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Weight and Weight-Related Behaviors Among 2-Year College Students

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Abstract

Objectives and Participants—The purpose of this paper is to describe weight indicators and weight-related behaviors of students enrolled in 2-year colleges, including sex differences.

Methods—During Fall 2011 and Spring 2012, 441 students from 3 Minnesota community colleges enrolled in the Choosing Healthy Options in College Environments and Settings (CHOICES) Study and completed baseline assessments. Participants completed a baseline survey evaluating eating and activity patterns, sleep, and stress and measures of height, weight, waist circumference, and body fat.

Results—Participants were primarily female (68%), white (73%), with a mean age of 22.8 years and 66.2% reporting an annual income <\$12,000. Almost half (47%) were overweight or obese. Young males appeared to engage the most in risky health behaviors and had higher levels of overweight or obesity, compared to young females.

Conclusions—Findings confirm the need for innovative interventions targeting this understudied and underserved young adult population.

Keywords

community college students; obesity-related; weight; young adults

INTRODUCTION

The transition from adolescence to young adulthood has become a priority target for weight gain prevention efforts. Indeed, young adults (i.e. 18–35 year olds) are gaining weight faster than their parents¹ averaging 30 pounds during this phase of the life course.² Between 2004 and 2010, the prevalence of overweight and obesity for males ages 20–39 has continued to increase from 62.2% to 67.1% and the prevalence for similarly aged females increased from 51.7% to 55.8%.³ Young adults struggle to achieve healthy lifestyles, reporting high rates of physical inactivity, breakfast skipping, fast food intake, alcohol consumption and sleep inadequacies.^{4–7} Young adults today often referred to as “Millennials” -- report the highest average stress levels compared to other generations, mainly due to work, money and job instability.⁸ They are also more likely to engage in unhealthy behaviors to manage stress.³ These unhealthy behaviors may result in weight gain, which is particularly important because weight gain during early adulthood tends to bring adverse changes in blood lipids, fasting insulin, and blood pressure in all race sex groups, independent of initial weight.⁹ Young adults who maintain stable body mass index (BMI) into middle age may prevent the progression of cardiovascular risk factors, even if they are already overweight.¹⁰

Moving away from home and into college is a unique life transition for many young adults with evidence of excess weight gain among 4-year college students, especially for minority, low income students and males.¹¹ While enrollment in 4-year colleges has increased over the past four decades among highest income families, enrollment in community colleges and technical schools has increased among students from the lowest income families.¹² We know very little about obesity prevalence and related risk factors among community college attendees. One evaluation of 14 Minnesota colleges and universities identified that 2-year college students were twice as likely to be obese compared to students attending 4-year colleges.¹³ Two studies comparing lifestyle behaviors of 2 year and 4 year college students identify similarities suggesting that other unmeasured factors such as family, social, community and other environmental factors are important.^{10,11}

Known risk factors for unhealthy weight gain

While little research has evaluated the weight-related behaviors of young adults, virtually none has focused specifically on 2-year college enrollees.

Diet—Some research has examined change in dietary patterns and food choices as adolescents’ transition into college. The National College Health Risk Behavior Survey (conducted in 1995 with both 2- and 4-year college students) found that 74% of college students did not eat at least five servings of fruit and vegetables and nearly 25% reported consuming at least two servings of high fat foods during the previous day.¹⁴ Two more recent Minnesota-based studies have shown that compared to 4-year college students, 2-year students exhibit a range of less healthful behaviors, including significantly higher consumption of soda, fast food, saturated fat, as well as a lower consumption of more favorable dietary attributes, such as whole grains, and greater frequency of meal skipping.^{13,15}

Alcohol consumption—The 21 to 25 year old population has the highest rate of alcohol consumption, regardless of their college or non-college status. Young men, aged 20–39, consume almost 175 calories on average from alcoholic beverages.¹⁶ The 2013 National Survey on Drug Use and Health identified that young adults enrolled full time in college were more likely than their peers who were not enrolled full time (i.e., part-time college students and persons not currently enrolled in college) to report current, binge, or heavy drinking.¹⁷ There is some speculation that continued exposure to the excess calories obtained from alcohol, as well as consumption of high-caloric foods during and after a drinking episode, can lead to weight gain.¹⁸

Physical activity and sedentary behaviors—The National Longitudinal Study of Adolescent Health provides some insight into the physical activity and sedentary patterns of youth transitioning from adolescence into young adulthood.¹⁹ At baseline, about 35% of the cohort was participating in at least five or more weekly sessions of moderate to vigorous physical activity each week. As the cohort transitioned into young adulthood, only 4.4% of the sample continued to meet these activity levels. One previous study indicates that approximately half or more of 2-year college students may be engaging in less than 2 hours/week of moderate-intensity physical activity and at least two or more hours of television viewing per day. Furthermore, a third or more of 2-year college students engage in no strenuous or strengthening activities on a weekly basis. In this study, women attending 2-year colleges were engaged in significantly less physical activity and more television viewing than those attending 4-year colleges.¹³

Stress—In addition to changes in diet and physical activity experienced in this period of the lifecycle, many college students experience high levels of stress.²⁰ New college students experience unfamiliar levels of autonomy, increased responsibilities for time management and challenges in interpersonal relationships.²¹ Stress has been associated with over-eating, obesity and poorer mental health.^{22–24} Stress is also related to depression among college students which may in turn be associated with obesity.²⁵ With increased levels of stress, and its potential to impact mental health, a focus on coping with stress as part of weight management is ideal.

Sleep—Even modest reductions in sleep have been associated with unhealthy weight in adults.²⁶ Low levels of sleep are well documented in college students and may be playing a role in the increased risk for obesity.²⁷ A 13-year prospective study of nearly 500 young adults showed an association between short sleep duration and obesity at age 27. Those reporting less sleep were at a seven time greater chance of being overweight as compared with young adults getting more sleep.²⁸

Characterizing risk factors known to be associated with unhealthy weight gain among college students, especially 2-year attendees, is an understudied area of research. The purposes of this paper are, therefore, to: 1) describe the diet, activity and sleep behaviors, stress, self-weighing, weight satisfaction, and weight indicators among young adults attending 2-year colleges and 2) identify potential sex differences in this college population.

METHODS

Setting, Recruitment and Participants

Targeted interventions to engage young adults 18–35 years of age in weight control studies are being addressed through a series of National Heart Lung and Blood Institute (NHLBI) funded clinical trials—all with weight-related primary (and some with secondary) outcomes (e.g., change in body weight, BMI, body fat distribution).²⁹ One study, Choosing Healthy Options in College Environments and Settings (CHOICES) was funded to test a for-credit course and accompanied by web-based social networking for 2-year community college students to help prevent unhealthy weight gain.³⁰

CHOICES Study student participants were recruited from 3 community colleges in the metropolitan areas of Minneapolis and St. Paul, Minnesota in two waves. The first wave of recruitment occurred during Fall 2011 and the second wave during Spring 2012. Recruitment and eligibility screenings occurred on campus the semester prior to study enrollment.³⁰ A variety of methods were used to recruit students into the CHOICES study. Our primary recruitment methods consisted of 1) sending e-mails to students, 2) hanging posters at schools with pockets that held info sheets and flyers, and 3) setting up a CHOICES study information table staffed by CHOICES study members in the school commons areas. Recruiting students required a prescreening and screening protocol to assure that participants met the study's eligibility criteria. Students also needed to provide signed consent and to agree to participate in baseline assessments and three additional measurement periods at 4, 12 and 24 months after baseline data collection. Tuition for the class was paid for by the research grant.³¹ Overall, 962 students expressed interest in study participation and 46% were eligible. The top four common reasons for ineligibility were age >35 years (27%), BMI exceeding study's BMI upper-limit inclusion criterion of 34.9 kg/m² (19%), non-attendance in one of the participating colleges during the next semester (16%), and BMI lower than the study's BMI lower-limit inclusion criterion of 20.0 kg/m² (13%). Baseline data were collected from 441 students prior to their randomization into a control or intervention condition.³¹ These baseline data were used to address the questions posed in this paper. The Institutional Review Board of the University of Minnesota (UMN) approved all aspects of the CHOICES research.

Data Collection and Measurements

All data were collected by trained and certified data collectors. Measurement visits occurred on the campuses of the participating community colleges, if possible. If not, participants were measured at the University of Minnesota or at their homes.

Anthropometry—Standardized protocols were used to assess body composition. Height was measured in duplicate using a Shorr height board (Irwin Shorr, Olney, MD), and recorded to the nearest 0.1 centimeters (cm). The average of two measurements that differed by 0.5 cm was used to represent the height. Body weight and % body fat were measured in duplicate using a Tanita scale with a built-in body fat analyzer. The Tanita is a bioelectrical impedance device that assesses body weight, lean and fat mass (Tanita TBF-300A Body Composition Analyzer, Arlington Heights, IL). These measures were recorded to the nearest

0.1 kilograms for weight and to the nearest 0.1 % for body fat. Waist circumference was measured in duplicate and recorded to the nearest 0.1 centimeters using a Gulick tape measure. The average of two measurements that differed by 1.0 cm was used to represent the waist circumference. Overweight and obesity for young adults is calculated from an individual's height and weight using the following formula: $BMI (kg/m^2) = [weight \text{ in pounds} / (height \text{ in inches} \times height \text{ in inches})] \times 703$. The classification of overweight is assigned to a BMI 25.0–29.9 kg/m^2 and obese to a BMI $\geq 30 kg/m^2$. The CHOICES study is one of seven clinical research studies in the **Early Adult Reduction** of weight change through **LifestYle Intervention (EARLY)** program.³⁰ Consistent across all seven studies, CHOICES engaged a rigorous measurement protocol including training, certification, and recertification. Assessments of measurement reliability for heights, weights, body fat and waist circumference among three raters were all in acceptable ranges.

Young Adult Student Survey—The behavioral and psychosocial survey included constructs that have been shown in the literature to be correlates or predictors of obesity among young adults including: eating and activity patterns, sleep and stress. Table 1 shows the questions used in the survey and the source of each question. Previous research documents the validity and reliability of these survey items.^{32–45}

The sex of student participants was assessed using a demographic question, “what is your gender?” asking students to respond by selecting male or female.

Analytic Plan

Analyses were conducted with SAS version 9.3 for Windows (SAS Institute Inc., Cary, NC, USA). Descriptive statistics were prepared using SAS PROC MEANS and SAS PROC FREQ. All analyses were conducted separately for males and females. The sample characteristics were tested for differences by sex using Chi-squared test for categorical measures and F test for continuous ones.

RESULTS

Table 2 shows the demographic characteristics of the young adult sample and the descriptive characteristics of weight status and weight-related behaviors. The group was primarily female (67.6%) and white (72.6%) with a mean age of 22.8 years. This was a low-income population (with 66.2% reporting an annual income $< \$12,000$) reflective of a college population. Slightly more than half were single and lived with their parents, and males were more likely to be single and living at home as compared to females. Almost one third of these students (32%) were first generation college students. Almost half of the sample (46%) had at least one child.

More than two-thirds of participants reported eating breakfast most days of the week. Approximately half (51%) reported buying fast food at least 1–2 times per week, and males were more likely to report this frequency of fast food consumption compared to females (59% versus 46%, respectively). Males also reported consuming more sugary and sugar-free drinks on a monthly basis (31 versus 18 beverages/month, respectively). Approximately half of the sample reported having at least one alcoholic drink per day in the previous 30 days

and of those who report drinking, they had, on average, at least one drink at least 5 days each month and nearly 3 drinks per day. Males reported drinking alcoholic beverages on more days than females and drinking more drinks each day.

Levels of physical activity were below recommended levels. The sample averaged less than 5 hours of physical activity each week, with males reporting more activity than females. Both groups report about 5 hours a day of sedentary behaviors.

Surprisingly, participants reported adequate sleep with an average of 8.4 hours of sleep per night. As a group, this sample of young adults scored low on symptoms associated with stress and depression. For perceived stress, participants reported a mean score of 5.4 with a low score interpreted as low perceived stress on a scale of 0–16. For depression (CES-D 10), participants reported a mean score of 6.2 with a higher score indicating greater symptoms on a scale of 0–30.⁴³ For the CES-D 10, a cutoff score of 11 is indicative of “significant” or “mild” depressive symptomatology. There were no significant differences in hours of sleep, depression or perceived stress scores by sex.

Almost half (46%) of the sample was overweight or obese, and males were more likely to be overweight or obese as compared to the females (53% versus 33%, respectively). However, more females indicated that they were dissatisfied with their weight as compared to males. While 54% of males were overweight or obese, only one-third (34%) reported that they were dissatisfied with their weight. About one-third of the sample reported weighing themselves at least once a week. Females had significantly higher % body fat than males (31% versus 19%, respectively). Four out of 10 females (44%) had waist circumferences that put them at risk for cardiovascular disease and diabetes.

COMMENTS

The CHOICES study provides a snapshot of the weight indicators and weight-related behaviors of 2-year college students. About two-thirds of our young adults were regular breakfast eaters; about half bought fast food at least 1–2 times a week and they drank, on average, 22 sugary and sugar-free beverages a month. National survey data indicate that soft drink intake is the highest among young adults, fast food consumption markedly increases and consumption of breakfast decreased during this transition between adolescence and adulthood.^{7,46} Project EAT (Eating Among Teens), a 5-year longitudinal cohort study of Minnesota adolescents mirrors a similar trend in other unhealthy behaviors, with a decrease in activity patterns during the transition from high school to young adulthood.⁴⁷

Interestingly, half of our community college students met the recommendations of 150 minutes of physical activity a week with no significant differences by sex. This is important because findings from the CARDIA (Coronary Artery Risk Development in Young Adults) study, a multi-state longitudinal cohort study, identify that relative to lower activity levels, maintenance of higher activity levels over 20 years was associated with smaller gains in BMI and waist circumference among men and women as they transitioned from young adulthood into middle age.⁵ Obesity (BMI ≥ 30) among our CHOICES sample was lower than the incidence of obesity among other young adults. Prevalence of obesity among 20 to 39 year olds in the United States from 2009 to 2010 was twice as high at 32.6% whereas

obesity among our sample of community college students was 14%.⁴⁸ The difference between national incidence rates of obesity and rates seen in our CHOICES sample likely reflects the restriction of our study sample to: (a) only those ages 18–35 years, with most participants being in their early 20s (mean age: 22.8), and (b) our study's exclusion of any individuals with a BMI ≥ 35 kg/m². Also interesting, the results indicate about a third of the participants weighed themselves at least weekly. Evidence of the benefit of self-weighing from the literature among adult samples is mixed. A cross-sectional study among adolescent girls identified that frequent self-weighing was associated with both healthy and unhealthy weight control behaviors, and did not contribute to weight loss over time.⁴⁹ A prospective cohort study among adults identified that more frequent self-weighing seemed to be most beneficial for obese individuals.⁵⁰

Finally, similar to other studies, the CHOICES study highlights differences by sex. Despite being more likely to live with parents, young males appeared to engage the most in risky health behaviors and have higher levels of overweight or obesity, but were more satisfied with their weight compared to young females. Although, a national study identified no sex differences in obesity prevalence among young adults ages 20 to 39 (2009–2010).⁴⁸ The CARDIA study identified that five-year weight gain was greater for males aged 18–24 years compared to men aged 25–30 years.⁹ Distinguishing between the earlier and latter stages of young adulthood may be important. Males reported over an hour more of physical activity a week than females and smaller waists. Forty-four % of females and only 13% of males were at significant increased disease risk due to excess fat around their waist. The National Heart Lung Blood Institute identifies an increased risk for heart disease and Type 2 diabetes if a waist circumference is greater than 35 inches for women and greater than 40 inches for men.⁵¹

Limitations

The CHOICES study is part of a national consortium of clinical trials that applied valid and reliable measures and rigorous data collection protocol contributing important methodological approaches (e.g. objectively measured heights and weights). In addition, the CHOICES study evaluated many evidence-supported contributors of potential weight gain and supporters of weight gain prevention among young adults. There are, however, limitations to this study. The sample is limited to one state and is a convenience sample from 3 metropolitan area located community colleges. Although, the study adhered to clear inclusion and exclusion criteria while enrolling the student participants. While valid and reliable instruments were used to assess diet and physical activity patterns, other methods (e.g. dietary recalls, accelerometers) may have yielded more accurate results. Still other instruments (e.g., bioelectrical impedance), even while engaging rigorous, cross-site protocol, can have variability based upon participant factors (e.g., fluid intake). With the CHOICES study design, measurement inaccuracies are distributed equally across sites and conditions. Finally, identifying differences between 2- and 4-year college students may be difficult since many college students attending 2-year institutions transfer to a 4-year institution. However, identification of significant obesity-related behavioral differences between 2- and 4-year students in prior work provides evidence of real differences.¹³

Conclusion

The CHOICES study addressed meaningful knowledge gaps in the young adult weight-related behavior literature. An assessment of student living situations, diet and activity behaviors, sleep patterns, stress, and weight indicators by sex have helped contribute to our knowledge of this understudied population. Finally, the focus on weight and weight-related behaviors of 2-year college students uniquely contributes to the scientific literature.

Therefore, the results of this study confirm the need for innovative interventions targeting this unique young adult population.

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Table 1

CHOICES survey items and their sources

Domain	Question
Breakfast ³⁴	In a typical week, how many times do you eat breakfast?
Fast food ³²	<p>Over the past 30 days, how many times did you buy food at a fast food restaurant, such as McDonald's, Burger King, Arby's, Wendy's, Hardee's, Taco Bell, Taco Johns, Chipotle, KFC, Pizza Hut, Panera, Quiznos, Noodles & Company, Bruegger's Bagels?</p> <p>Not including the fast food restaurants listed above, in the past 30 days, how many times did you buy food at any other sit down (full service) restaurant and order from a waiter/waitress?</p> <p>Over the past 30 days, how many times did you buy food from an all-you-can-eat buffet, such as CiCi's Pizza, Old Country Buffet, Chinese buffet, Indian buffet, an all-you-can-eat café at college or university dining halls?</p>
Sugary and sugar- free drinks ³³	<p>Over the past 30 days, how often did you drink soda or pop?</p> <p>How often were these sodas or pop diet or sugar-free?</p> <p>Over the past 30 days, how often did you drink fruit drinks? Please do not include 100% juice beverages like orange juice, but do include drinks such as cranberry cocktail, Hi-C, lemonade or Kool-Aid, diet or regular?</p> <p>How often were your fruit drinks diet or sugar-free drinks?</p> <p>Over the past 30 days, how often did you drink sports drinks (such as Propel, PowerAde or Gatorade)?</p> <p>Over the past 30 days, how often did you drink energy drinks (such as Red Bull or Jolt)?</p>
Alcohol ⁴⁴	<p>During the past 30 days, have you had at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor?</p> <p>During the past 30 days, how many days did you have at least one drink of any alcoholic beverage?</p> <p>During the past 30 days, on the days when you drank, about how many drinks did you drink on average?</p> <p>Considering all types of alcoholic beverages, how many times during the past 30 days did you have 4 or more drinks (women) or 5 or more drinks (men)?</p>
Physical activity ³⁵	<p>How many days this week did you walk briskly for the purpose of exercise or transportation for at least 10 continuous minutes outside, at an indoor facility, or on a treadmill?</p> <p>On these days in which you walked briskly at least 10 continuous minutes, on average, how many minutes per day did you walk briskly?</p> <p>How many days this week you participated in any other sport, fitness, or recreational activities</p> <p>On these days in which you were physically active while performing the activity, on average how many minutes per day you did the activity?</p>
Sedentary activity ³⁶	How much time do you usually sitting or reclining on a typical day?
Sleep ³⁷	<p>What time do you usually go to bed in the evening (turn out the lights in order to go to sleep)?</p> <p>What time do you usually get out of bed in the morning?</p>
Stress ³⁸	<p>In the last month, how often have you felt that you were unable to control the important things in your life?</p> <p>In the last month, how often have you felt confident about your ability to handle your personal problems?</p> <p>In the last month, how often have you felt that things were going your way?</p> <p>In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?</p>
Depression ^{43,45}	<p>In the past week, I was bothered by things that don't usually bother me.</p> <p>In the past week, I had trouble keeping my mind on what I was doing.</p>

Domain	Question
	<p>In the past week, I felt depressed.</p> <p>In the past week, I felt that everything I did was an effort.</p> <p>In the past week, I was happy.</p> <p>In the past week, I felt fearful.</p> <p>In the past week, my sleep was restless.</p> <p>In the past week, I felt hopeful about the future.</p> <p>In the past week, I felt lonely.</p> <p>In the past week, I could not “get going”.</p>
Weight satisfaction ^{41,42}	How satisfied are you with your weight?
Self-weighing ^{39,40}	How often do you weigh yourself?

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Table 2

Characteristics of young adults attending a 2 year college (n=441) by sex

	Mean (SD) (Min,Max)			P-value
	All (n=441)	Females (n=298)	Males (n=143)	
Demographic				
Sex, Female	67.6			
Race/ethnicity, White	72.6	70.1	77.6	0.10
Age at randomization, Years	22.8 (5.0) (18.0, 36.0)	23.1 (5.3) (18.0,36.0)	22.1 (4.2) (18.0,35.0)	0.03
Full time student status	72.9	72.8	73.2	0.93
Works less than 20 hours per week	57.5	56.2	60.1	0.44
Yearly income less than \$12,000	71.1	69.4	74.3	0.30
Family				
Single	54.6	49.8	64.3	<0.01
Number of children	1 (1.3) (0,7)	1.1 (1.3) (0,6)	0.8 (1.3) (0,7)	0.03
Has at least one child (%)	45.9	50.5	36.4	<0.01
Lives with parents	54.4	50.0	63.6	0.01
Father or male guardian a college graduate	34.6	32.8	38.2	0.29
Mother or female guardian a college graduate	36.8	34.7	41.2	0.20
Diet, Activity & Sleep Behaviors				
Eat breakfast 3–4 times or more per week	68.2	69.1	66.4	0.57
Buy fast food at least 1–2 times per week	50.6	46.3	59.4	0.01
Number of sugary and sugary-free drinks consumed in a month	22.3 (30.6) (0,180)	18.0(25.9) (0,148)	31.3 (37.1) (0,180)	<0.01
Physical activity in an average week, hrs ¹	4.5 (6.8) (0,56.0)	4.1 (6.3) (0,56.0)	5.5 (7.7) (0,53.5)	0.04
% meets recommended 150 minutes a week (moderate intensity)	50.7	48.0	56.3	0.10
Sedentary behavior in an average day, hrs ²	5.4 (3.3) (0,23.5)	5.5 (3.5) (0,23.5)	5.1 (3.0) (0,3,14.0)	0.18
Average hours of sleep per night	8.4 (1.2) (4.0,12.3)	8.4 (1.2) (4.0,11.4)	8.4 (1.4) (5.0,12,3)	0.95
Alcohol Intake				
At least one alcoholic drink during past 30 days	50.3	51.0	48.9	0.69
Among drinkers: # of days at least 1 drink during past 30 days	5.4 (4.9) (1,30)	5.0 (4.6) (1,25)	6.4 (5.3) (1,0,30)	0.05
Among drinkers: # of drinks per drinking day	2.9 (2.6) (<1,25)	2.5 (1.7) (<1,10)	3.7 (3.8) (1,25)	<0.01
Factors & Related Behavior				
Perceived Stress Scale Score	5.4 (2.6) (0,13.0)	5.4 (2.6) (0,12.0)	5.3 (2.7) (0,13.0)	0.62
Depression (CES-D summary score)	6.2 (4.4) (0,23.0)	6.1 (4.3) (0,23.0)	6.4 (4.6) (0,23.0)	0.46
Dissatisfied/very dissatisfied with their weight	41.7	45.6	33.6	0.02
Self-weighing at least once a week Weight Indicators	32.3	30.6	35.7	0.29
Normal weight, BMI < 25.0	53.3	56.7	46.1	0.04
Overweight BMI 25	32.9	31.2	36.4	0.28
Obese, BMI 30	13.8	12.1	17.5	0.12

	Mean (SD) (Min,Max)			P-value
	All (n=441)	Females (n=298)	Males (n=143)	
% Body Fat	27.0 (8.7) (8.0,48.3)	30.7 (7.0) (8.9,48.3)	19.1 (6.6) (8.0,36.0)	<0.01
Waist Circumference, inches	34.9 (3.9) (26.8,45.2)	34.8(3.9) (26.9,45.2)	35.1 (4.0) (26.8,45.2)	0.47
% females greater than 35 inches		43.7		
% males greater than 40 inches			13.3	

¹ Paffenbarger exercise variables: Weekly minutes of physical activities. Total minutes per week = minutes of walking + total minutes of all sport, recreation, and fitness activities. Does not include stairs climbed. (LTPAMIN, reported as hours in table)

² Global Physical Activity Questionnaire (GPAQ):Summary Score for Sedentary Behavior, minutes per week (SEDBMIN, reported as hours in table)