
CONTINUOUS AND ROBUST MEASURES OF THE OVERWEIGHT EPIDEMIC: 1971–2000*

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This article considers alternate measures of the overweight epidemic that are more robust to measurement error, continuous in the body-mass index (BMI) at the overweight threshold, and sensitive to changes in the BMI distribution. The measures suggest that prevalence rates may understate the severity of the overweight problem. Since 1971, the prevalence of overweight has increased by 37%, while the distribution-sensitive measure has increased by 173%. Furthermore, although Hispanics have the highest prevalence of overweight, the distribution-sensitive measures reveal that overweight Hispanics exceed the overweight threshold by the smallest proportion (21%), whereas overweight non-Hispanic blacks exceed the threshold by 33%, on average.

The National Center for Health Statistics (2002) estimated that in 1999, 61% of U.S. adults were overweight (including those who were obese).¹ The list of negative health implications from being overweight or obese is long and includes being at an increased risk of morbidity from hypertension; stroke; Type 2 diabetes; osteoarthritis; respiratory problems; and breast, prostate, and colon cancers.² Himes (2000) found that for elderly women, there is a clear association between being overweight and having difficulty with essentially all activities of daily life, such as bathing and dressing (excluding eating). The Surgeon General stated that 300,000 Americans die annually from illnesses that are caused or worsened by excessive body weight and projected that being overweight could soon overtake tobacco usage as the primary cause of preventable death in the United States (U.S. Department of Health and Human Services 2001).

The economic implications of being overweight have been somewhat less researched, but are seemingly also stark. In terms of the public costs of this health issue, the U.S. Department of Health and Human Services (2000) estimated that in 1995, the economic costs from medical expenses and lost productivity were \$99 billion. In terms of private costs of being overweight, Pagan and Davila (1997) and Register and Williams (1990) reported that overweight women receive significantly lower wages than women who are not overweight with otherwise similar characteristics.

Despite the evidence that the American public faces dire consequences from being overweight, there appears to be significant skepticism in the popular press and the public as to the importance of this public health issue. Oliver and Lee (2002) examined public attitudes toward the health consequences of being overweight and found that most

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1. This estimate was based on data from the 1999 sample of the National Health and Nutrition Examination Survey (NHANES). The larger 1999–2000 NHANES sample indicates that the prevalence of overweight and obesity in U.S. adults (aged 20–75) is 64%.

2. See National Heart, Lung, and Blood Institute (1998: chaps. 1 and 2) for a more complete list of health problems that are associated with being overweight and for citations for each of the listed health problems.