



Data Points

RESULTS FROM THE CALIFORNIA WOMEN'S HEALTH SURVEY

Being overweight or obese increases the risk of hypertension, diabetes, and coronary heart disease as well as endometrial, breast and colon cancer.¹ For women of reproductive age, being overweight or obese poses additional health risks during pregnancy such as gestational diabetes, pregnancy-induced hypertension and eclampsia, giving birth to an abnormally large baby (macrosomia), or having an induced labor or cesarean delivery. Moreover, babies born to women who are overweight or obese prior to conception are less likely to be breastfed and are at increased risk for being overweight themselves, for infant death, and for certain birth defects.²⁻⁴

Data on weight status among women of reproductive age from the California Women's Health Survey (CWHS) point to

an increased trend in combined overweight and obesity over the past ten years, from 38.8 percent in 1997 to 49.1 percent in 2007.⁵

The CWHS asked women about their pregnancy status and intent, their height and weight for body mass index (BMI) calculations, the number of children born to them, and demographic questions. For the current analysis, data from the 2006 and 2007 surveys were combined and limited to women ages 18-44 (n=4,237). Pregnancy intent was measured with the question: "Are you trying to become pregnant?" Weight status was categorized into four groups based on the National Heart, Lung and Blood Institute guidelines⁷: *underweight* (BMI of <18.5), *healthy weight* (BMI of 18.5 – 24.9), *overweight* (BMI of >25 – 29.9), and *obese* (BMI of >30).

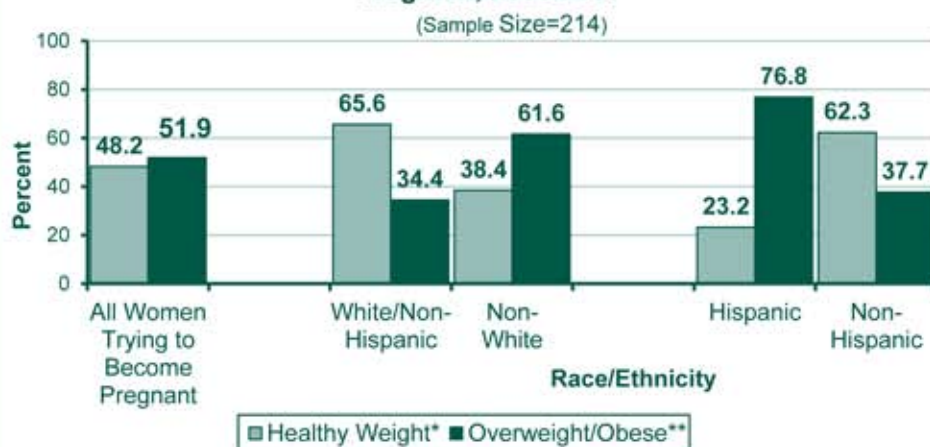
Overweight and Obesity Among California Women Trying to Become Pregnant, 2006-2007

California Department of Public Health
Maternal Child and Adolescent Health Division
Cancer Control Branch

Public Health Message:

Since over 40 percent of births in California are unplanned,⁵ the Maternal, Child and Adolescent Health (MCAH) Division encourages all women of reproductive age to maintain a healthy weight to minimize these chronic illnesses and pregnancy-related health risks. MCAH programs encourage women to enter pregnancy at an optimal weight, gain appropriate weight during pregnancy, return to a healthy postpartum weight, and breastfeed, all of which may reduce the risk of childhood obesity.

Figure 1 **Combined Overweight and Obesity vs. Healthy Weight Among California Women Ages 18-44 Trying to Become Pregnant, 2006-2007**



*Healthy weight includes women with a BMI of 18.5 - 24.9; underweight women (BMI <18.5) excluded⁶

**Overweight/Obese includes women with a BMI of >25

Source: California Women's Health Survey, 2006-2007

Issue 6, Fall 2010, Num. 21

*Overweight and Obesity
Among California Women
Trying to Become
Pregnant, 2006-2007*

California Department of Public Health
Maternal Child and Adolescent Health Division
Cancer Control Branch

Women with missing or unknown BMI or pregnancy intent responses (n=251) were excluded from our analyses. All responses were weighted in these analyses by age and race/ethnicity to reflect the 2000 California adult female population.

Among all non-pregnant women of reproductive age

- A little over 3 percent (3.1 percent) were underweight and 48.6 percent were at a healthy weight, while 25.4 percent were considered overweight and an additional 22.9 percent were obese.

Among women trying to become pregnant (N=214; see Figure 1)⁸

- Compared with all non-pregnant women of reproductive age, the prevalence of being overweight and obese combined was similar among the subgroup of women who were trying to become pregnant (48.2 percent versus 51.9 percent). Obesity, however, was notably higher among women trying to become pregnant (30.2 percent) than all non-pregnant women (22.9 percent).
- Non-White women had a significantly higher prevalence of combined overweight and obesity (61.6 percent) than White/non-Hispanic women (34.4 percent; chi-square test $p < 0.0001$).⁹
- Hispanic women had twice the prevalence of combined overweight and obesity (76.8 percent) compared with non-Hispanic women (37.7 percent; chi-square test $p < 0.0001$).

- Combined overweight and obesity increased with parity levels; for never pregnant women, the prevalence was 47.0 percent, among women who had given birth to one child the prevalence was 52.4 percent, and among women who had given birth to two or more children the prevalence was 62.9 percent (Mantel-Haenszel chi-square test, $p < 0.0001$).

Data from this analysis indicate many California women trying to become pregnant are not at an optimal preconception weight and those most likely to be overweight or obese are Hispanic women and other women of color. In addition, each subsequent pregnancy places women at increased risk for overweight and obesity.

Factors that influence overweight/obesity rates among California women trying to become pregnant are the same as those identified for U.S. women of reproductive age in several population-based studies.¹⁰⁻¹³ Given the high proportion of unintended pregnancies in California, promoting healthy weight is warranted among all women of reproductive age for the sake of their own health as well as for the health of any unplanned pregnancy.

1 Health and Human Services, Centers for Disease Control and Prevention. Division of Nutrition and Physical Activity, National Center for Chronic Disease Prevention and Health Promotion. Overweight and Obesity: Health Consequences. <http://www.cdc.gov/nccdphp/dnpa/obesity/consequences.htm>. Accessed September 2008.

*Overweight and Obesity
Among California Women
Trying to Become
Pregnant, 2006-2007*

California Department of Public
Health
Maternal Child and Adolescent
Health Division
Cancer Control Branch

- 2 Amir LH, Donath S. A systematic review of maternal obesity and breastfeeding intention, initiation and duration. *BMC Pregnancy and Childbirth*. 2007;7:9.
- 3 Thompson DR, Clark CL, Wood B, Zeni MB. Maternal Obesity and Risk of Infant Death Based on Florida Birth Records for 2004. *Public Health Rep*. July-August 2008;123:487-493.
- 4 Kent H, Skala J, Desmarais J. Promoting Healthy Weight among Women of Reproductive Age. Washington, DC. Association of Maternal and Child Health Programs. January 2006.
- 5 California Department of Public Health, Maternal Child and Adolescent Health Division. Preconception Health: selected measure, California, 2005. October 2007. <http://www.cdph.ca.gov/HealthInfo/healthyliving/childfamily/Documents/MO-PreconceptionHealthOct07.pdf>. Accessed June 2008.
- 6 Unpublished data from the Department of Public Health, Cancer Control Branch, 2008.
- 7 National Institute of Health. *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: the Evidence Report*. NIH Publication No. 98-4083. Washington, DC. National Institute of Health; 1998.
- 8 Women who were trying to become pregnant and were considered "underweight" (those with a BMI of 18.5 and below) represented a very small group (n=3), and were excluded for this analysis.
- 9 Non-white women include those who reported their race/ethnicity as one of the following: African American/Black, Hispanic and Asian/Other.
- 10 Sugerman SB, Adkins S, Foerster SB, Hoegh H. Body weight and obesity-related risk factors and relationships among California women: Findings from the California Women's Health Survey, 1997-2002. *Women's Health Findings from the California Women's Health Survey, 1997-2003. California.2006*. <http://www.cdph.ca.gov/programs/owh/pages/default.aspx>. Published May 2006. Accessed June 2008.
- 11 Centers for Disease Control and Prevention. State-Specific Prevalence of Obesity among Adults --- United States, 2007. *MMWR*. 2008;57(28):765-768.
- 12 Ogden CL, Carroll MD, Curtin LR, McDowell MA, Tabak CJ, Flegal KM. Prevalence of Overweight and obesity in the United States, 1999-2004. *JAMA*. 2006;295:1549-1555.
- 13 Kim SY, Dietz PM, England L, Morrow B, Callaghan WM. Trends in pre-pregnancy obesity in nine states, 1993-2003. *Obes* 2007;15(4):986-993.

Submitted by: Aldona Hermdorf, M.P.H. and Suzanne Haydu, R.D., M.P.H., California Department of Public Health, Maternal, Child and Adolescent Health Division, and Patrick Mitchell, Dr.P.H. and Sharon Sugerman, M.S., R.D., California Department of Public Health, Cancer Control Branch and Public Health Institute, (916) 552-8497, Aldona.Hermdorf@dhcs.ca.gov