

# Body Weight and Weight Loss

The Youth Risk Behavior Survey includes questions on self-perceived weight, current weight loss/gain method, and body weight as it relates to exercise, diet, fasting, diet supplementation, and vomiting and laxative use.

## Overall Trends

**During the 1990s, reported exercise and dieting for weight loss/control by Lancaster County teens increased, while the percentage of teens reporting that they are overweight changed little (Figure 1).**

Teens reporting that they were overweight (“slightly” or “very”) changed little from 1991 to 1999, remaining at about one-third of teens in 1999. The percentage of teens reporting that they are currently trying to lose weight also changed little, averaging 41% from 1991-1997 before rising to 45.6% in 1999.

The percentage of teens reporting that they exercised or dieted during the past 30 days to maintain or lose weight increased from 1995 to 1999. There was little change in the percentage of teens reporting that they used dietary supplements, vomited or used laxatives to maintain or lose weight in the past 30 days.

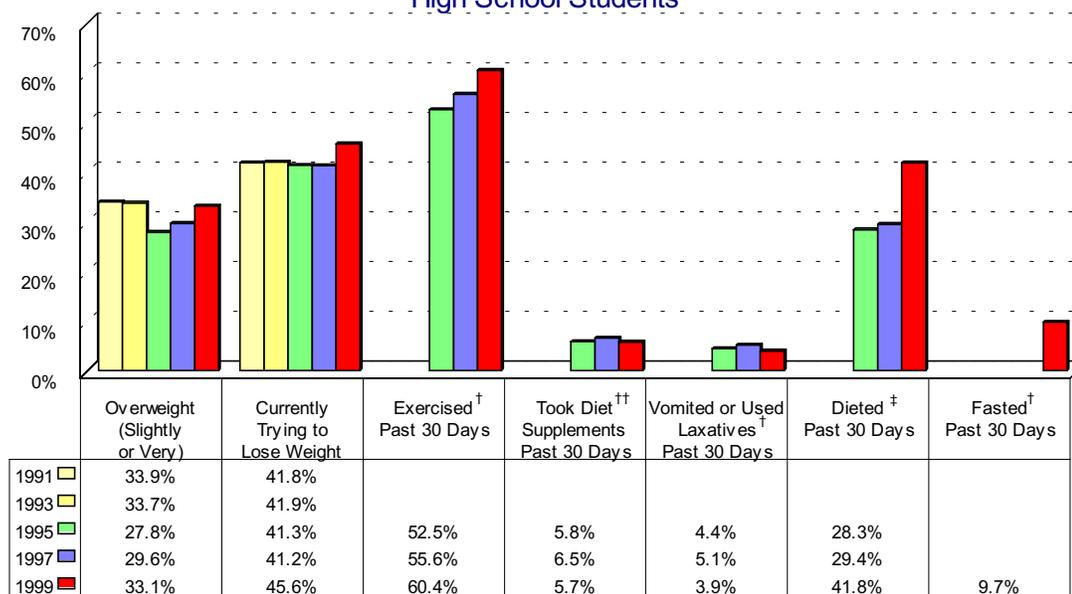
Two new weight-loss questions were added to the YRBS in 1999. First, 41.8% of teens reported that, during the past 30 days, they ate less food, fewer calories, or foods low in fat to lose or maintain weight. In 1997 and 1995, wording on this question was less specific, asking whether teens “dieted” in the past 30 days. Also in 1999, 9.7% of teens reported that, during the past 30 days, they fasted for 24 hours or more to lose or maintain weight.

These trends in reported weight loss behaviors and overweight generally held among respondents of different grades, males and females, and white and non-white teens. See the following pages for detail.

YRBS data for Lancaster County (1991-1999) and Nebraska (1993-1997)<sup>1</sup> indicated little change in reported overweight and weight loss intent, while national trends (1993-1999)<sup>2</sup> showed slight decreases for overweight and increases in weight loss intent. Reported exercise and dieting increased in Lancaster County and the U.S. Reported vomiting or laxative use remained unchanged in both Lancaster County and the U.S. Reported supplement use increased in the U.S. but remained unchanged in Lancaster County. Nebraska trend data are not yet available for these latter indicators introduced in 1995.

1 Tables published by Buffalo Beach Company, Lincoln, NE  
2 Centers for Disease Control and Prevention: Youth Risk Behavior Trends Fact Sheet, <<http://www.cdc.gov/nccdphp/dash/yrbs/trend.htm>>; *MMWR* Surveillance Summaries 1999, 1997, 1995, 1993.

**Figure 1: Body Weight & Weight Loss Behaviors\***  
High School Students



<sup>†</sup> "to lose weight or keep from gaining weight"

<sup>‡</sup> 1999: "ate less food, fewer calories, or foods low in fat to lose weight or keep from gaining weight"

<sup>††</sup> "took diet pills, powders, or liquids without a doctor's advice to lose weight (does not include meal replacement products)"

1997, 1995: "dieted"

\* Grade Adjusted

# Body Weight and Weight Loss

## Differences by Gender

During the 1990s, female teens were considerably more likely than male teens to report that they are overweight or that they engage in weight loss behaviors. However, on select measures there were signs of a reduced gender gap (Figs. 2 - 4).

As in earlier years, female teens in 1999 were more likely than male teens to report being overweight and various weight loss behaviors. Large gender gaps were obvious on all indicators (Fig. 2). For example, female teens in 1999 were 3.9 times more likely than male teens to report that during the past 30 days they went without eating for 24 hours or more in order to lose or maintain body weight.

As with teens as a whole (Fig. 1), there was little change by gender in reported weight loss intent over the 1990s (Fig. 3). However, prevalence of reported overweight declined for females from 1991 to 1995, with the effect of a reduced gender gap (Fig. 3).

Males increasingly reported exercise in the past month to lose or maintain body weight, from 33.6% in 1995 to 45.9% in 1999 (Fig. 4). Females changed little but remained more likely than males to report exercise to lose weight (73.6% vs. 45.9% in 1999).

Both sexes increasingly reported dieting in the past month to lose or maintain body weight, with females remaining about two-thirds more likely to report dieting (60.1%) than males (21.6%) in 1999 (Fig. 4). This increase may have been affected by a wording change from 1995 and 1997 (“dieted”) to 1999 (“ate less food, fewer calories, or foods low in fat”).

From 1995 to 1999, there was relatively little change in female reports that, within the past 30 days, they used diet supplements without the advice of a physician (9.7% to 8.6%) or vomited or used laxatives to lose weight (7.9% to 6.6%). There was also little change in male reports on these indicators: diet supplementation (2.0% to 2.5%) and vomiting or using laxatives to lose weight (1.1% to 2.5%).

Figure 2: 1999 Body Weight and Weight Loss\*  
High School Students

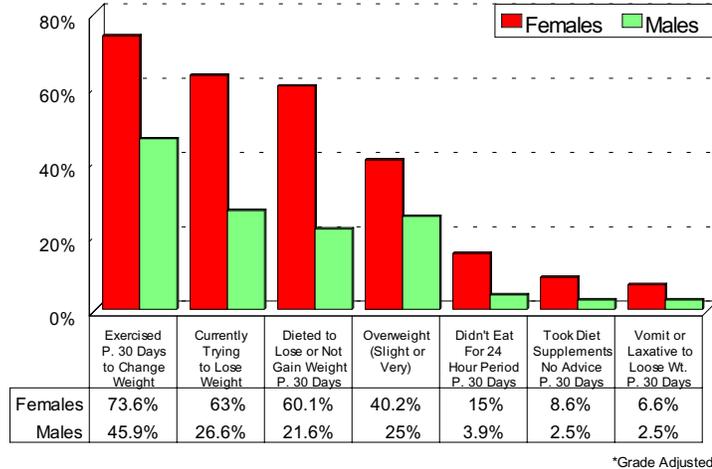


Figure 3: Overweight and Weight Loss\*  
High School Students

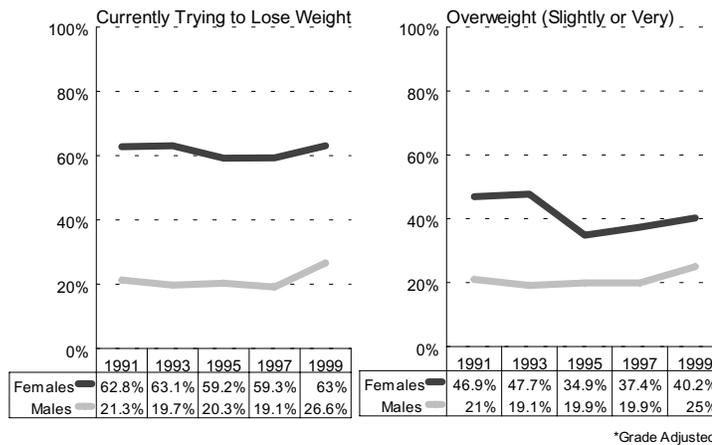
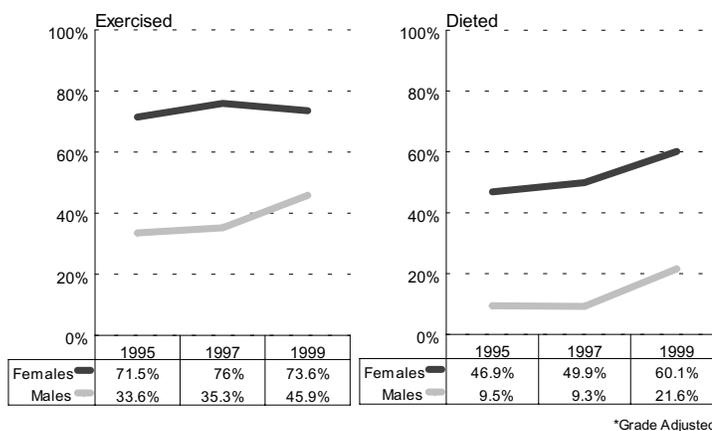


Figure 4: Exercise and Diet\*  
High School Students Who Reported Exercising or Dieting to Lose or Maintain Body Weight During the Past 30 Days



## Differences by Grade

During the 1990s, reports of weight loss intent, exercise and dieting increased among teens in all or most grades. Differences among grades in weight loss behaviors decreased over the period (Figs. 5 - 7).

Trend data for the 1990s did not indicate clear increases or decreases by grade in teen reports of being overweight. In 1990, as in earlier years, reported overweight was similar across grades: 30.7% of 9th graders, 33.5% of 10th graders, 35.0% of 11th graders and 33.0% of 12th graders.

From 1991 to 1999, the percentage of teens reporting that they are currently trying to lose weight appeared to increase among the three oldest grades, although these were not statistically significant increases (Fig. 5).

From 1995 to 1999, the percentage of teens who reported exercise during the past 30 days to lose or maintain body weight appeared to increase in each grade though only the increase among 12th graders was statistically significant (Fig. 6). Teens in lower grades tended to be more likely to report exercise to lose/maintain weight; however, by 1999 these differences among grades were no longer noticeable.

Teens in all grades showed marked increases from 1995 to 1999 in reported dieting to lose or maintain weight. The greatest increase occurred among 12th graders: from 25.6% in 1995 to 44.1% in 1999 (Fig. 7). This increase may have been affected by a change in wording from 1995 and 1997 (“dieted”) to 1999 (“ate less food, fewer calories, or foods low in fat”).

Responses on other weight loss indicators were not large enough to identify clear trends by grade.

Figure 5: Weight Loss By Grade  
High School Students Who Reported Currently Trying to Lose Weight

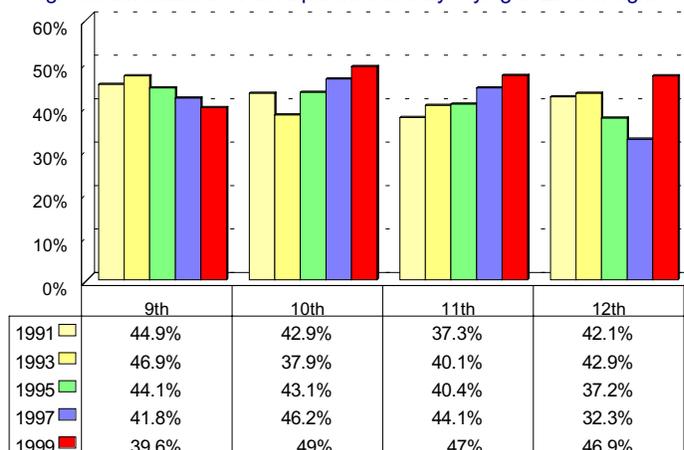


Figure 6: Exercise By Grade  
High School Students Who Reported Exercising to Loose or Maintain Body Weight During the Past 30 Days

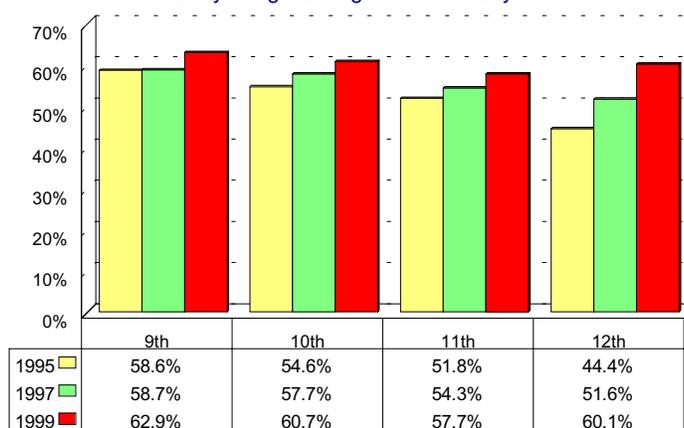
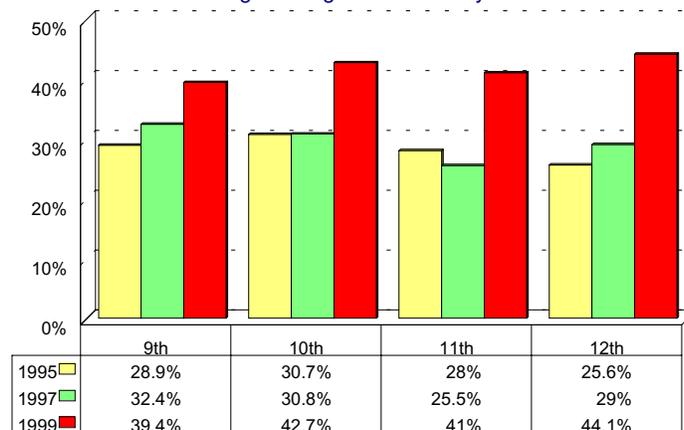


Figure 7: Dieted By Grade  
High School Students Who Reported Dieting to Lose or Maintain Body Weight During the Past 30 Days



# Body Weight and Weight Loss

## Differences by Race

During the 1990s there was little difference between white and non-white teens in reported body weight or weight loss behaviors (Fig. 8).

YRBS sample sizes for major race/ethnic groups (Black, Hispanic, American Indian or Asian) were not large enough to reliably compare these groups or examine trends over time. However, selected comparisons were feasible between white teens and those who may be classified as “non-white” -- of minority race or Hispanic ethnicity.

The only statistically significant disparity was between non-white (14.1%) and white (5.0%) teens in reports of taking diet supplements without a doctor’s advice, within the past 30 days.

Throughout the 1990s, white and non-white teens were similarly likely to report that they are overweight or currently trying to lose weight (Fig. 9). No significant increase occurred for either group in either indicator from 1991 to 1999.

White and non-white teens were also similarly likely to report that they exercised or dieted to lose or maintain bodyweight (Fig. 10). The percentage of white teens reporting that they exercised to lose or maintain weight increased from 1995 (52.4%) to 1999 (61.1%).

Both white and non-white teens appeared to increasingly report dieting to lose weight, although only the increase among white teens was statistically significant. These increases may have been affected by a change in wording from 1995 and 1997 (“dieted”) to 1999 (“ate less food, fewer calories, or foods low in fat”) (Fig. 10).

Figure 8: Body Weight and Weight Loss\*  
1999 High School Students

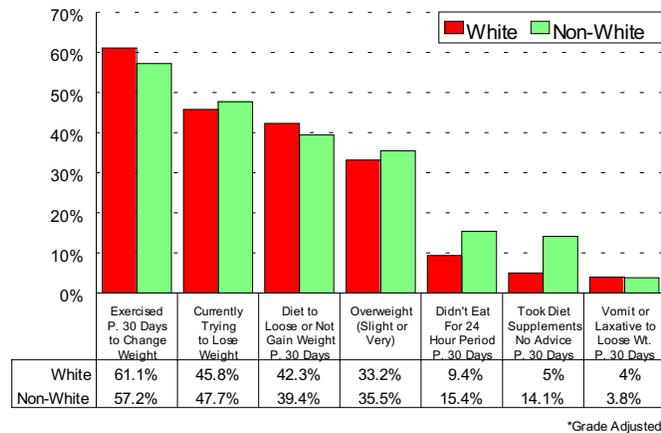


Figure 9: Overweight and Weight Control\*  
High School Students

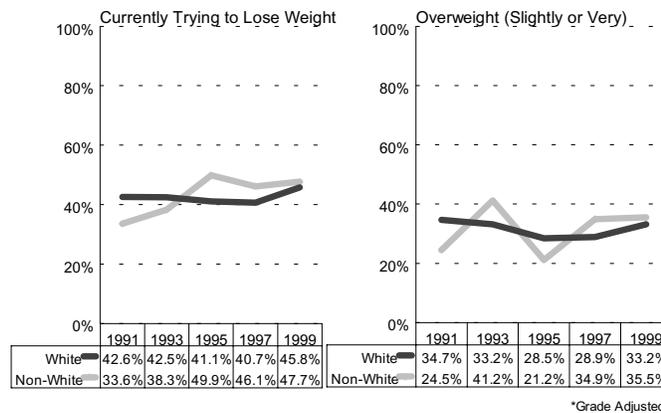
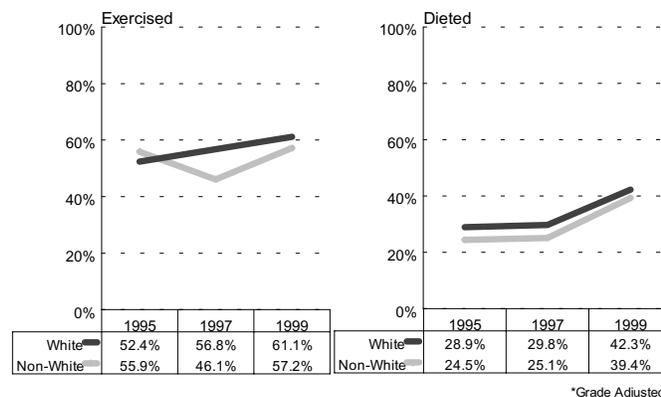


Figure 10: Exercise and Diet\*  
High School Students Who Reported Exercising or Dieting to Lose or Maintain Body Weight During the Past 30 Days



# Body Weight and Weight Loss

YRBS Results  
Lancaster County, NE

**Health Objectives for the Year 2010:** *Improve the health, fitness, and quality of life of all Lancaster County residents and reduce their chronic disease risk by promoting regular daily physical activity and optimal nutrition status.*

## Public Health Discussion

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Weight is now viewed as an important health issue. Being overweight is a risk factor for health problems such as diabetes, high blood pressure, high cholesterol and triglycerides, arthritis, gall bladder disease, gynecologic problems, some cancers, and even lung problems. While some people who need to lose weight for their health don't recognize it, others who don't need to lose weight want to get thinner for cosmetic reasons. Successful weight management is a long-term challenge that begins with personal behaviors.<sup>1</sup>

### Parental Roles and Responsibilities:

**Being overweight is usually the effect of diet and physical activity.**

The balance of diet and physical activity varies with each individual and may well need the expertise of a physician and a nutritionist. Youth who know they are overweight as identified by suggested weight guidelines can improve their health by a loss of 5-10 percent of starting weight. It doesn't mean stopping there, but it does mean that an initial goal of losing 5-10 percent of starting weight is both realistic and valuable.



**“Establishing good nutrition and physical activity habits at an early age is important for good health throughout life.”**

*Charlotte Burke, MS, RD, Health Educator  
Chronic Disease Reduction Program  
Lincoln-Lancaster County Health Dept.*

### Community Roles and Responsibilities:

**Behaviors that will help youth lose weight and maintain it:**

1. Set the right goals. Most people trying to lose weight focus on weight loss. The most productive areas of focus are on dietary and exercise changes that will lead to weight loss. Effective goals are a) specific, b) attainable and c) forgiving (less than perfect).
2. Nothing succeeds like success. Shaping is a behavioral technique that lets youth select a series of short-term goals that get closer and closer to the ultimate goal by using small steps to reach a distant goal.
3. Reward success. Rewards may be tangible, such as a movie or a music CD, or intangible such as time away from busy schedules. Avoid rewards of extra food.
4. Encourage youth to balance their food checkbook. Self-monitoring is observing or recording of calorie intake, servings of fruits and vegetables, exercise sessions, outcome of behaviors such as weight. Regular weighing of oneself and graphing the weight is helpful in reaching goals. Body water weight will vary from day to day much more than fat weight.

## Policy Makers' Roles and Responsibilities:

**An increase in physical activity is an important part of a youth's weight management program.**

While bodyweight is a personal matter, community and policy makers can create positive environments for youth to spend time where physical activity is easily accessible, affordable and safe. Community settings might include sports courts, bicycle trails, swimming pools, skating, community gardening, jogging, exercise courses, dances and a host of other places where youth can go individually, or congregate with other youth in both competitive and non-competitive activities and events. While a pricetag usually accompanies physical activity settings, the price of being overweight can also be measured in terms of future productivity in the workplace, health costs, and low self esteem.

### References:

1. National Heart, Lung and Blood Institute. "Obesity Education Initiative: Patient and Public Education Materials." 2000. <http://www.nhlbi.nih.gov/health/public/heart/obesity/lose>

