with 34.2% of international students using exercising to lose weight and no international students using vomiting or taking a laxative to lose weight,  $\chi^2(1) = 10.756^{***}$ .

### **GLBT Differences**

- Heterosexual (n=523) students were significantly more likely to use exercise as a method of weight loss (60.4%) in the last 30 days, as compared to (37.5%) of the GLBT students using exercise to lose weight.

No significant differences were found based on student status, age categories and undergraduate year in school for weight loss methods.

\* significant to  $\leq .05$ , \*\* significant to  $\leq .01$ , \*\*\*significant to  $\leq .001$

## **Exercise**

Students were asked to respond to four questions regarding vigorous exercise and exercises to strengthen or tone. Vigorous exercise was defined as a vigorous aerobic exercise for 20 minutes or moderate aerobic exercise for 30 minutes. Exercise to strengthen or tone muscles included push-ups, sit-ups or weight lifting.

### **Vigorous Exercise**

The first question asked the number of days in the past week that students exercised vigorously for 20 minutes or moderately for 30 minutes (see Table 2.1). Of all OSU students, 45.5 % exercised vigorously for at least three days in the past week (See Table 2.1).

#### **High-Risk Drinkers**

- High-risk drinkers (n=223) were significantly more likely to participate in vigorous exercise in the past seven days with an average number of 3.59, SD = 1.896, as compared to low-risk drinkers with an average of 3.28 days, SD = 1.836,  $t(555) = -1.967^*$ .

**Table 2.1: On how many of the past seven days did you participate in vigorous exercise for at least 20 minutes or moderate exercise for at least 30 minutes (Percentages)?@**

		0 Days		1-2 Days		3-5 Days		6-7 Days	
		OSU	NCHA	OSU	NCHA	OSU	NCHA	OSU	NCHA
	Total (n=560)	20.5	24.9	33.9	30.9	39.1	35.5	6.4	8.8
Gender	Women (n=334)	22.2	26.0	31.1	31.0	41.0	34.0	5.7	8.0
	Men (n=224)	18.3	22.0	38.4	30.0	35.7	38.0	7.6	10.0
Student Status	Undergraduate (n=380)	21.8		32.6		38.7		6.8	
	Graduate (n=160)	16.9		37.5		40.0		5.6	
Residence	On-Campus (n=142)	24.6		38.0		30.3		7.0	
	Off-Campus (n=418)	19.1		32.5		42.1		6.2	

@ T-tests were performed using mean number of days for vigorous exercise based on gender, student status and residence with no significant findings at  $p < .05$

\* significant to  $\leq .05$ , \*\* significant to  $\leq .01$ , \*\*\*significant to  $\leq .001$

**Racial/Ethnic Differences**

- White/Caucasian students, and students who labeled themselves in the Other category for ethnicity, reported the next highest average number of days (3.20) participating in vigorous exercise, and Black/African American students with the lowest average of 2.38 days per week,  $F(4,543) = 2.621^*$ ,  $\eta^2 = 0.024$  (See Table 2.2)

**Table 2.2: On how many of the past seven days did you participate in vigorous exercise for at least 20 minutes or moderate exercise for at least 30 minutes? (Mean and Standard Deviation)**

	White/ Caucasian (n=458)	Other (n=15)	Asian/ Pacific Islander (n=49)	Hispanic/ Latino/Latina (n=10)	Black/African American (n=16)
M	3.51	3.20	2.96	2.60	2.38
SD	1.900	1.740	1.695	1.430	1.544

@American Indian/Alaskan Native (n=1) not able to calculate in statistical analysis

No significant differences were found between OSU and NCHA results, gender, school status, campus residence, sexual orientations, international status, undergraduate class rank and age category for the number of days sent participating in vigorous exercise in the past week.

**Exercises to Strengthen or Tone Muscles**

The second question regarding exercise asked the number of times in the past seven days that the students participated in exercises to strengthen or tone muscles, such as push-ups, sit-ups, or weight lifting. Of the total OSU respondents, 33.6% participated in some type of strength conditioning for at least three days in the past week (See Table 2.2).

**Gender Differences**

- Compared to the men in the NCHA population, OSU men (n=558) averaged 4.41 days per week participating in vigorous exercise, with SD = 2.002, which was significantly higher than NCHA men (n=4.196) with an average of 2.90 days per week,  $t(559) = 2.581^*$ .

**High-Risk Drinkers**

- High-risk drinkers (n=222) averaged 3.11 days per week participating in exercises to strengthen or tone muscles, with SD = 1.789, which was significantly higher than low-risk drinkers with an average of 2.58 days per week, SD = 1.689,  $t(553) = -3.526^{***}$ .

\* significant to  $\leq .05$ , \*\* significant to  $\leq .01$ , \*\*\*significant to  $\leq .001$

Nutrition, Exercise and Physical Health

**Table 2.3: On how many of the past seven days did you do exercises to strength or tone your muscles, such as push-ups , sit-ups or weight lifting (Percentages)?**

		0 Days		1-2 Days		3-5 Days		6-7 Days	
		OSU	NCHA	OSU	NCHA	OSU	NCHA	OSU	NCHA
Categories	Total (n=558)	34.6	34.9	31.7	28.6	30.6	30.7	3.0	5.8
Gender	Women (n=332)	33.4	36.0	33.7	30.0	30.1	29.0	2.7	5.0
	Men (n=224)	36.6	32.0	28.6	26.0	31.3	34.0	3.6	7.0
Student Status	Undergraduate (n=379)	33.0		30.9		31.7		4.5	
	Graduate (n=159)	38.4		32.7		28.9		0.0	
Residence	On-Campus (n=142)	31.2		35.5		28.4		5.0	
	Off-Campus (n=417)	35.7		30.5		31.4		2.4	

@ T-tests were performed using mean number of days for strength conditioning based on gender, student status and residence with no significant findings at  $p < .05$

**International and Resident Students**

- International students (n=38) had significantly lower averages for participating in strength conditioning in the past week with an average of 2.11 days, SD = 1.556, as compared to students who were resident students (n=512) with an average of 2.84 days, SD = 1.757,  $t(548) = -2.491^*$ .

**Age Categories**

- Between age categories, significant differences were found for the number of days participating in strength conditioning in the past week. Students in the 18-20 year old category reported the highest average number of days (2.99) participating in vigorous exercise, and 46+ year olds reported the lowest average of 2.00 days per week,  $F(4,552) = 2.755^*$ ,  $\eta^2 = 0.020$  (See Table 2.4)

**Table 2.4: On how many of the past seven days did you participate in to strength or tone your muscles, such as push-ups , sit-ups or weight lifting? (Mean and Standard Deviation)**

	18-20 Years Old (n=198)	21-24 Years Old (n=218)	25-29 Years Old (n=82)	30-45 Years Old (n=51)	46+ Years Old (n=8)
M	2.99	2.86	2.32	2.65	2.00
SD	1.851	1.753	1.594	1.534	1.773

There were no significant differences in percentages between ethnicities, sexual orientations, campus residence and undergraduate years in school for the number of days participating in strength conditioning for the past week.

\* significant to  $\leq .05$ , \*\* significant to  $\leq .01$ , \*\*\*significant to  $\leq .001$

## **Sleep**

In regard to sleep, OSU students were asked the number of days per week they were getting enough sleep so that they felt rested when they woke up in the morning. Of the total OSU participants, 30.8% felt rested for at least six days in the past week (See Table 2.5).

### ***Comparison to NCHA Sample***

Significant differences were found between OSU students (n=560) and the NCHA population (n=19,497) with OSU students reporting an average number of days in the past seven days that they feel rested (4.41) , SD = 2.002, that was greater than the NCHA population with an average of 4.196, t(559) = 2.581\*\* (See Table 2.5).

### ***Undergraduate and Graduate/Professional***

- Undergraduates (n=380) reported having greater difficulty getting enough sleep to where they felt rested in the past seven days with an average of 4.26 days of full rest, SD = 1.950, as compared to graduate/professionals with an average of 4.83 days of feeling rested, SD = 2.027, t(538) = -3.002\*\* (See Table 2.5).

### ***On-Campus and Off-Campus***

- On-campus students (n=142) reported having greater difficulty getting enough sleep to where they felt rested in the past seven days with an average of 4.10 days of full rest, SD = 1.983, as compared to off-campus students with an average of 4.52 days of feeling rested, SD = 1.999, t(558) = -2.183\* (See Table 2.5).

**Table 2.5: On how many of the past seven days did you get enough sleep so that you felt rested when you woke up in the morning (Percentages)?**

		0 Days		1-2 Days		3-5 Days		6-7 Days	
		OSU	NCHA	OSU	NCHA	OSU	NCHA	OSU	NCHA
	Total (n=560)	8.8	10.4	26.6	29.5	47.9	45.1	16.8	14.0
Gender	Women (n=334)	9.3	11.0	26.6	30.0	48.2	45.0	15.9	14.0
	Men (n=224)	8.0	9.0	26.3	29.0	47.3	48.0	18.3	14.0
Student Status	Undergraduate (n=380)	9.5		28.7		49.5		12.4	
	Graduate (n=160)	6.9		19.4		46.9		26.9	
Residence**	On-Campus (n=142)	13.4		27.5		47.9		11.3	
	Off-Campus (n=418)	7.2		26.3		47.8		18.7	

@ T-tests were performed using mean number of days for strength conditioning based on gender with no significant findings at p<.05

\* significant to ≤ .05, \*\* significant to ≤ .01, \*\*\*significant to ≤ .001

**High-Risk Drinkers**

Averaging 4.17 days in the last week where they got enough sleep to feel rested, SD = 1.908, high-risk drinkers (n=223) had significantly fewer days of feeling rested than low-risk drinkers (n=334) with an average of 4.57 days of feeling rested, SD = 2.049,  $t(555) = 2.379^*$ .

**International and Resident Students**

- International students (n=380) reported having greater difficulty getting enough sleep to feel rested in the past seven days with an average of 3.68 days of full rest, SD = 1.861, as compared to resident students with an average of 4.48 days of feeling rested, SD = 2.000,  $t(550) = -2.391^*$ .

**Age Categories**

- Differences were also found based on age categories. Students in the 18-20 year old category reported the lowest average number of days (4.21) of getting enough sleep to feel rested in the morning, and 46+ year olds reported the highest average of 6.50 days per week,  $F(4,554) = 3.043^*$ ,  $\eta^2 = 0.022$  (See Table 2.6)

**Table 2.6: On how many of the past seven days did you get enough sleep so that you felt rested when you woke up in the morning? (Mean and Standard Deviation)**

	18-20 Years Old (n=198)	21-24 Years Old (n=218)	25-29 Years Old (n=82)	30-45 Years Old (n=51)	46+ Years Old (n=8)
M	4.21	4.47	4.38	4.71	6.50
SD	1.943	1.938	2.158	2.091	2.070

\* significant to  $\leq .05$ , \*\* significant to  $\leq .01$ , \*\*\*significant to  $\leq .001$

## **Servings of Fruits and Vegetables**

Participants were asked the number of servings of fruits or vegetables they usually have per day (1 serving = 1 medium piece of fruit, ½ cup of chopped, cooked or canned fruits/vegetables, ¾ cup of fruit/vegetable juice, or 1/2cup of dried fruit). Only 5.7% of all OSU students in the survey (NCHA 6.9%) ate the recommended five or more servings of fruits and vegetables, and 61.4% (NCHA 63.1%) ate two or fewer servings per day (See Table 2.6). No significant differences were found between the OSU sample and NCHA population.

**Table 2.5: How many servings of fruits and vegetables do you usually have per day?**

		Don't Eat		1-2 Servings		3-4 Servings		5 or More	
		OSU	NCHA	OSU	NCHA	OSU	NCHA	OSU	NCHA
	Total (n=559)	3.8	3.7	57.6	59.4	32.9	30.0	5.7	6.9
Gender	Women (n=333)	3.0	3.0	53.8	57.0	36.6	33.0	6.6	8.0
	Men (n=224)	4.9	6.0	62.9	64.0	27.7	25.0	4.5	6.0
Student Status	Undergraduate (n=379)	5.0		60.9		29.6		4.5	
	Graduate (n=160)	1.3		50.6		40.0		8.1	
Residence	On-Campus (n=142)	4.9		62.7		30.3		2.1	
	Off-Campus (n=417)	3.4		55.9		33.8		7.0	

### ***Undergraduate and Graduate/Professional***

Graduate/professional students (n=160) were significantly more likely to eat fruits and vegetables with 48.1% graduate/professional students eating three or more as compared to 34.1% for undergraduates (n=379),  $\chi^2(3) = 12.600^{**}$ . (See Table 2.5).

No significant differences were found between genders, student residence, ethnicities, international status, age categories, undergraduate class rank or sexual orientation in regards to the number of servings of fruits and vegetables consumed per day.

\* significant to  $\leq .05$ , \*\* significant to  $\leq .01$ , \*\*\*significant to  $\leq .001$

## **FUTURE RESEARCH**

In addition to reports provided by the office of Student Affairs Assessment, additional uses of this data include:

- 1) Identification of specific issues with OSU students that might be improved programmatically by student affairs or other offices on campus. *In addition to referencing this report, programs and offices on campus may review the data files, or request a focused analysis of individual question items by contacting the Office of Student Affairs Assessment or Student Wellness to gain access to the data or obtain more detailed information.*
- 2) The tracking of change over time so that improvements or possible problem areas can be identified. *OSU currently plans to participate in the survey again in the spring of 2006 to enable this tracking.*
- 3) Making comparisons to the national sample so that OSU can identify areas that may need to be researched further in terms of identifying best practices from other institutions. *In addition to comparisons made in this report, a data set containing information from other large, research institutions has been requested from NCHA so that more specific comparisons can be made.*

\* significant to  $\leq .05$ , \*\* significant to  $\leq .01$ , \*\*\*significant to  $\leq .001$