

Obesity and Overweight among Adults in Rhode Island

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The proportion of U.S.¹ and Rhode Island adults who are overweight or obese has grown significantly over the past 15 years. This increase is alarming due to the anticipated increases in diseases associated with overweight and obesity^{2,3} and growth in the already high associated health care costs and loss of productivity.⁴ This report presents Rhode Island survey data on obesity and associated risk factors.

Methods. Obesity is defined as having a body mass index (BMI, defined as weight divided by the square of height measured in kg/m²) at or above 30, and overweight is defined as having a BMI between 25 and 30. Obesity and overweight proportions were calculated using heights and weights reported by respondents to the Rhode Island Behavioral Risk Factor Survey (RIBRFS).⁵ The RIBRFS is part of a state-based national telephone survey of randomly selected samples of adults aged 18 or older; the national BRFS is the source of the US data presented here.⁶ For analysis, the Rhode Island survey data are weighted to be representative of the state's adult population on the basis of age, sex and race. Between 1991 and 2005, the annual number of respondents to the RIBRFS ranged from 1800 to 4500. During 2002-2004, the period for which most of the analysis was performed, there were 11,895 respondents to the RIBRFS, or approximately 330 per monthly panel.

Results. Figure 1 shows the rise in the proportion of Rhode Island adults who were overweight or obese during 1991-2005. Although the percentages of both obese and overweight Rhode Islanders rose during this period, the percentage of obese adults doubled from 10% to 21%. During 2002-2004, 37.8% of Rhode Island adults aged 18 or older (approximately 292,000) were overweight and

18.7% (about 144,000) were obese. More than half (56.5%) of all adults in the state were overweight or obese in 2002-2004. This compares with 37% overweight and 22% obese reported for the United States in 2002. The actual proportions that are obese and overweight are likely to be higher because many adults under-report their weight when asked. (Actual measures of height and weight for Rhode Island adults are not available. However, results from a national study in 2003-2004 that weighed and measured adults ages 20 and older found 66.3% were overweight or obese.⁷)

Which Adults are at Risk? During 2002-2004, Rhode Island men were more likely to be either overweight (47.3%) or obese (19.2%) compared with Rhode Island women (28.8% overweight and 18.1% obese). Although Rhode Island men exceeded men nationally in the proportion who were overweight (47.6% vs. 44.7% in 2002), they were less likely to be obese (19.7% vs. 23.1% in 2002). Women in Rhode Island were less likely to be overweight or obese than women nationally (45.7% vs. 50.9% in 2002).

Of the approximately 436,000 Rhode Island adults who are overweight or obese, the vast majority (84.1%), about 367,000 persons, are White non-Hispanics. However, a higher proportion of Hispanic Rhode Islanders is overweight or obese (62.2%) than White non-Hispanic (56.1%) and Black non-Hispanic (55.9%) Rhode Islanders.

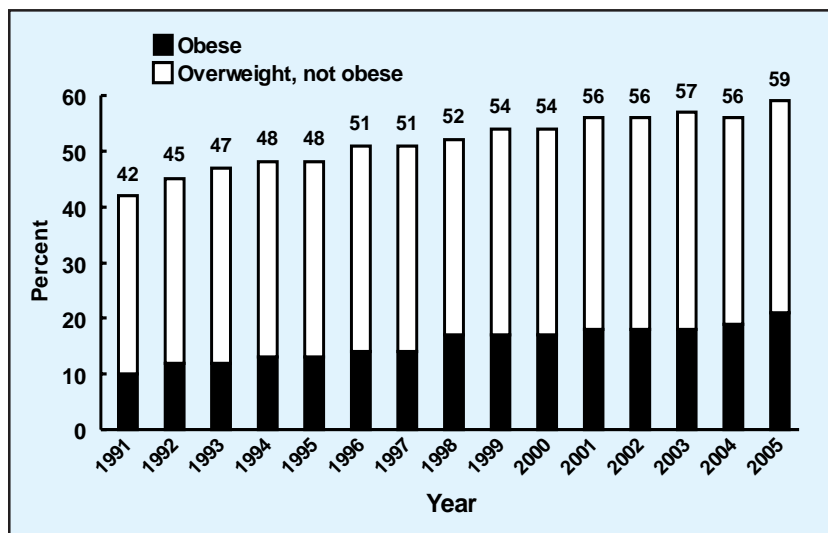


Figure 1. Obesity and Overweight, Ages 18 and Older, by Year, Rhode Island, 1991-2005

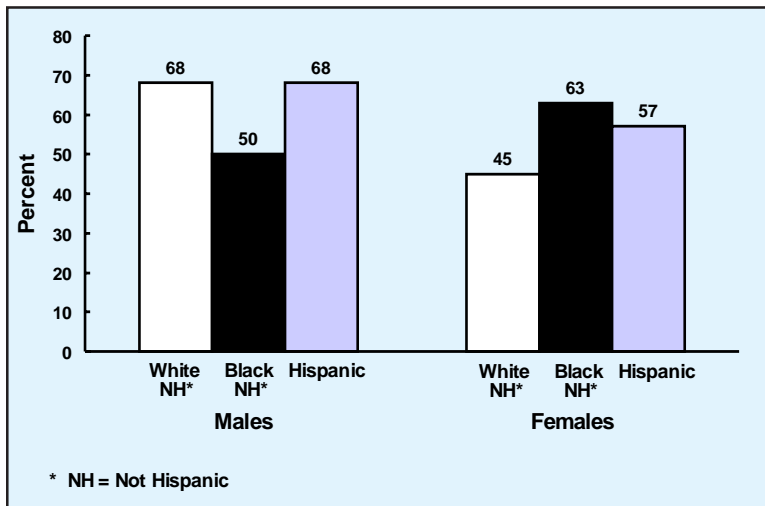


Figure 2. Obesity and Overweight, Ages 18 and Older, by Sex and Race/Ethnicity, Rhode Island, 2002-2004

There are also considerable disparities between racial/ethnic groups when males and females are considered separately. (Figure 2) White non-Hispanic men (67.6%) and Hispanic men (67.9%) are more likely to be overweight or obese than Black non-Hispanic men (49.8%). White non-Hispanic women (45.4%) are less likely to be overweight or obese than either Black non-Hispanic (63.0%) or Hispanic (56.6%) women. These racial and ethnic disparities have not been adjusted for differences in income or education that might explain some of the differences observed.

Overweight and obesity are more common among women who are less educated (56.8% among those with no college) compared to college graduates (37.1%) and are more common among those with lower annual incomes (57.6% among those with less than \$25,000) compared to those with higher incomes (36.1% among those with incomes at or above \$75,000). While education does not make a difference for men, men with incomes of \$75,000 or above are more likely to be overweight or obese (70.9%) than those with incomes below \$25,000 (62.5%).

Risk Factors for Overweight and Obesity. Nutrition and physical activity are important factors in weight control. Approximately 73% of Rhode Island adults eat fewer than five servings of fruits and vegetables per day (2003),⁵ 63% have soda available at home (2004)⁸ and 21% eat fast food more than once per week (2004).⁸ In addition, 23% of Rhode Islanders report no leisure time physical activity at all (2004).⁵ Obese adults in Rhode Island eat fewer fruits and vegetables, eat more frequent fast food, and are less active than those who are not obese.^{6,8}

Discussion. Adults in Rhode Island are at high risk of overweight and obesity, particularly White and Hispanic men, and both Black and Hispanic women as well as low-income women of all races and ethnicities. Although some Rhode Islanders report adequate leisure time activity and fruit and

vegetable intake, the proportion who do so is clearly not enough to stem the tide of this very important and growing public health problem.

While any discussion of race or ethnicity cannot disentangle the influences of genetics, culture and economic circumstance, Rhode Island communities can be assured that targeting interventions toward low-income families, especially those of color, will likely impact some of the highest risk Rhode Islanders.

The reporting of insufficient fruit and vegetable intake and low physical activity serves as a call to action for families, schools, towns, and the entire state to identify opportunities and find creative ways to motivate Rhode Islanders to eat more nutritiously and to be more active. A population that is more active, less sedentary and eats nutritiously will likely be at lower risk of obesity,

overweight and all associated health conditions.

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