

Healthy and unhealthy weight loss practices of Latino women at a college in USA¹

Prácticas Saludables y No Saludables de Pérdida de Peso de Mujeres Latinas de una Universidad en Estados Unidos

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Abstract

The purpose of the study is to collect information from college Hispanic women to identify healthy and unhealthy weight loss practices used for weight control. A total of 217 participants completed a survey of which 100 who reported going on a special diet to lose weight were assessed on the weight loss practices used, and their demographic characteristics. The hypothesis was that Hispanic females who try to lose weight do not engage in unhealthy weight loss practices. The results revealed healthy practices more often than unhealthy ones. Nevertheless, the use of unhealthy weight loss practices among some Hispanic females may be more common than one would expect, and prevention campaigns should consider these results for future public health programs.

Keywords: Weight loss, healthy practices, unhealthy practices, Hispanic women

Resumen

El objetivo del estudio fue describir las prácticas saludables y no saludables para bajar y controlar el peso en mujeres hispanas. Un total de 217 participantes completaron una encuesta, de las cuales 100 informaron estar en una dieta especial para perder peso y reportaron las prácticas utilizadas y sus datos demográficos. La hipótesis era que las mujeres hispanas que intentan bajar de peso, no presentarían prácticas no saludables. Los resultados mostraron que las prácticas saludables fueron más frecuentes que las no saludables. Sin embargo, el uso de prácticas no saludables fue más común a lo esperado y las campañas de prevención debiesen considerar esta información para futuros programas de salud pública.

Palabras clave: Baja de peso, prácticas saludables, prácticas no saludables, mujeres

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Introduction

Americans are increasingly overweight or obese. Consider that in 1960, only 44.8% of adults in the U.S. ages 20 to 74 were overweight or obese, yet by the year 2002 the population of overweight or obese adults in America had increased to 65% (Weight control information Network, 2006). A closer look at the numbers reveals considerably higher percentages of overweight or obese adults among Hispanics. Mexican-American adults, for example, are 75.5% more overweight or obese than the general population. Although approximately 30% of non-Hispanic white adults were obese in 2006, for Mexican-American adults, that figure is 36.8% (Ogden et al., 2006). The problem of obesity among Hispanics is worth investigating because their population has more than doubled in the last two decades: from 14.6 million in 1980 to 35.3 million in 2000, and Hispanics now represent 14% of the total US population (U.S. Census, 2000). Given the remarkable population growth of this ethnic group, Hispanic health and obesity status has become an increasingly important public health issue (Zhang & Wang, 2004).

Approximately 45 million Americans "diet" each year including 40-45% of all American women (Serdula et al., 1999). U.S. consumers spend about 33 billion dollars annually on weight control products and services. Spending on weight loss programs is estimated at 1 to 2 billion dollars per year, and the total estimated obesity-related spending is 100 billion annually, yet all of this spending seems to have little success in reversing the prevalence of obesity in the U.S. (American Obesity Society, 2000). In 2000, women comprised 51% of the total US population (U.S. Census, 2000), and in 1999 an estimated 40-45% of women dieted each year. Given that certain ethnic groups, such as Hispanics are at greater risk for obesity (Amaro & Zambrana, 2000), a closer look at the weight loss and weight prevention practices of Hispanic women may serve to better inform our understanding of the successes and failures of current weight loss practices in the U.S.

Although the literature on weight management is extensive, relatively few reports exist on weight management practices used by the nation's Hispanic/Latino population. The purpose of the study is to collect information from Hispanic/Latino women at a college in New York City to identify healthy and unhealthy weight loss practices used for weight control and the frequency of their use. This information may be useful when planning and implementing programs related to weight management.

Method

Participants

The target population of the study was Hispanic female students who attended a 2- to 4-year college in New York City. This college was selected because it is located in Williamsburg-Bushwick, Brooklyn an area identified by the New York City Vital Sign 2003 report as one of the areas with the highest obesity levels. More than half (53%) of the adult population in New York City is overweight or obese and 1 in every 6 adults is obese; but in some neighborhoods, such as Williamsburg-Bushwick in Brooklyn, as many as 1 in every 4 adults is obese (NYC Vital Signs, 2003). This college also has a high volume of Hispanic female students (59%). The entire female Hispanic student population (340) who met the study sample criteria, older than 17 years of age, of Hispanic background and registered as a student at the time of the study, was considered for this the investigation. The study was performed during students' class time inside their classrooms. A total of 217 participants completed the survey instrument, thus composing the sample for this study. All participants signed a consent form acknowledging their voluntary participation in the study in accordance with the ethical standards of the responsible committee on human experimentation and with the IRB committee.

Survey Instrument

The survey instrument utilized for this paper was created and tested for reliability for this researcher's doctoral dissertation. Focus groups with Hispanic females were performed to create the survey items, face validity was established and test-retest reliability (coefficients-0.82 at $p < .001$) for the knowledge scale was performed (Mercado, 2003). The participants were asked to answer the same survey instrument on two different occasions 14 days apart following the same protocol. The data used for this study consisted of those participants who answered the same survey twice (217) and analyses were performed using the aggregated data. For the purposes of this paper, the variables discussed are limited to those relating to the participants who reported going on a special diet to lose weight ($n=100$), the specific weight loss practices used, and their demographic characteristics. The same survey instrument was created and available in English and Spanish, but the majority of the students (86%) completed it in English.

Statistical Analyses

Descriptive analysis of the data was performed using the Statistical Package for Social Science for Windows. The data included both descriptive and inferential statistics. Pearson Correlation was used to analyze the relationship of

the demographic characteristics and the self-reported dietary techniques used by the participants. Pearson correlation was also used to calculate test-retest reliability.

Results

Table 1 show the demographic characteristics of all study participants and of those participants who had gone on a special diet to lose weight within the previous 12 months. Overall, the sample included a large number of single, working mothers between 21 and 40 years of age who were in their first or second year of college, had never before taken a nutrition education course and who considered English their primary language. There is no major demographic difference between the sample as a whole and the participants who had gone on a special diet to lose weight within the previous 12 months. The study sample is homogeneous in nature and data on Hispanic classification was not collected.

Weight Loss History and Practices Used

To assess weight loss history and practices, the participants were asked if they had gone on a special diet to lose weight and what specific weight loss practices they had tried

within the previous 12 months, if any. On the first question, 100 (46%) of the participants said they had gone on a special diet to lose weight. Table 2 shows the frequency of self-reported weight loss practices used by the 100 participants who reported being on a special diet to lose weight within the previous 12 months. This table shows the percentages for the number of times they tried specific weight loss practices. Table 2 shows the most frequently used practice: “exercising more” (85%), “eating a little less food” (84%) and “eating mostly salad” (83%). At least three quarters of the respondents reported “eating mostly fruits” (76%) and “avoiding sweets and junk food” (75%). In contrast, the least frequently used practices were “throwing up after eating” (15%) and “taking laxatives” (23%). Although not nearly as frequent as the most used practices, two somewhat more prevalent practices were “using diet pills” (43%) and “hardly eating or fasting” (47%).

Table 2 also shows those participants who reported not using any of the weight loss practices within the previous 12 months. That column shows that the following practices were never used by at least half the respondents: “throwing up after eating” (85%), “taking laxatives” (77%), “using diet pills” (57%), “hardly eating at all or fasting” (53%), “eating ‘diet’ products” (52%) and “eating mostly food high in protein such as meat and cheese” (52%).

Table 1. Demographic Characteristic of the Study Participants

	Whole Sample (n=217)		Participants that Gone on a Special Diet to Lose Weight During the Last 12 Months (n= 100)
	Percent	Frequency	Percent
Age			
20 & under	14	30	15
21 to 40	72	157	75
41 & over	13	28	10
Education Level			
1 st year	55	120	53
2 nd year	32	69	32
3 rd and 4 th year	13	28	15
Work Status			
Full Time	51.2	111	56
Part Time	16.6	36	21
Not working	31.8	69	23
Marital Status			
Married	29.5	64	34
Single	41.0	89	35
Separated	29.5	64	31
Nutrition Education			
Yes	36	78	42
No	64	139	58
Children			
Yes	72.4	157	73
No	27.6	60	27

Table 2. Frequency of Self-Reported Weight Loss Practices Used During the Last 12 Month Considered Healthy or Unhealthy (n= 100)

Weight Loss Practices Used During the Past 12 Months	Total % of Those Who Never Used the Weight Loss Practices "0"	Total % of Those Who Used Any Weight Loss Practice at Least Once	% of Those Who Used Any Weight Loss Practice by the Frequency		
			% of Those Who Used the Weight Loss Practice 1-5 times	% of Those Who Used the Weight Loss Practice 6-10 times	% of Those Who Used the Weight Loss Practice >11 times
Healthy Weight Loss Practice					
Exercising more	15	85	55	19	11
Eating a little less food	16	84	55	14	15
Avoiding sweets and "junk food"	25	75	40	16	19
Unhealthy Weight Loss Practice					
Eating "diet" products	52	48	36	5	7
Using diet pills	57	43	29	7	7
Skipping meals	36	64	41	12	11
Taking laxatives	77	23	16	4	3
Hardly eating at all or fasting	53	47	33	7	7
Throwing up after eating	85	15	7	7	4
Drinking mostly liquids	26	74	42	19	13
Eating mostly food high in protein such as meat and cheese	52	48	30	8	10
Other Weight Loss Practice					
Eating mostly fruits	24	76	52	16	8
Eating mostly salad	17	83	51	25	7

From those participants who reported having been on a special diet to lose weight, the survey showed a mixed response, involving both healthy and unhealthy or potentially harmful practices. Table 2 shows which weight loss practices are considered to be healthy and unhealthy. The weight loss practices considered healthy are those that involve eating less food, exercising more, and avoiding sweets and "junk food". A high percentage of the participants answered eating mostly salads (83%), and mostly fruits (76%) as practices they frequently used for weight loss. These practices are considered neither healthy nor unhealthy in respect to this study because of possible misinterpretation of the meaning of the word "mostly". A substantial portion of the respondents reported engaging in unhealthy weight loss practices such as: using diet pills, hardly eating at all or fasting, skipping meals, drinking mostly liquids and eating mostly high protein foods. Other unhealthy weight loss practices such as taking laxatives and throwing up after eating were mentioned less frequently: 23% and 15%, respectively.

Demographic Characteristics and Self-Reported Techniques

The demographic characteristics were analyzed with the self-reported weight loss practices of the respondents for the 12 month period prior to the study (table 3) [insert

table close by]. As can be seen in Table 3, there were 12 significant relationships (at alpha .05 or less) between the weight loss practice used within the previous year and the respondent's demographic characteristics: (a) "skipping meals," positively related to both work status and having children; (b) "eating mostly fruit," negatively related to age and positively related to having children; (c) "eating mostly salads," negatively related to age and positively related to having children; (d) "eating a little less food," negatively related to age and positively related to work status and having children; and (e) "Drinking mostly liquids," positively related to having children.

Overall, "eating a little less food" was the weight loss practice most significantly related to the most (n=3) demographic characteristics and "having children" was the demographic characteristic most significantly related to the most (n=5) self-reported weight loss practice. Specifically, "having children" was positively related to healthy practices such as "eating a little less food" and negatively related to unhealthy practices such as "throwing up after eating" and "using diet pills".

Discussion

The purpose of this study was to examine the frequency of self-reported weight loss practices used in order to

Table 3. The Background Characteristics and Self-Reported Weight Loss Practice

Weight Loss Practice	Age	Marital Status	Work Status	Having Children	Nutrition Education	Education Level
Eating "Diet" products	.023	.022	.050	.150	-.093	-.024
Using diet pills	-.071	.010	.086	-.037	.080	-.024
Exercising more	-.108	-.013	-.018	.073	-.202*	-.048
Skipping meals	-.100	-.070	.286**	.199*	.082	-.135
Taking laxative	-.115	-.056	-.075	.015	-.073	.040
Eating mostly fruit	-.168*	-.013	.048	.286**	-.046	-.062
Eating mostly salads	-.174*	-.033	.068	.214**	.055	-.109
Hardly eating at all or fasting	-.157	.095	.183*	.122	.132	-.106
Eating a little less food	-.173*	.021	.237**	.250**	-.056	-.099
Drinking mostly liquids	-.118	.063	.056	.210**	-.072	-.116
Avoiding sweets and junk food	.088	.058	-.014	.021	.026	-.006
Throwing up after eating	.079	.082	.040	-.032	-.089	.002
Eating mostly foods high in protein such as meat and cheese	-.052	-.036	.021	.110	-.083	-.155

* $p < .05$. ** $p < .01$.

identify the frequency of healthy and unhealthy weight loss practices of Hispanic women. This study's hypothesis was that Hispanic females who try to lose weight do not engage in unhealthy weight loss practices such as using diet pills, purging and laxatives. About half of the participants reported having been on a special diet to lose weight and all of them mention using at least one weight loss practice.

Healthy Weight Loss Practices

Respondents were asked about the weight loss practices they personally used within the last year, and it was encouraging to find that the participants used healthy ones such as eating less food, exercising more and avoiding sweets and "junk food" more often than unhealthy ones.

Data from the 2001-2002 National Health and Nutrition Examination Survey (NHANES) revealed that of all persons trying to lose weight, 51% are doing so by modifying their diets, although only half reported consuming fewer calories. Less than one fourth combined caloric restriction with the higher levels of physical activity (300 or more minutes per week) recommended in the 2005 dietary guidelines by the U.S. Department of Health and Human Services and U.S. Department of Agriculture. The investigators concluded that although weight control is a common concern, most people do not use the recommended combinations of caloric restriction and adequate levels of physical activity (Weis et al., 2006). The National Health Interview Survey (1998) showed that about one third of the sample interviewed was trying to lose weight but only one third of those trying to lose weight reported eating fewer calories and exercising more. Women report an even smaller percentage (19.4%)

of following the above mentioned recommended weight-control methods (Kruger et al., 2004).

Unhealthy Weight Loss Practices

It should be noted that a substantial portion of respondents reported engaging in unhealthy weight loss practices such as using diet pills, hardly eating at all or fasting, skipping meals, drinking mostly liquids, and eating mostly high protein foods. However, dramatically unhealthy weight control practices such as taking laxatives or throwing up after eating were mentioned less frequently, although still in alarming numbers (23% and 15%, respectively). These observations are consistent with other studies conducted on other minority female groups.

This study suggests that the use of unhealthy weight loss practices among some Hispanic females may be more common than one would expect. French et al. (1999) studied the ethnic differences in psychosocial and health behavior correlates of dieting and purging among female adolescents. The data for this report was based on 17,159 females, of whom only 176 were classified as Hispanic. Purging behavior was measured by asking "How often do you vomit (throw up) on purpose after eating?" and "Do you use any of the following to lose weight: laxatives, diuretics and Ipecac?" The researchers found that purging was most prevalent in Hispanics (25%) and American Indians (22.3%) compared to other groups. Overall, the investigators suggested that nonwhite ethnic groups may have a lower prevalence of dieting and weight concerns, but that weight loss practices may be similar among these ethnic groups, suggesting comparable underlying mechanisms.

Additional support for the idea that dieting behavior differs between various sub groups of the overall population was provided by Breitkopf et al. (2004) who examined the prevalence and correlation of weight reduction behavior among low-income women. In their study, a total of 1,709 women aged 12-58 years, of whom 36.5% were Hispanic, reported their weight loss behavior for a period of 30 days. Overall, they found that 43.7% of the women exercised for the purpose of weight loss, 35.3% “dieted”, 15.1% used diet pills, and 4.3% reported purging. The investigators reported significant differences among racial and ethnic groups when it came to weight loss practices. African American women reported “dieting” less frequently than Hispanic or Caucasian women, 28.4% versus 37.8% and 40.1% respectively ($p < .001$). For those women who reported purging (vomiting, use of laxatives or diuretics), 3% were Caucasian, 4.7% African American and 5.2% Hispanic. The use of diet pills was reported by 16.9% of Caucasian and Hispanic women and by 12.4% of African American women. These investigators concluded that low-income women frequently use maladaptive strategies such as diet pills and purging, to lose weight.

Other Weight Loss Practices

Eating mostly salads or fruits are practices considered neither healthy nor unhealthy ones in this study. The use of the word “mostly” created interpretation concerns; it is questionable whether respondents understood the word correctly. There is a possibility that the participants took the word “mostly” to mean eating these foods “more often” rather than eating them “almost exclusively” as it was intended. Therefore, for this study eating mostly salad and eating mostly fruits are considered neither healthy nor unhealthy weight loss practices due to possible misinterpretation of question.

In terms of their demographic characteristics and the weight loss practices used, having children was significantly related to the most self-reported weight loss practice. Specifically, this demographic factor was positively related to healthy practices such as “eating a little less food” and negatively related to unhealthy practices such as “throwing up after eating” and “using diet pills”. These findings could indicate that being a parent makes one more aware about dieting and may have some influence on weight management behavior.

Findings from this study lead the researcher to conclude that most adults choose weight loss practices that are reasonable or adequate, but that unhealthy behaviors or weight loss practices are not uncommon. The most important issue, however, is to identify strategies to promote healthier behaviors or practices that can be sustained for a long time so that they can achieve the desired weight control effect. These results suggest that a health campaign directed at women, especially Hispanic women, is needed to promote

education and behavioral intervention strategies encouraging healthier and more effective weight-loss practices, to discourage unhealthy and ineffective weight loss practices, and to dispel dangerous weight loss myths.

The limitations of this study include those inherent in any study that uses self-reported data. Also, the study lacked weight and height measurements of the participants, which prevented the researcher from determining the relationship between respondents’ weight and weight loss practices. The investigator also limited the classification of the respondents to “Hispanic” in general, and thus did not explore the relationship between participants’ interracial origins and their weight loss practices. No data was collected on acculturation but it can be deduced that this group of students was acculturated since the majority of them (84%) completed the survey in English. This study was done on a limited sample of female Hispanic students from one specific university. The data discussed in this paper was limited to those participants who reported being on a special diet to lose weight within the previous 12 months only.

Implications For Research And Practice

The recommendations for future research include the replication of the study using a larger and more diverse group of Hispanic women. Research should include anthropometrics information such as height and weight. An in-depth interview study should be conducted to explore the psychodynamic factors that may prevent participants from accepting or adopting healthy weight loss practices into their everyday lives. In particular, future studies should focus on how cultural norms and traditions involving food, physical activity and body image conflict with contemporary healthy weight loss practices and eating guidelines.

A better understanding of the weight loss practices used among Hispanic females would be useful for clinicians and nutritionists in the development of health prevention and weight management treatment programs for this growing population.

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