## **Obesity**

## Why It Is Important

Obesity has increased greatly in the last 20 years and is significantly associated with diabetes, high cholesterol, high blood pressure, asthma, arthritis and overall poor health status. 41,42 Obesity is defined using a Body Mass Index (BMI) of 30.0 or greater. A normal BMI is 18.5 to 24.9 and a person is overweight if their BMI is 25.0 to 29.9.43 BMI for adults is calculated in the following way:

BMI = 
$$\left(\frac{\text{Weight in Pounds}}{\text{(Height in inches)}}\right) \times 703$$

While a BMI of 30 or greater strongly suggests that an individual will be at a higher risk for the aforementioned obesity-related diseases, a person's waist circumference is a more powerful predictor of cardiovascular disease risk than any other single measure of obesity.<sup>44</sup> Waist circumferences greater than or equal to 40 inches for men and greater than or equal to 35 inches for women are very predictive of heightened cardiovascular disease risk.<sup>45</sup>

Although waist circumference is the best indicator of cardiovascular disease risk associated with obesity, the BMI continues to be the most commonly accepted measure of obesity status in general. The figures below show BMI data only, as data on waist circumference are not available for Stanislaus County and California at this time.

Further, linked to obesity is metabolic syndrome, which is a combination of medical disorders that increase the risk of developing cardiovascular disease and diabetes. Metabolic syndrome is diagnosed when a person has at least three of the following heart disease risk factors: excessive fat in the stomach area ("apple shaped"), high blood levels of triglycerides (a type of fat in the blood), low blood levels of high-density cholesterol (HDL, a protective blood fat-protein), high blood pressure, and high blood sugar. Metabolic syndrome affects a large number of people, and prevalence rises with increasing obesity, particularly abdominal obesity.<sup>46</sup> Almost 25% of U.S. residents currently have metabolic syndrome, and the numbers continue to grow.<sup>47</sup>

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<sup>&</sup>lt;sup>41</sup> Centers for Disease Control and Prevention (CDC), Overweight and Obesity: Economic Consequences, 2004.

<sup>&</sup>lt;sup>42</sup> Centers for Disease Control and Prevention (CDC), Overweight and Obesity: Health Consequences, 2004.

<sup>&</sup>lt;sup>43</sup> Centers for Disease Control and Prevention (CDC), Overweight and Obesity: Defining Overweight and Obesity, 2005.

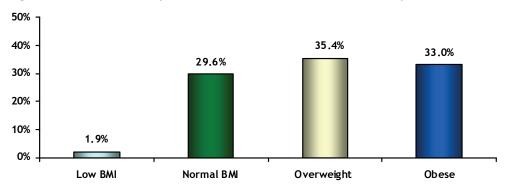
<sup>&</sup>lt;sup>44</sup> Lakka et al., Abdominal Obesity is Associated with Increased Risk of Acute Coronary Events in Men, 2002.

<sup>&</sup>lt;sup>45</sup> The Journal of the American Medical Association, National Cholesterol Education Program (NCEP) ATP II, 2001.

<sup>&</sup>lt;sup>46</sup> Grundy et al., AHA Scientific Statement: Diagnosis and Management of the Metabolic Syndrome Diagnosis and Management of the Metabolic Syndrome, 2005.

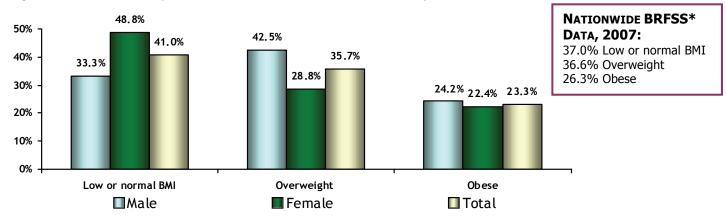
<sup>&</sup>lt;sup>47</sup> U.S. Department of Health & Human Services, National Institute of Health (April 2007), *Metabolic Syndrome*, Retrieved March 2008 from, http://www.nhlbi.nih.gov/health/dci/Diseases/ms/ms\_whatis.html.

Figure 104: † Body Mass Index of Stanislaus County Adults, 2008



Source: Applied Survey Research, Stanislaus County Community Health Assessment Survey, 2008. N=2,608

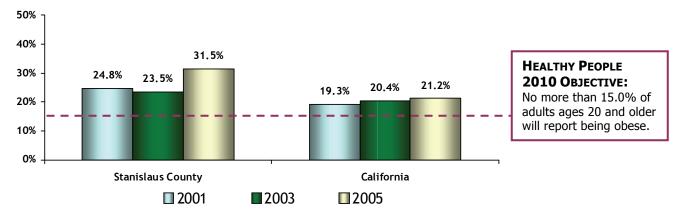
Figure 105: 🛍 Body Mass Index of California Adults, by Gender, 2007



Source: Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, 2008.

Male N: 2,134; Female N: 3,335; Total N: 5,469.

Figure 106: Percentage of Adults, Ages 18 and Older, Who Are Obese



Source: 2001, 2003, and 2005 California Health Interview Survey. Stanislaus County 2001 N: 305,000; 2003 N: 335,000; 2005 N: 352,000. California 2001 N: 23,852,000; 2003 N: 25,597,000; 2005 N: 26,388,000.



New data not available

<sup>\*</sup> Behavior Risk Factor Surveillance System.

## **Data Summary**

Less than one-third (30%) of respondents to the Stanislaus County Community Health Assessment Survey had a normal Body Mass Index (BMI). Thirty-five (35%) of respondents were overweight, and 33% were obese. The Healthy People 2010 Objective is to not have more than 15% of adults ages 20 and older report being obese. Neither Stanislaus County nor California met that objective.

The percentage of obese adults increased in both Stanislaus County and California from 2001 to 2005 according to CHIS. Moreover, in each survey year, Stanislaus County had higher percentages of obese adults than California. In 2005, 32% of County adults were obese compared to 21% of California adults. When broken down by gender, data showed that a greater proportion of males (67%) than females (51%) were overweight or obese in California.

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