Vermont Data Overview

Behavioral Risk Factor Surveillance System (BRFSS)
Since 1990, Vermont has participated with the Centers for Disease Control and Prevention in the BRFSS, a telephone survey of personal health behaviors including weight in non-institutionalized adult Vermonters 18 years or older. The survey is currently conducted in all 50 states and enables comparison between states and with the nation as a whole. Since this is a telephone survey, the data are self-reported.

Behavioral Risk Factor Surveillance System Data for Vermont Adults 18 Years and Older

All data presented in this section are age standardized to US 2000 population except where noted.

Overweight and Obesity Trends

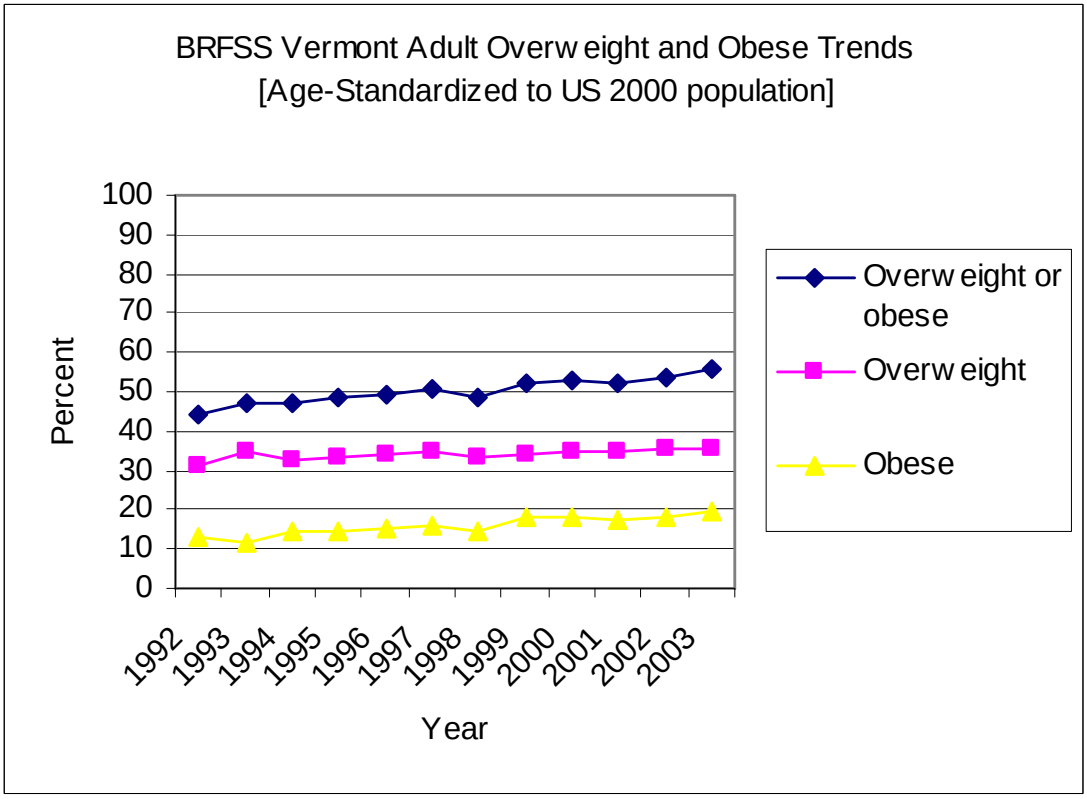


Figure 2

- Over half (55.5 percent) of adult Vermonters 18 years and older were overweight or obese in 2003. In 1992 that number was 44.3 percent.

- From 1992 to 2003 the prevalence of obesity rose by 51 percent from 12.8 percent to 19.3 percent while the prevalence of overweight adults rose 15 percent from 31.1 percent to 35.8 percent.
- Nationally the prevalence of adult obesity rose by 66 percent from 13.7 in 1992 to 22.8 in 2003 while overweight rose 4 percent from 35.3 to 36.7 for the same time period. In 2003, Vermont is not statistically different from the national prevalence of overweight.

Overweight and Obese Trends by Sex

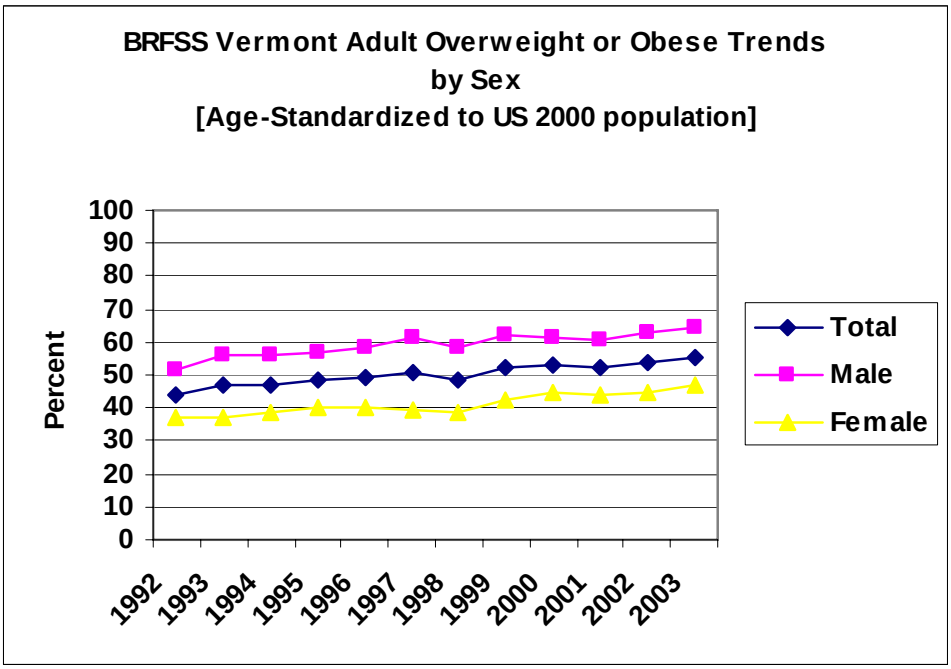


Figure 3

- Figure 3 displays overweight and obesity trends in Vermont by gender since 1992.
- Males are consistently higher than females for the 12 years.
- In 1992 the prevalence of overweight or obese adult Vermont males was 51.6 percent while that for females was 37.1 percent.
- In 2003 the prevalence of overweight or obese adult males rose by 24 percent from 1992 to 64.1 percent while the prevalence of overweight or obese females rose by 26 percent to 46.6 percent.

Class III Obesity Trends

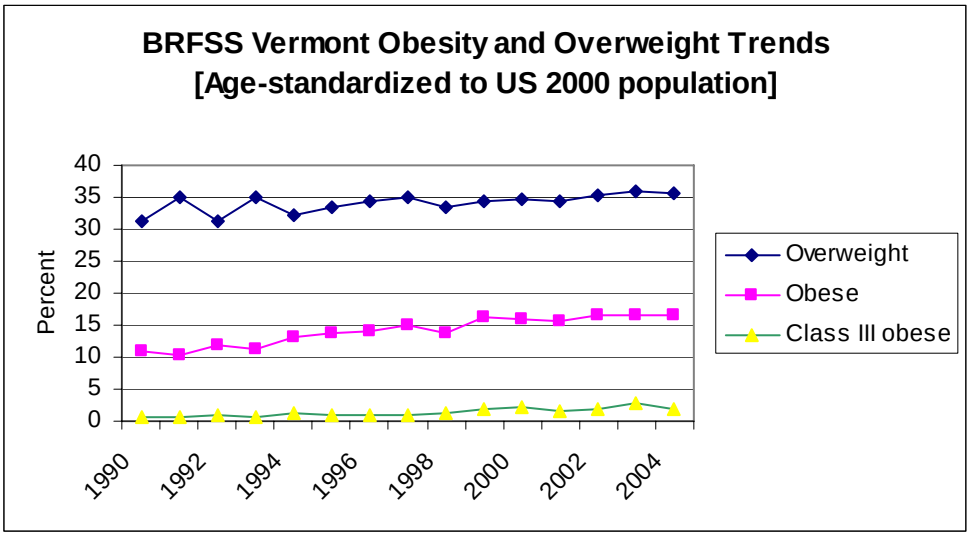


Figure 4

- Class III obesity is rising in Vermont and the US.

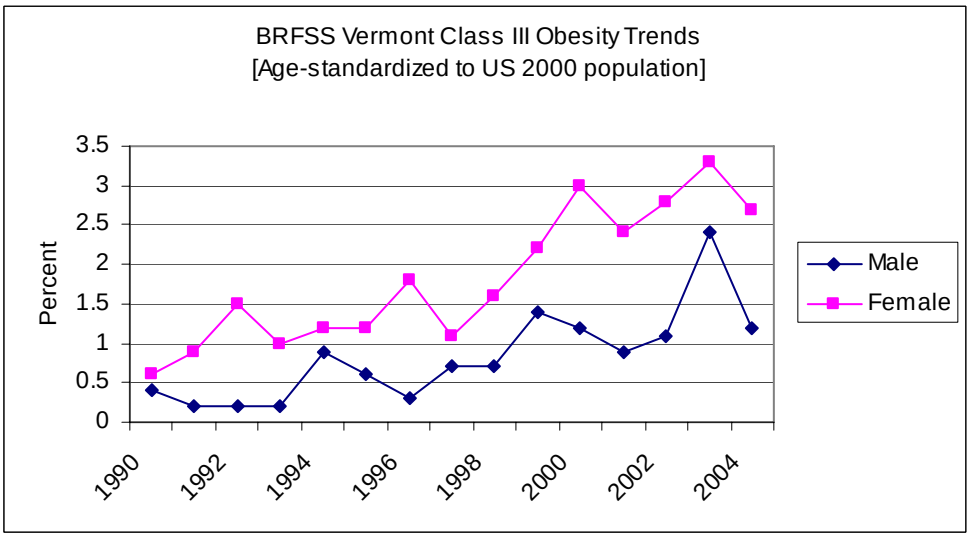


Figure 5

- Vermont women have a higher prevalence than men for class III obesity.
- Class III, or extreme obesity rose by 250 percent for the period 1992 to 2003, from 0.8 percent to 2.8 percent. Although the morbidly obese make up a relatively small percentage of the population, the increase in their prevalence is of concern.

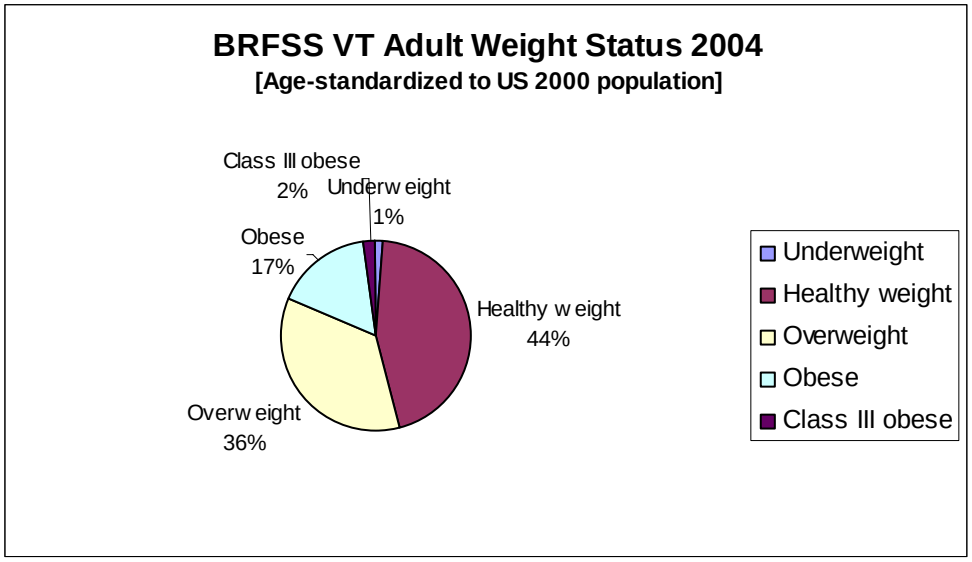


Figure 6

Adult Obesity by Age and Gender 1999-2003

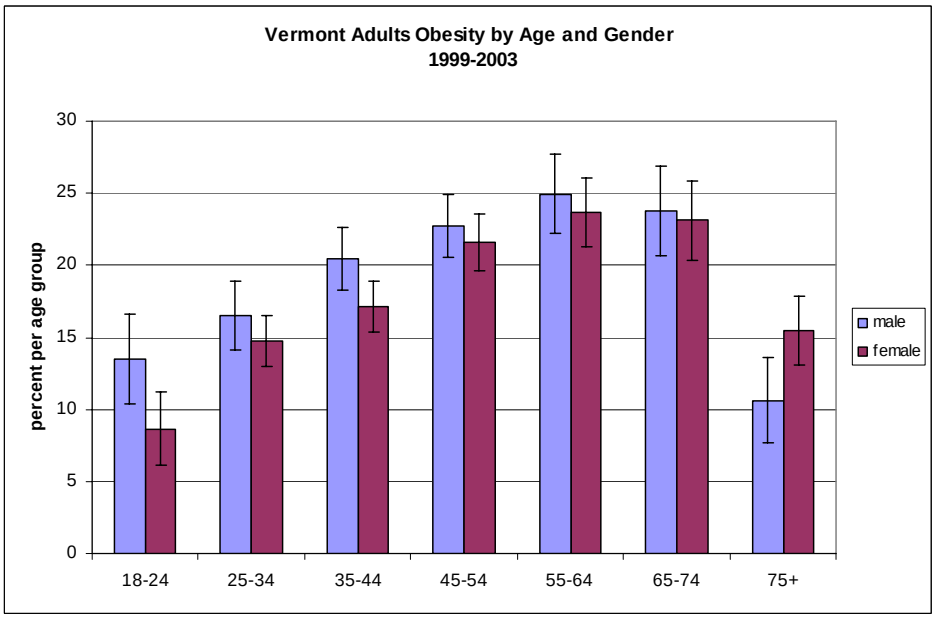


Figure 7

(Source: BMI_03Draft Publication Graph rec'd from C. Dawson 01/14/05)

- Figure 6 shows obesity by age and gender 1999-2003. Although males are higher in all age categories except the oldest at 75 years and above, the difference between males and females within each age category is not statistically significant. The prevalence of both obese and overweight adult Vermonters generally increased with increasing age in both sexes to

a peak (not statistically significant) in the 55-64 age category then decreased in the older age categories.

- National data has indicated that the prevalence of overweight and obesity increases until about age 60 then begins to decline. (17)

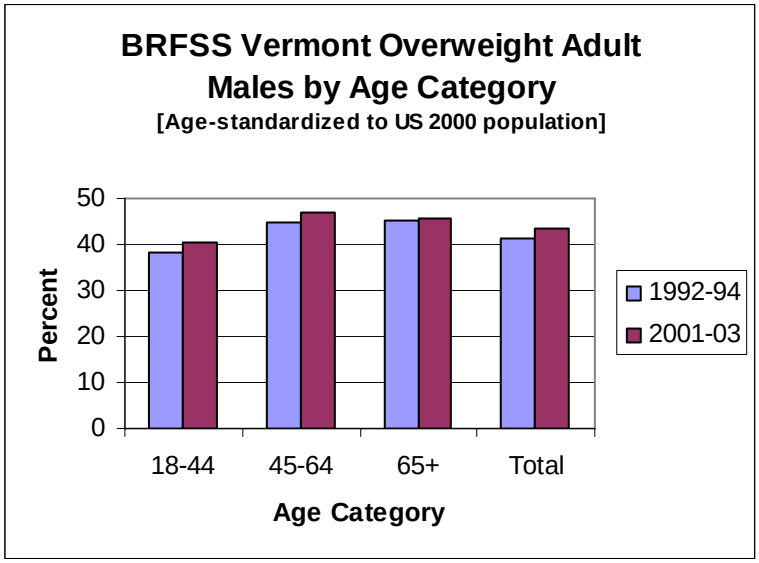


Figure 8

- There was no statistically significant change in the prevalence of overweight males between 1992-94 and 2001-03, but a non-significant increase in prevalence between the two time periods.

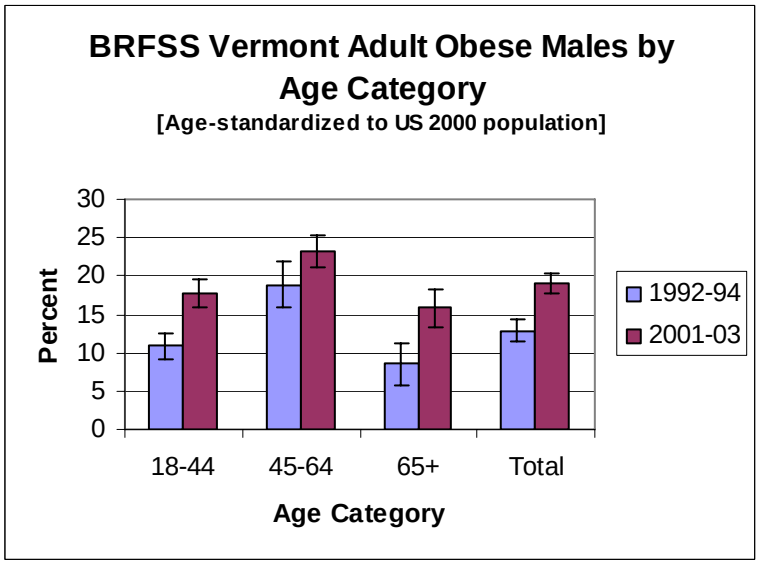


Figure 9

- Between 1992-1994 and 2001-2003, Vermont adult male obesity increased significantly in all age categories except 45-64 year olds, which increased but the increase was not statistically significant.

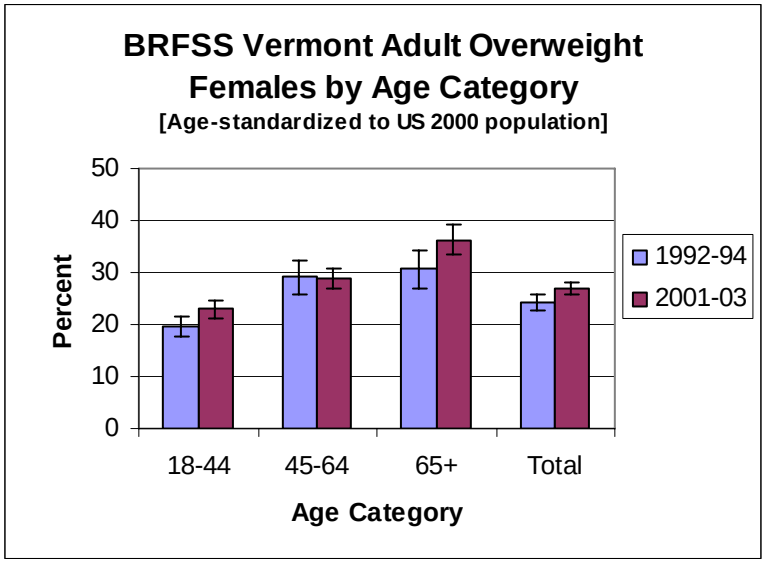


Figure 10

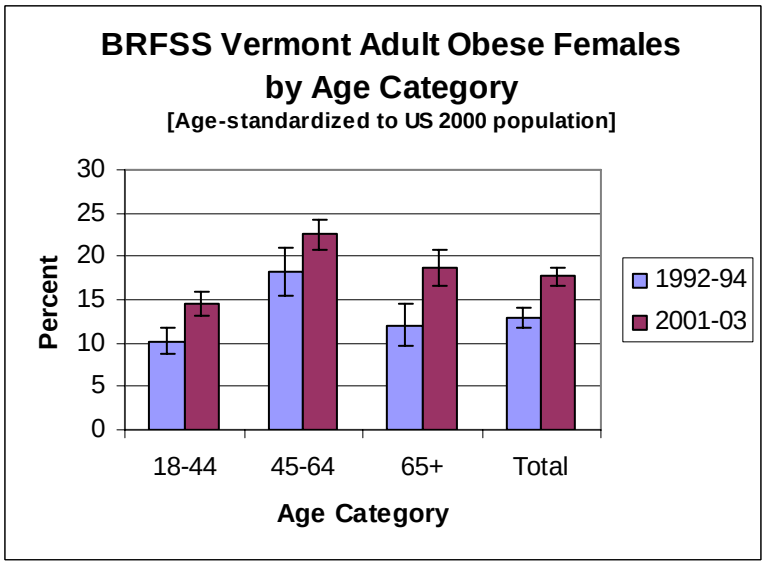


Figure 11

- Between 1992-1994 and 2001-2003, Vermont total adult Vermont female obesity increased significantly.

Overweight and Obesity by County

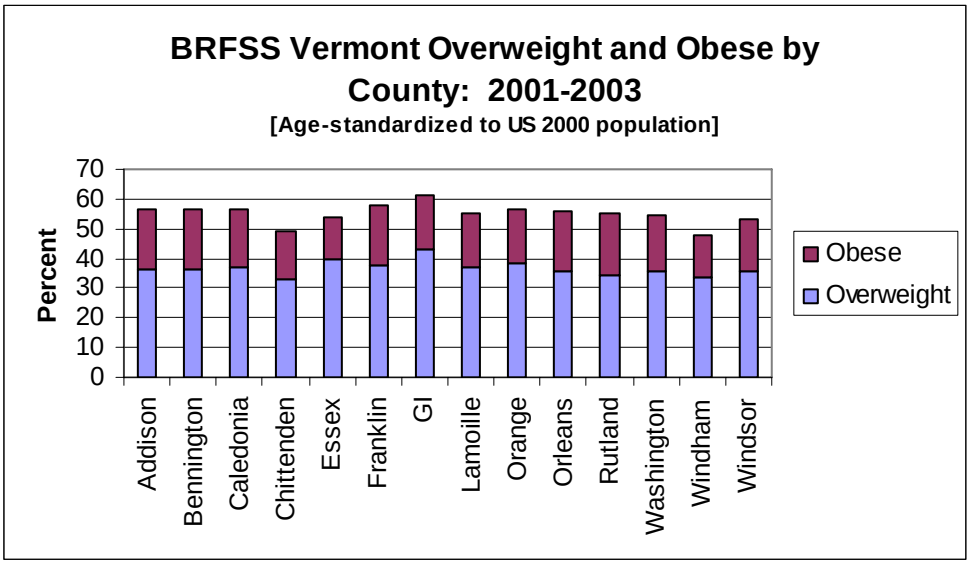


Figure 12

	Total	Addison	Bennington	Caledonia	Chittenden	Essex	Franklin	GI	Lamoille	Orange	Orleans	Rutland	Washington	Windham	Windsor
Overweight	35.296	36.083	36.247	36.888	33.055	39.988	37.481	43.139	36.707	38.049	35.704	34.421	35.752	33.588	35.732
Obese	18.416	20.583	20.274	19.488	16.085	13.673	20.676	18.3012	18.516	18.241	20.443	20.631	18.891	14.407	17.598

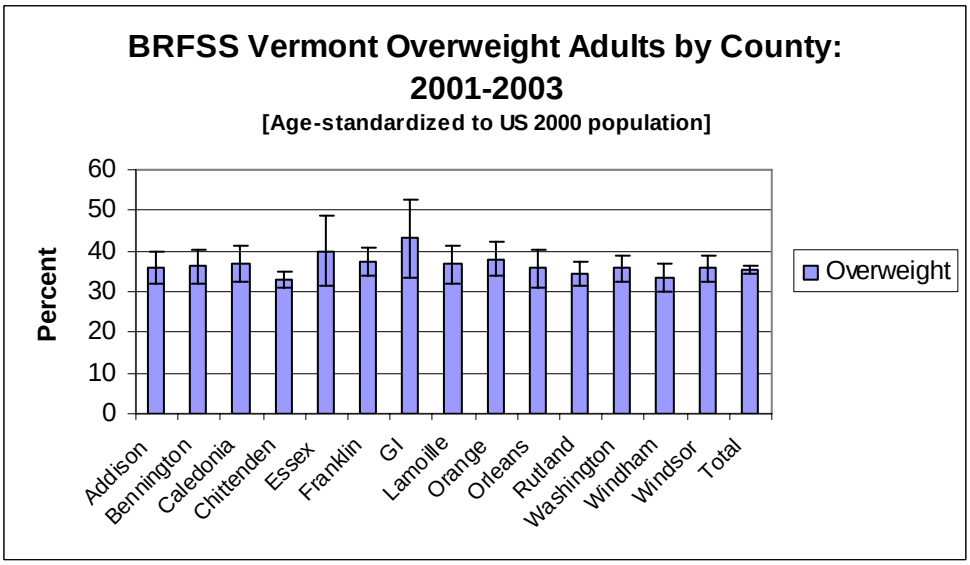


Figure 13

- No county is statistically different from Vermont total for overweight for the period 2001-2003.
- Vermont total prevalence for overweight adults for 2001-2003 was 35.3 percent.

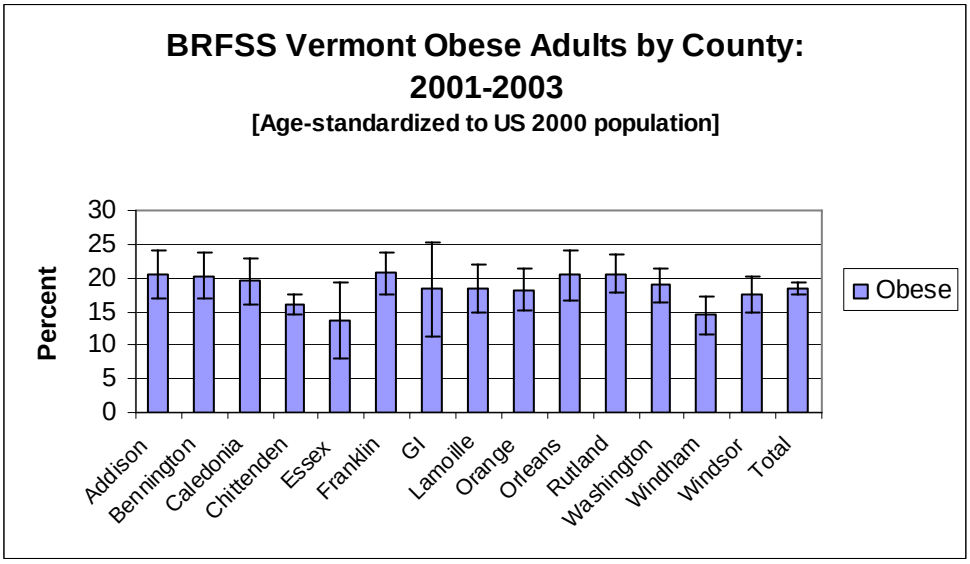


Figure 14

- Overall, Vermont had an adult obesity prevalence of 18.4 percent for 2001-2003.
- Chittenden County at 16.1 percent and Windham County at 14.4 percent were statistically less obese than Vermont total for the period 2001-2003**.**

Overweight and Obesity by Race (16)

The following section was excerpted from the report to the Minority Health Program. (16) Since its inception, BRFSS has asked questions about race, Hispanic origin, height and weight. At the national level, the BRFSS has tracked the percent meeting the NHANES definition of being overweight by racial/ethnic groups. This definition is a BMI of 28.7 for males and 27.3 for females.* Because of the small samples a corresponding comparison in Vermont is not possible. Because of the small number of interviews among Vermont minorities looking at trends in average body mass index (BMI) is the statistic with the smallest error of estimation.

Both nationally and in Vermont the trend since the early 1990s has been increasing BMI across all groups. In the US, Black Non-Hispanics appear to be the most overweight of the groups.
In Vermont, adjusting for the age and gender distribution differences between the racial groups of interest, BMI trended upwards for all groups until 1997 and leveled off. The increasing on the national level can be attributed to the two effects of the aging of the population and people of all ages getting heavier.

American Indians and African-Americans have the highest risks of weight-related health problems, while Asian & Pacific Islanders have the least. However since the age-sex-adjusted average BMI is in the overweight or obese categories for all groups, the weight related health risks are high for all groups.

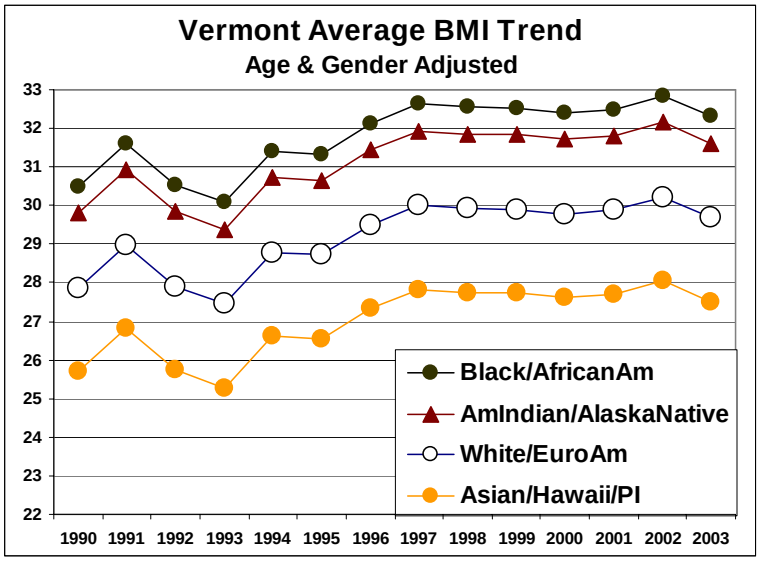


Figure 15

*Recently, a BMI of 25 or more was defined as being overweight, and 30 or more is obese.

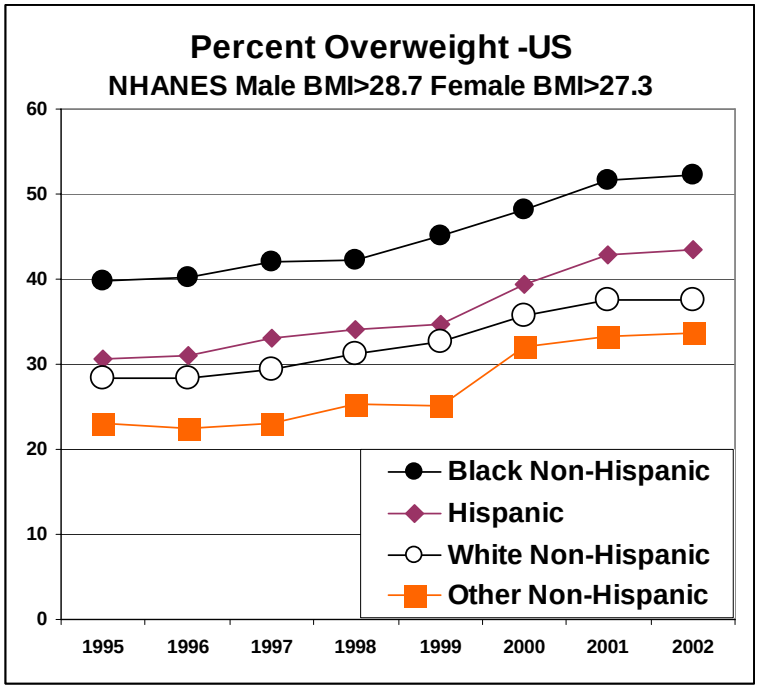


Figure 16

Overweight and Obesity and Income

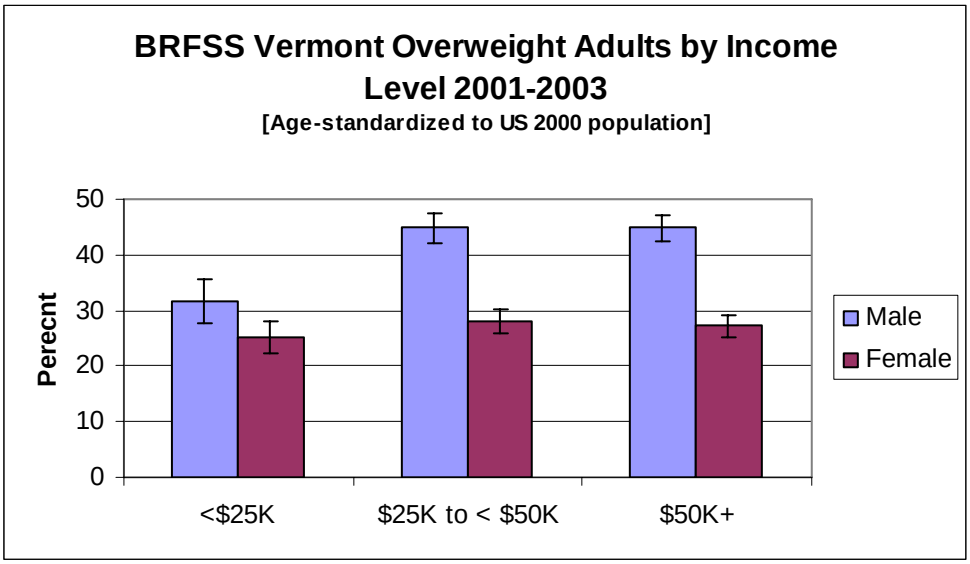


Figure 17

- Vermont adult males have a higher prevalence of overweight in the upper household income levels than the lowest income level.
- Vermont adult females show no difference in overweight prevalence across the three household income categories shown.

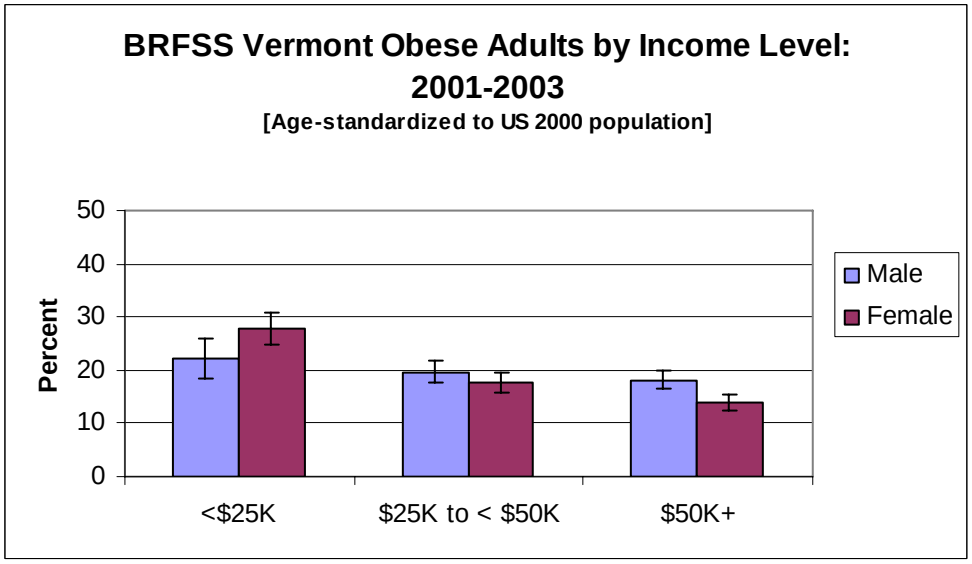


Figure 18

- Figure 14 shows a non-statistically significant trend toward decreasing obesity prevalence with higher household income level in adult Vermont males.
- Adult Vermont females show a significant trend for lower prevalence of obesity with higher household income level.

Overweight and Obesity and Education

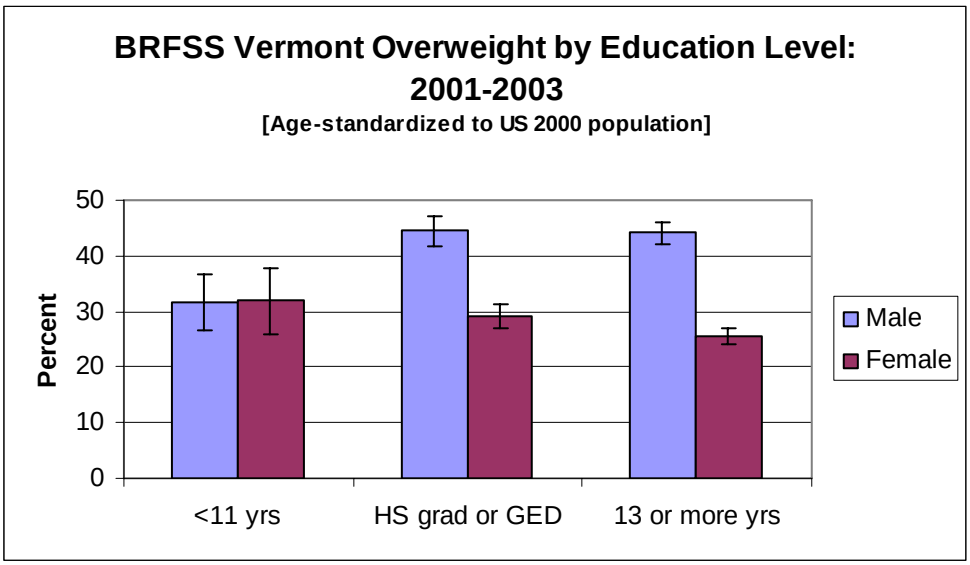


Figure 19

- Vermont adult males with a high school education or more had a higher prevalence of overweight than those with fewer than 11 years of education.
- There is a non-statistically significant trend toward less overweight in females with more education.

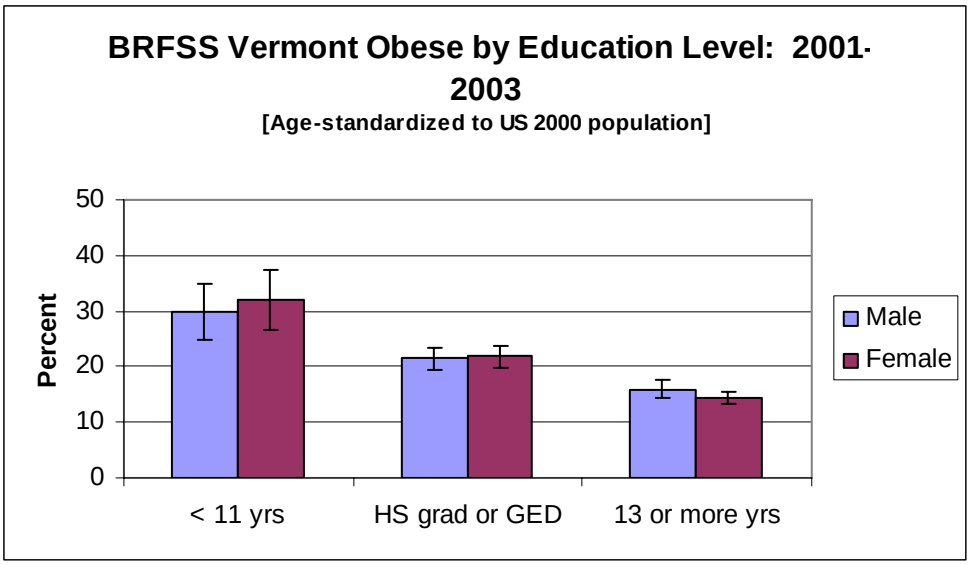
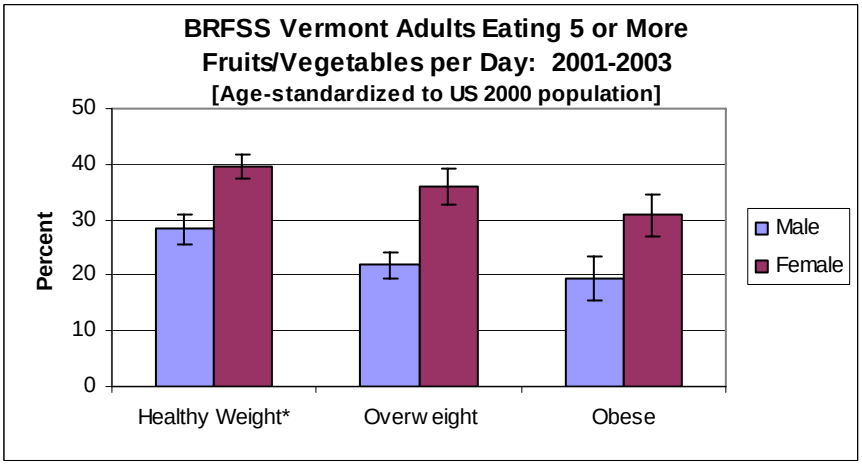


Figure 20

- Both Vermont adult males and females showed a statistically significant gradient toward higher obesity with lower education level.

Overweight and Obesity and Nutrition



* Healthy Weight category includes all individuals with BMI below 25, underweight individuals are included in this category.

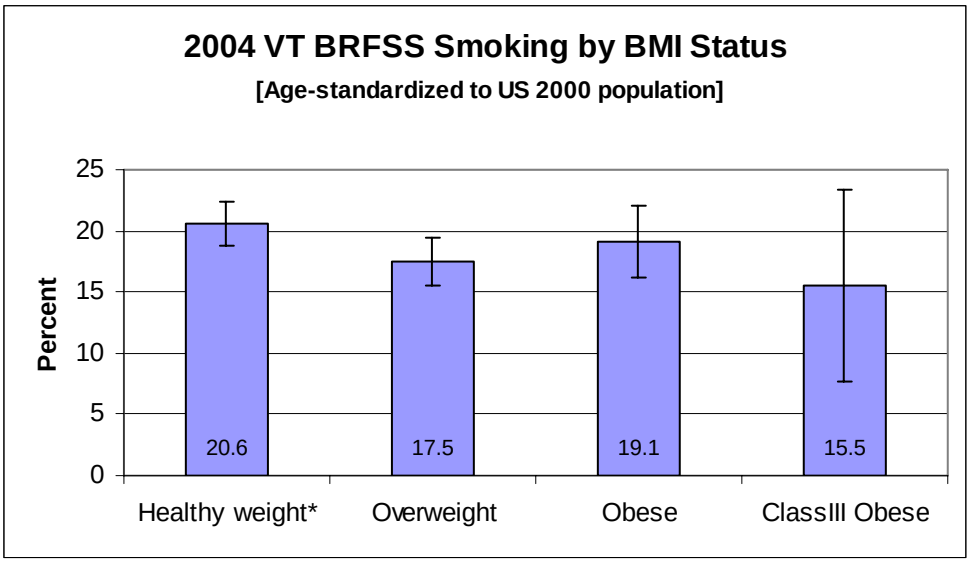
Figure 21

- Both males and females who are of healthy weight are more likely to eat 5 or more fruits or vegetables per day than those who are obese. Twenty-

eight percent of healthy weight males report eating 5 or more per day compared to 19 percent of their obese counterparts.

- Women of all weight categories eat more fruits and vegetables than men. Healthy weight females have a statistically significant higher prevalence of eating 5 or more fruits and vegetables per day than obese females.

BMI and Smoking

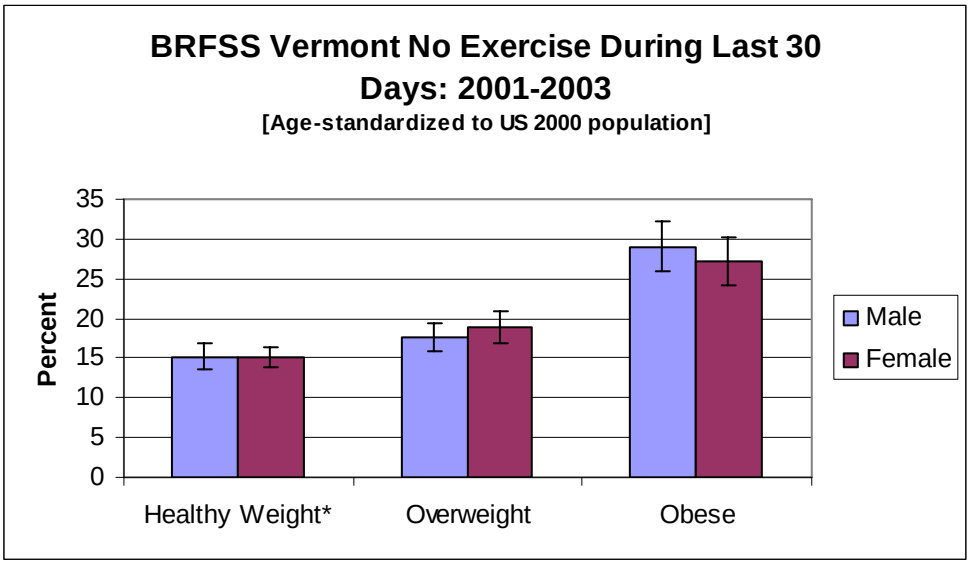


* Healthy Weight category includes all individuals with BMI below 25, underweight individuals are included in this category.

Figure 22

- There is no statistical difference in smoking prevalence between BMI categories.
- It is well known that smoking decreases life expectancy and obesity has been shown to have a negative effect on longevity. (2,7)
- Smoking and obesity combed apparently compound cardiovascular risk. (2)
- All smokers regardless of weight status should quit smoking. (2)

Obesity and Overweight and Exercise



* Healthy Weight category includes all individuals with BMI below 25, underweight individuals are included in this category.

Figure 23

- Obese adult Vermonters were more likely to report having no exercise during the past 30 days than Vermonters of healthy weight or overweight.