

**Shields M., Carroll M.D., Ogden C.L.  
Adult Obesity Prevalence in Canada  
and the United States. NCHS Data  
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There is rarely consensus among scientists and public policy experts. Nonetheless, an exception to this “rule” is the uncontested reality that obesity rates worldwide have reached unacceptable levels and that if this trend is not reversed, health, economic, and societal consequences will soon be stretched beyond capacity. Among the first areas to experience increasing rates of obesity have been wealthy, industrialized nations. However, not all such nations have experienced similar increases, and understanding these differences might provide valuable information as to how unhealthy obesity trends might be curbed in nations not yet beginning to experience this potential health crisis. To shed light on this critical issue, researchers at the U.S. National Center for Health Statistics (a component of the U.S. CDC) recently compared and contrasted current obesity prevalence rates among residents of Canada and the United States. They also reported changes in these rates over the past 2 decades.

**Data sources and definitions**

Estimates of U.S. obesity rates were drawn from 2 surveys that are part of the NHANES, specifically, NHANES III (1988–1994) and NHANES 2007–2008. These surveys were designed to be representative of all ages of the noninstitutionalized, civilian population and conducted in a way that allowed oversampling of population subgroups (e.g. African Americans) of particular interest. Estimates of Canadian obesity rates were based on data from the 1986–1992 Canadian Heart Health Survey and cycle 1 (2007–2009) of the Canadian Health Measures Survey, the latter of which is very similar to NHANES in design.

For all surveys, data were adjusted for sample weights (accounting for differential probabilities of selection, non-response, and noncoverage) and age. BMI (kg/m<sup>2</sup>) was used to categorize obesity into the following severity categories: obesity class I: 30.0–34.9 kg/m<sup>2</sup>; obesity class II: 35.0–39.9 kg/m<sup>2</sup>; and obesity class III: 40 kg/m<sup>2</sup>. To put these categories into perspective, a person with a height of 5 feet, 9

inches would be categorized as having class I, II, or III obesity if he/she weighed 203, 236, or 270 pounds.

**Current obesity rates**

The first questions addressed were whether obesity rates currently differ between countries, and if so, whether certain segments of the population are responsible for these differences. Indeed, the overall obesity rates were found to be 24.1 and 34.4% in Canada and the United States, respectively ( $P < 0.05$ ), with each class of obesity being higher in Americans than Canadians. Perhaps most alarming was the finding that class III obesity is nearly twice as prevalent in the United States as in Canada (6.0 vs. 3.1%, respectively;  $P < 0.05$ ). Similar trends were found when men and women were analyzed separately.

Further investigation revealed that differences between nations were much smaller when only non-Hispanic white individuals were included. The authors concluded that this finding was due to different racial distributions within each nation. Specifically, the majority of the nonwhite population in the United States is black or Hispanic (a group with high obesity rates), whereas the largest nonwhite group in Canada is comprised of East/Southeast Asian persons (a group with relatively low obesity rates).

**Changes in obesity rates**

The next issue addressed was whether changes in obesity prevalence in the last 20 y have been similar in the 2 countries. Data revealed that obesity rates have risen significantly in both nations and that the magnitudes have been fairly comparable. Overall, rates increased 10 and 12 percentage points in Canadian and U.S. men, respectively. Among women, the increase was 8 percentage points in Canada and 10 percentage points in the United States.

When data were considered as a whole, patterns of increase were similar across the lifecycle. However, older men (60–74 y) and younger women (20–39 y) experienced the greatest increases (17.5 and 12.4 percentage points, respectively). There were also important differences between nations in terms of prevalence estimates at both time points for young (20–39 y) and middle-aged (40–59 y) women; current values for Canadian women were similar to those of American women 20 y earlier.

**Summary**

This brief report provides for the first time important data characterizing obesity rates (and changes thereof) for American and Canadian residents over the past 2 decades. Key findings are: 1) current prevalence of obesity is lower in Canada than in the United States, especially among non-Hispanic white individuals; 2) obesity rates have increased in both countries; and 3) obesity rates among young and middle-aged Canadian women are now similar to those observed in U.S. women 20 y ago. Clearly, preventing Canadian

obesity prevalence rates from reaching those of the United States and reversing unhealthy U.S. obesity trends will continue to be major public health priorities in the decades to come.

**For more information**

Free copies of the full report as well as summaries and other related information are available at <http://www.cnpp.usda.gov/DGAs2010-DGACReport.htm>.