

**Obesity and Food Behaviors in Vermont  
Vermont Poll 2004**

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## Introduction

The word *obesity*, commonly understood in American society today as the “disease of excess body fat,” has become a very familiar term in the nation’s vocabulary in recent years (Kral, 2001). Obesity has increased by over 20% in the past ten years, and more than half of American adults are currently overweight or obese (Newby et al, 2003). This epidemic, however, is not a new topic of study. Over half a century ago in 1952, the American Heart Association recognized obesity as a high risk factor for cardiac complications (Nestle, 2000). Cardiac problems are among the many medical conditions that can be caused by obesity, a disease for which the medical and social costs are enormous. The Journal of the American Dietetic Association has estimated that obesity-related illnesses contribute to 6.8% of U.S. healthcare costs (Harnack, 2003).

The increasingly fast pace of the U.S. has forced people to eat meals on the go and away from home. Fast food restaurants have enjoyed strong demand for quick, inexpensive and convenient meals. Recent attempts by these establishments to accommodate choices for the health-conscious consumer—e.g., low-fat and low calorie items—have had little success (DeMaria, 2003). Fast food restaurants have triumphed, however, with portion size. Given the same price, larger portion items look more attractive to the consumer (DeMaria, 2003). The option to choose unhealthy over healthy foods is a *food behavior* characteristic.

Individuals make healthy decisions everyday as to what to

## Analysis

In this study, we examine the characteristics and behaviors of Vermonters to get a better picture of who is overweight and why. The focus of this study is to:

1. *Determine the extent to which Vermonters are overweight;*
2. *Examine how certain demographics influence being overweight;*
3. *Explore how eating at home, eating at fast food restaurants and the number of meals eaten per day influence weight; and,*
4. *Consider how certain food behaviors are influenced by demographics.*

In order to look at the relationships between weight and food behaviors, we grouped people into two categories: overweight or not overweight. We used three major food behaviors: frequency of eating fast food meals; frequency of meals eaten per day; and, frequency of meals prepared at home.

Four questions from the Vermont Poll targeted obesity and food behaviors. The questions were worded as follows:

(Q.13): How many meals do you eat in a typical day?

(Q.14): To the best of your knowledge how many times did you eat meals from a fast food restaurant in the last week?

(Q.15): To the best of your knowledge, how many times did you eat home-prepared meals made from scratch in the last week?

(Q.114): Overweight status – due to the sensitive nature of the topic, this information had to be obtained by asking a series of questions. Height and weight information were obtained, and then the respondent's Body Mass Index (BMI) was calculated. BMI is a measure used frequently by the medical profession to determine whether an individual is overweight.

The demographics of gender, age, education level and income were used to examine their influences on obesity and food behaviors. We used two age groups in our analysis: adults between 18 and 35 years old, and those over age 35. When examining the effect of educational attainment on weight and food behaviors, we looked at people without a bachelor's degree and people with a bachelor's degree or higher. We established two income groups for our analysis: Vermonters with an annual household income of \$35,000 or less, and those with an income of greater than \$35,000.

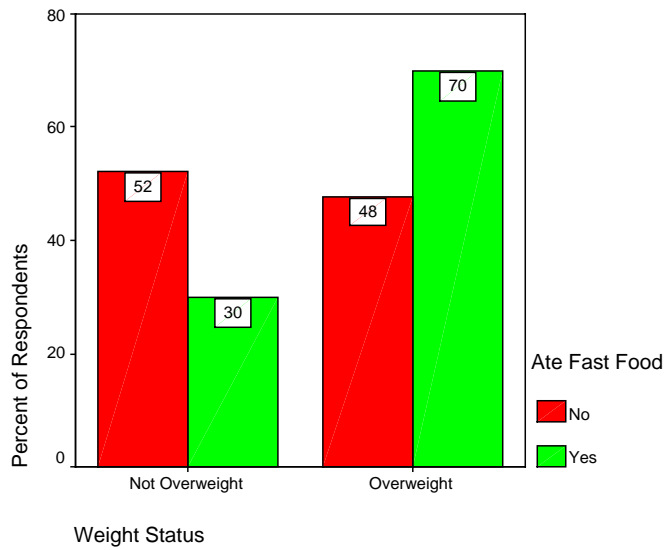
We used the Statistical Package for Social Scientists (SPSS) to conduct our analysis. "Significance" values noted throughout the report indicate findings at confidence levels of 90% or greater. For example, a significance value of 0.05 indicates a result that is significant at a 95% level of confidence.

## **Results**

According to the inform

While Vermonters did not appear overall to be heavy consumers of fast food, we did not find them to be eating only home-cooked meals made from scratch. When asked how many home-prepared meals made from scratch they had eaten in the last week, 41.5% said they had eaten between 0 and 7 homemade meals (no more than 1 per day). About 21% of the participants reported eating between 8 and 14 homemade meals (between 1 and 2 per day), while just over one third (35.1%) of the participants ate between 15 and 21 home-prepared meals in the last week (between 2 and 3 per day). The median number of home-cooked meals eaten was 12 per week, and we used this measure to divide our sample into two groups: those who ate 12 or more home-cooked meals per week (at or above the median), and those who ate less than 12 home-cooked meals per week (below the median).

Figure 4: Weight Status and Ate Fast Food in the Last Week  
(n=581) (significance value < 0.001)



Source: Center for Rural Studies, University of Vermont, 2004 Vermont Poll

Of the remaining demographic factors, we found no significant relationship between being overweight and income level, nor did we find any significant relationship between age and being overweight.

Among the other food behaviors, we did not find weight status to be related to the numR3aant relatieS2ef12. 37us to be rel

People older than 35 years of age were more likely to eat 12 or more meals prepared at home (52%) than people between 18 and 35 years old (38.5%) (significance < 0.001); and,

Those with household incomes above \$35,000 annually were more likely to eat 12 or more meals prepared at home (51.1%) than those who had incomes of less than \$35,000 (42.8%) (significance = 0.07).

Lastly, our analysis showed the typical number of meals eaten in a day was only influenced by one's level of education. Vermonters with a bachelor's degree or higher were more likely to eat 3 or more meals per day (74.9%) compared to those without a bachelor's degree (67.3%) (significance = 0.044). We did not find gender, income or those with a bachelor's degree by

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