

The Implications of Aging and Diversification of Population on Overweight and Obesity and the Economic Burden Associated with Overweight and Obesity in the U.S. from 2000 to 2050

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Abstract

Overweight and obesity are major health concerns in contemporary America. The percentage of the population that is considered overweight and obese has increased substantially over the past years for both adults and children. Approximately 133.6 million American adults, or 66.0% of all adults are either overweight or obese. Obesity rates have more than doubled since 1990, increasing from 11.6% in 1990 to 26.3% in 2007. This increase is of substantial concern because of the health risks associated with overweight and obesity. Overweight and obesity are related to increased risk for heart disease, type 2 diabetes, and a number of other diseases. Approximately, 300,000 to 400,000 deaths each year in the U.S. are attributable to overweight and obesity.

In addition to observing differences in obesity for males and females, higher body mass indices tend to be more prevalent among minority population members due to an association between low socioeconomic status and obesity and a variety of other factors such as historical and cultural aspects. For example, in 2001 23.7% of Hispanic and 31.3% of Blacks were either overweight or obese compared to 19.6% of Anglo. The prevalence rates for age group 65 and older for all race/ethnicity groups are higher compared with younger age groups. In the U.S., the proportion of Anglo population decreased from 69.2% to 63.8% while the proportion of Hispanic population increased from 12.5% to 16.3% from 2000 to 2010. The U.S. population is projected to become a majority minority by 2042 with approximately 30% Hispanics and about 12% Blacks by midcentury.

This paper examines the implications of future demographic changes on overweight and obesity and costs associated with overweight and obesity in the U.S. Decomposition techniques are used to examine the relative impacts of population growth, aging and changes in the

racial/ethnic composition of the population on increases in the prevalence and related costs of overweight and obesity in U.S., an important input for the formulation of nationwide health policies.

Methods

The analysis was performed in four stages. The first stage involved the preparation of detailed projections of the population by age, sex, and race/ethnicity in Texas. The second stage involved the derivation of age, sex and race/ethnicity-specific rates for normal weight, overweight, and obesity and multiplication of these rates by the number of persons in the projected population cohorts. The third stage involved the computation of direct and indirect costs associated with overweight and obesity for the base year and multiplication of these costs by the projected number of overweight and obese population to obtain the projected costs associated with overweight and obesity in Texas. The fourth stage involved the computation of decomposition effects due to changes in population growth, age structure, and race/ethnicity composition. The procedures followed in each of these stages are described in the following sections.