



CWHS

Data Points

RESULTS FROM THE 2009 CALIFORNIA WOMEN'S HEALTH SURVEY

As awareness of obesity as a public health problem increases, it is important that people have an accurate perception of their body weight regardless of their weight status. Erroneous perception of body weight can have important health consequences.¹ Overweight individuals who do not believe they are overweight may not intervene effectively to control their weight. Conversely, underweight individuals who perceive themselves as normal or overweight may engage in unnecessary dieting or even extreme weight control practices such as bingeing and purging. The California Department of Public Health administers a number of programs that focus on obesity risk reduction. Discrepancies between actual weight and perceived weight can impede the acceptance or effectiveness of interventions to "achieve a healthy body weight."²

This study used data from 24,548 respondents from the 2005 to 2009 California Women's Health Survey to compare women's self-perceived weight category with their actual weight by age, race, education, poverty status, and marital status. Women's self-reported height and weight were used to calculate body mass index (BMI): $BMI = [(weight (lb) * 703) / (Height^2 (in^2))]$. A woman's perceived weight category was based on the following question: *Currently, do you consider yourself overweight, underweight, or about the right weight for your height?* Women were categorized into four weight levels based on BMI. BMI less than 19 was defined as underweight; BMI equal to or greater than 19, but less than 25 was defined as healthy weight; BMI equal to

or greater than 25, but less than 30 was defined as overweight; and BMI equal to or greater than 30 was defined as obese. Overweight and obese categories were combined, and BMI equal to or greater than 25 was defined as "overweight or obese." This analysis did not focus on women who were defined as "healthy weight" because these women are less likely to have problems due to their misperception. Misperception of weight was defined as underestimating or overestimating one's actual weight.

Responses were weighted in these analyses by age and race/ethnicity to reflect the 2000 California adult female population. To control for confounding when examining misperceptions by race, estimates for race were stratified by age (less than age 45 and greater than or equal to age 45). Because of small sample sizes by age and race, misperceptions by age and race were analyzed for overweight and obese women combined. Unless otherwise noted, all reported differences were significant at *P* less than .05.

Classification by BMI indicated that 23.6 percent of women were obese, 27.3 percent were overweight, 44.5 percent were at a healthy weight, and 4.6 percent were underweight. A high percentage of women had misperceptions about their weight, with underweight women more likely to misclassify themselves compared with overweight or obese women. Among underweight women, 2.6 percent thought they were overweight, and 60.5 percent thought their weight was about right (total misperception equaled 63.1 percent). Among

Perceived Body Size Vs. Self-Reported Weight Among Adult Women in California, 2005-2009

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Public Health Message:

Substantial numbers of underweight and overweight California women misperceive their weight status, and misperceptions are greater among women with low income and low education. Public health messages that enable women to correctly identify body weight status are important for engaging their participation in risk reduction activities. Greater misperception about weight among women with low income and low education points out the importance of tailoring such public messages to specific population subgroups.

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overweight women, 28.4 percent underestimated their weight was about right and 0.5 percent thought they were underweight (total misperception equaled 28.9 percent). Among obese women, 5.2 percent thought that their weight was about right and 0.4 percent thought they were underweight (total misperception 5.6 percent) (Figure 1). Combining the categories of overweight and obese women, 18.1 percent thought their weight was about right or that they were underweight.

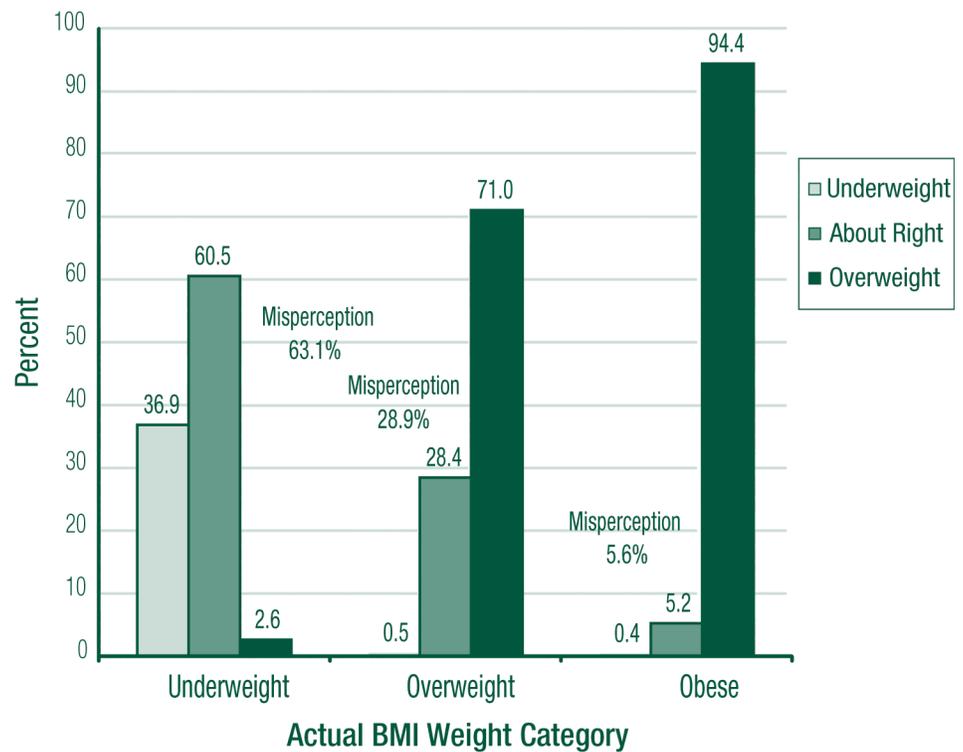
Among women who were overweight or obese, Hispanics were more likely than Whites to underestimate their weight category if they were younger than age 45 (23.2 percent vs. 15.7 percent) or were at least 45 years old (22.8 percent vs. 13.4 percent). Among obese or overweight women at least 45 years old, African Amer-

icans/Blacks were more likely than Whites to underestimate their weight (24.1 percent vs. 13.4 percent), but no significant difference was found between these groups among women younger than age 45.

Misperceptions about weight varied strongly by education and by poverty status among women in all underweight and overweight BMI categories.

- Obese and overweight women with less education were more likely to underestimate their body weight status than women with more education. Among obese women, those with less than a high school education were more likely than more educated women to underestimate their weight (13.4 percent vs. 3.5 percent, respectively); the same trend was found

Figure 1
Percent of Women Who Misperceived Weight Category by Actual Body Mass Index (BMI) Weight Category, 2005-2009



Source: California Women’s Health Survey, 2009

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in less educated vs. more educated overweight women (42.3 percent vs. 26.1 percent, respectively). In contrast, among underweight women, high school education level was not related to misperceptions about weight.

- Obese and overweight women from low income households were more likely to underestimate their weight than were women from higher income households. Among obese women, 9.6 percent of those at or below 130 percent of the federal poverty level (FPL) underestimated their weight status to be about right or underweight vs. 5.1 percent of those between 131 percent and 185 percent of the FPL, and 2.5 percent of those with household income more than 185 percent of the FPL.³
- Among underweight women, 65.3 percent of those living in high income households \geq 185 percent of the FPL overestimated their weight status as about right or overweight, as did 55.5 percent of those living in households with income \leq 130 percent of the FPL; however, the difference was not statistically significant.

- 1 Kuchler F, Variyam JN. Mistakes were made: misperception as a barrier to reducing overweight. *Int J Obes Relat Metab Disord.* 2003;27(7):856-861.
- 2 Zapka J, Lemon SC, Estabrook B, Rosal MC. Factors related to weight loss behavior in a multiracial/ethnic workforce. *Ethn Dis.* 2009;19(2):154-160.
- 3 Among obese and among overweight women, rates were significantly different for any pairing of the poverty level categories.
- 4 Paeratakul S, White MA, Williamson DA, Ryan DH, Bray GA. Sex, race/ethnicity, socioeconomic status, and BMI in relation to self-perception of overweight. *Obes Res.* 2002; 10(5):345-350.

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