



CWHS

Data Points

RESULTS FROM THE CALIFORNIA WOMEN'S HEALTH SURVEY

Obesity continues to be a prevalent public health problem. The 2007 national rate for self-reported obesity in adult women in the United States was 24.8 percent.¹ Obesity contributes to several chronic diseases found at disproportionately higher rates among certain race/ethnicities and low-income, less-educated populations.^{2,3} The Cancer Control Branch's Network for a Healthy California is one of several California Department of Public Health programs working in the area of obesity prevention, focusing its efforts on the low-income population participating in or eligible for the Food Stamp Program (FSP).

Core questions in the 2007 California Women's Healthy Survey asked women to self-report height and weight, which were used to calculate the body mass index (BMI), a measure for obesity. Obesity is defined as a BMI greater than or equal to 30. Demographic data and use of the FSP and the Women, Infants, and Children Supplemental Nutrition Program (WIC) were also collected. A six-item U.S. Department of Agriculture food security scale was also used to classify women into three groups: food secure (i.e., having access at all times to enough food for an active healthy life); food insecure without hunger; or food insecure with hunger.

Only the 4,667 non-pregnant women who were post-partum one year or more were included in this analysis. The relationship between sociodemographic variables and obesity was initially examined for statistical significance using bivariate statistics. Regression analysis was subsequently

performed to adjust for multiple confounding factors. Responses were weighted in these analyses by age and race/ethnicity to reflect the 2000 California adult female population.

The overall obesity rate among California women in 2007 was 24.3 percent. Obesity prevalence varied significantly by respondents' demographic characteristics, household income federal poverty level (FPL), food insecurity, and participation in the FSP or WIC.

- The lowest rates of obesity were among the youngest and oldest women (ages 18-24 at 16.5 percent and ages 65+ at 19.3 percent) than ages 25-34 (26.5 percent), ages 35-44 (24.2 percent), ages 45-54 (28.4 percent), and ages 55-64 (29.2 percent; $p < .0001$).
- The highest rates of obesity were among African American/Black women (35.7 percent) and Hispanic women (33.4 percent), than White women (19.8 percent) and Asian/Other women (13.9 percent; $p < 0.001$).
- The prevalence of obesity was also associated with educational level (see Figure 1). The prevalence of obesity was lowest among college graduates (15.7 percent) than women with some college (24.9 percent), high school graduates (24.6 percent), and women with less than a high school education (38.2 percent; $p < .0001$).

Disparities in Prevalence of Obesity Among California Women, 2007

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Public Health Message:

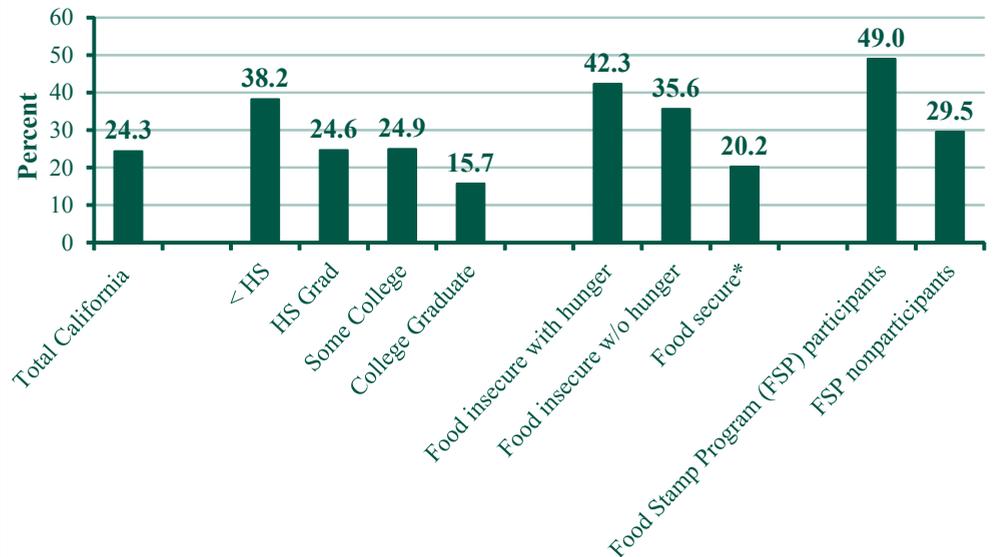
Although cross-sectional studies cannot determine causality, disparities in race/ethnicity, socioeconomic status, and education are interrelated, cross-cutting factors that are strongly associated to obesity. Additionally, women who were food insecure and those who were receiving food stamps were at significantly greatest obesity risk. Findings point to the importance of employing a multifaceted public health approach to address disparities in obesity prevalence.

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Figure 1 **Obesity Prevalence Among California Women, by Education and Poverty-Related Factors, 2007**

N = 4667



*Food secure - having access, at all times to enough food for an active healthy life

Source: California Women's Health Survey, 2007

- Poverty-related factors were highly associated with obesity. Women from households with income reported as less than or equal to 130 percent of the FPL had an obesity prevalence rate of 32.8 percent; those at 131 percent to 185 percent of the FPL, had a rate of 30.1 percent, and those with income above 185 percent of the FPL had a rate of 19.9 percent ($p < .0001$).
- Women from households with reported income at or above 400 percent of the FPL (16.2 percent) were nearly half as likely to be obese as women with income below that level (29.0 percent; $p < .0001$).
- The prevalence of obesity among food insecure women with hunger was 42.3 percent, among food insecure women without hunger 35.6 percent, and among food secure women 20.2 percent. Food insecure women had a combined prevalence rate of 38.2 for obesity ($p < .0001$).
- Women who participated in a major supplemental food program within the past 12 months were more likely to be obese than income-eligible non-participants.⁴ Among women meeting the income-eligibility criterion for the FSP, participants had an obesity prevalence of 49.0 percent, while nonparticipants at this income level had a 29.5 percent rate. Among those meeting the criterion for WIC, participants had a 38.0 percent prevalence rate while nonparticipants at the same income level had a 31.3 percent rate ($p < .05$).
- Looking only at WIC-eligible⁵ women, significant differences were observed by assistance program combinations, with obesity rates of 49.6 percent for women participating in both the FSP and WIC, 47.5 percent for FSP participation alone, 32.6 percent for WIC participation alone, and 26.4 percent for eligible women who did not participate in either program during the past year ($p < .0001$).

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- When poverty level, food insecurity, use of supplemental food programs, education, race/ethnicity, and age were included in a logistic regression model, after taking into account the remaining variables, FPL and WIC were no longer statistically significant. When controlled for the confounders, FSP participants were 2.3 times more likely to be obese than non-FSP users with income less than or equal to 130 percent of the FPL; and food insecure women were 1.6 times more likely than food secure women to be classified as obese. Women who had not graduated from college were 1.6 to 1.9 times more likely to be obese than those who had attained college degrees. White women were 1.7 times, Hispanic women were 2.3 times, and African American/Black women were 3.2 times more likely to be obese than women of Asian/Other background.
- 1 Galuska DA, Gillespie C, Kuester SA, Mokdad AH, Cogswell ME, Philip CM. State-specific prevalence of obesity among adults --- United States, 2007. *MMWR*. July 18, 2008;57(28):765-768.
 - 2 Atiedu AA, Network for a Healthy California, Health Disparities Action Team. Issue paper: Health disparities in California. Sacramento, CA. California Department of Public Health, Cancer Prevention and Nutrition Section; 2008.
 - 3 U.S. Department Of Health And Human Services. Summary health statistics for U.S. adults: National Health Interview Survey, 2007. Data from the National Health Interview Survey. National Center for Health Statistics. *Vital Health Stat*. 2008;10(240):1-169.
 - 4 Income-eligibility criterion for FSP participation is less than or equal to 130 percent FPL, while income-eligibility criterion for WIC is less than or equal to 185 percent FPL.
 - 5 For WIC participation, only women taking part on behalf of their children less than five years old were included; since women who were pregnant or up to one year post-partum had been eliminated from the sample.

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