

EATING BEHAVIORS, NUTRITION AND EXERCISE

Physical activity, eating behaviors and food choices have a tremendous impact on health. In the United States, physical inactivity and unhealthy eating are the underlying causes responsible for at least 300,000 preventable deaths each year. Regular physical activity and healthy eating reduce the likelihood of obesity. According to the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, the total economic cost of obesity in the United States for 1995 was estimated to be nearly \$100 billion.¹ Health researchers and educators have noted that excess weight and increasingly sedentary lifestyles are becoming a particular problem for young people as well as adults.

Of children aged 5 to 15 who are overweight, 61% have one or more cardiovascular disease (CVD) risk factors such as elevated lipid, insulin, blood pressure and cholesterol levels. Furthermore, 27% were found to have two or more of these risk factors. In addition, research indicates that the appearance in the past two decades of Type II diabetes among adolescents is related to the trend of increasing excess weight. Previously, Type II diabetes was known as "adult-onset diabetes" because it was so rarely seen in children or adolescents.² Type II diabetes accounted for 2-4% of all childhood diabetes before 1992, but increased dramatically, comprising 16% of all childhood diabetes by 1994.²

Unhealthy behavior patterns of inactivity and eating frequently start in childhood and adolescence.³ Studies indicate that children who watch a lot of television and get more calories from protein or fat are at increased risk for overweight.⁴ Findings also suggest that although children from low-income families are not more likely to be overweight than non-poor children, poor families may be more likely to experience conditions that limit their control over the factors which influence weight. Lack of access to resources such as adequate housing, utilities, health care, safe recreation areas, and fresh food sources may lead to reliance on high-calorie, high-fat foods and to lack of exercise.⁵ In order to reduce the risk of chronic disease, it is essential that communities work to promote regular physical activity and healthy eating, as well as focus on creating an environment that supports these behaviors. People who make a lifelong practice of healthy eating and exercise, and avoid the behaviors that increase their risk for chronic diseases, can expect to live longer and be healthier even into old age.¹

BODY MASS INDEX (BMI) AND BODY IMAGE

U.S. HEALTHY PEOPLE YEAR 2000 OBJECTIVES

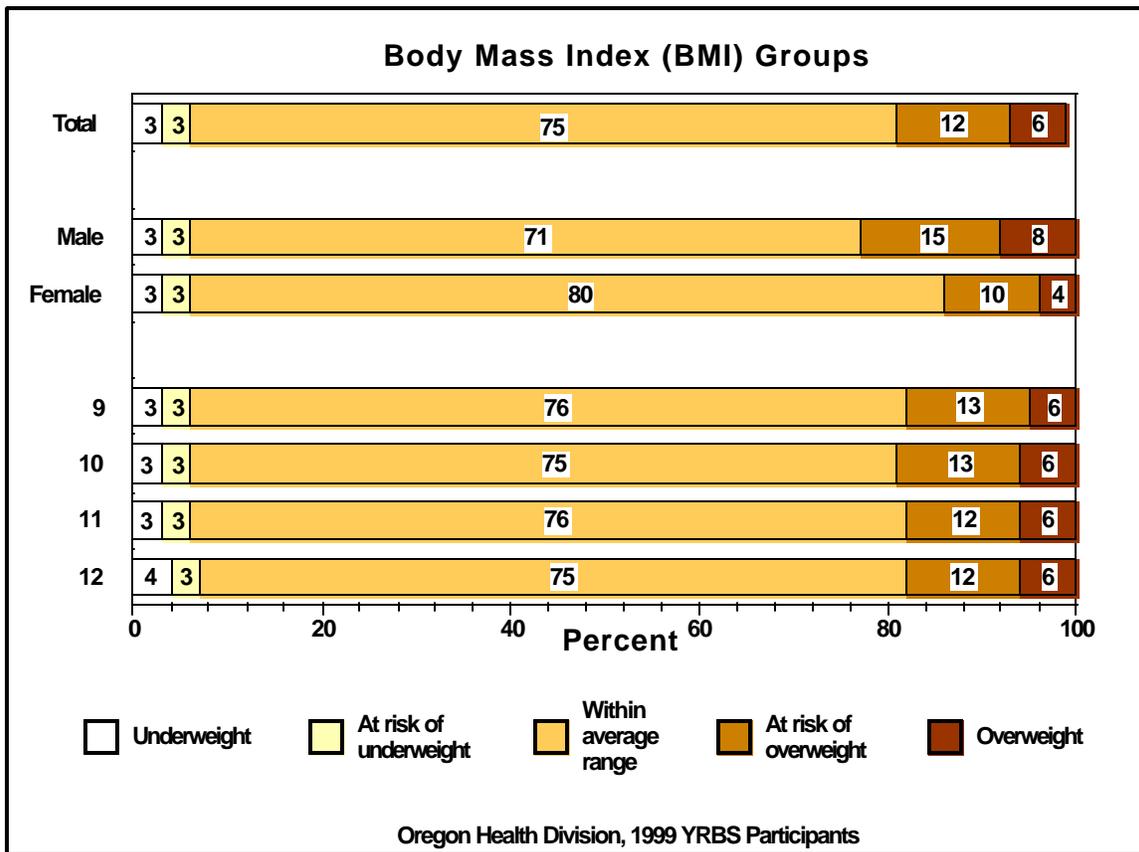
1.2 Reduce prevalence of overweight people aged 12-19 years to 15% or less

The next three questions examine the risk of being over or underweight, and student perceptions about their weight. Nationally, the percentage of overweight youth aged 6-17 has more than doubled in the past 30 years.¹ Research indicates that childhood overweight and obesity continue into adulthood and contribute to increased risk for heart disease, high blood pressure, diabetes, and possible cancer. In addition, children and adolescents often experience social and psychological stress related to obesity.⁶ According to the 1999 Adult Behavioral Risk Factors Survey, 36 percent of 18 to 24 year-old Oregonians were considered overweight. Overall, 56 percent of adult Oregonians (aged 18 and over) were overweight.

In 1999, the CDC added questions about height and weight to the YRBS questionnaire so that a measure called Body Mass Index (BMI) could be calculated. Clinical guidelines for adolescent health propose that the BMI be used to identify those at greatest risk of obesity and associated health problems, and recommend its use in routine annual health screening of

adolescents.⁷ Although the measure reflects a person's body mass rather than the amount of fat present, and some adolescents might have a large but lean body mass because of exercise, muscle, or large frame, BMI is nevertheless significantly correlated with subcutaneous and total body fatness in adolescents, in studies conducted in the United States. Because self reported height and weight information is easy to obtain and is relatively reliable for high school youth, BMI is a useful measure in identifying levels of risk in populations, at least in industrialized countries.^{8,6}

Body Mass Index for Oregon High School Students by gender and grade



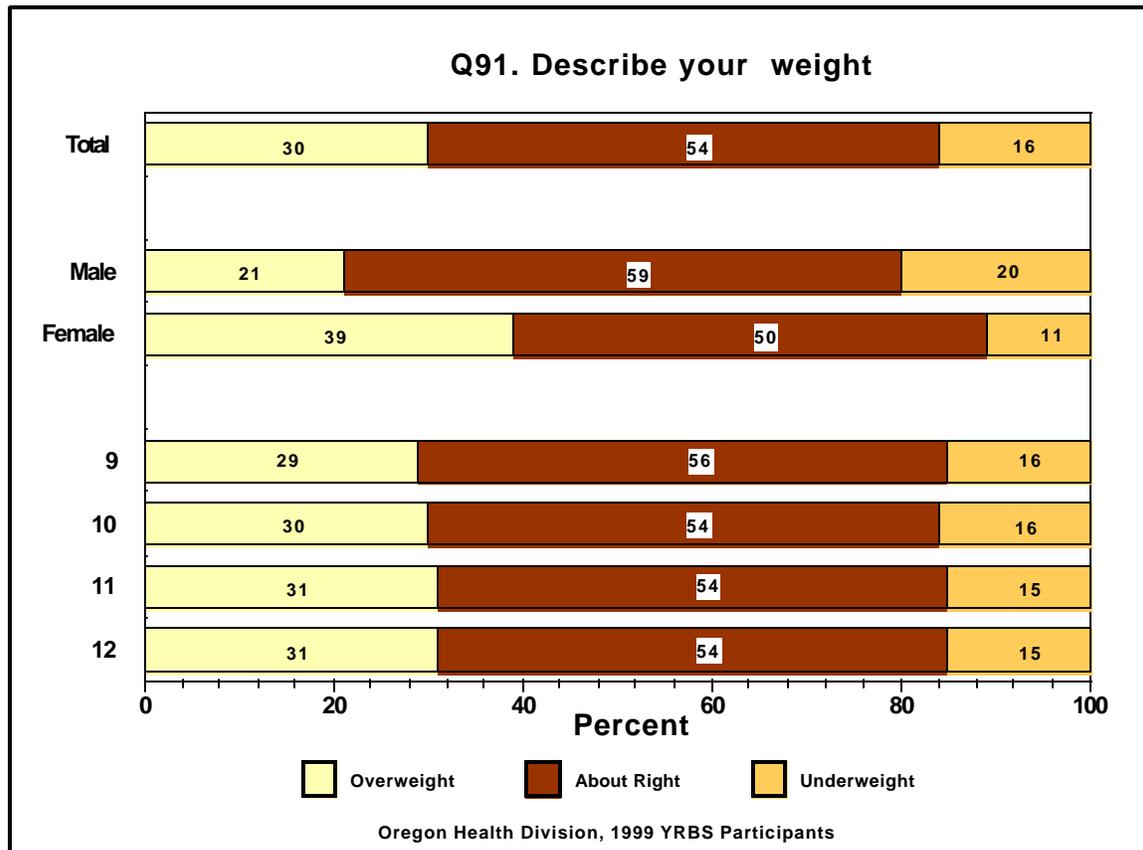
NOTE: Graphs show information by total participants, and by gender and grade level (9, 10, 11, 12).

Reference data used to establish the cut-off levels for overweight and risk of overweight in the 1999 YRBS come from the first National Health and Nutrition Examination Survey (NHANES).⁹ Cut-off levels are extrapolated to match age in years as reported on the YRBS (which does not include birth month). Although 75 percent of Oregon 1999 YRBS participants had a body mass index that falls within the average range, almost one fifth of the high school students (18 percent) were overweight or at risk for being overweight. Males were over one and a half times more likely than females to fall into one of these categories (23 vs. 14 percent). There was, however, little variation by grade.

Nationally, 1999 YRBS data showed similar patterns, although a larger proportion--one fourth--of students nationally were overweight or at risk for being overweight (26 percent). Males were more likely than females to be overweight (12 vs. 8 percent) and at risk for becoming overweight (17.5 vs. 14.4 percent).

WHAT OREGON STUDENTS REPORTED

Q91. How do you describe your weight?

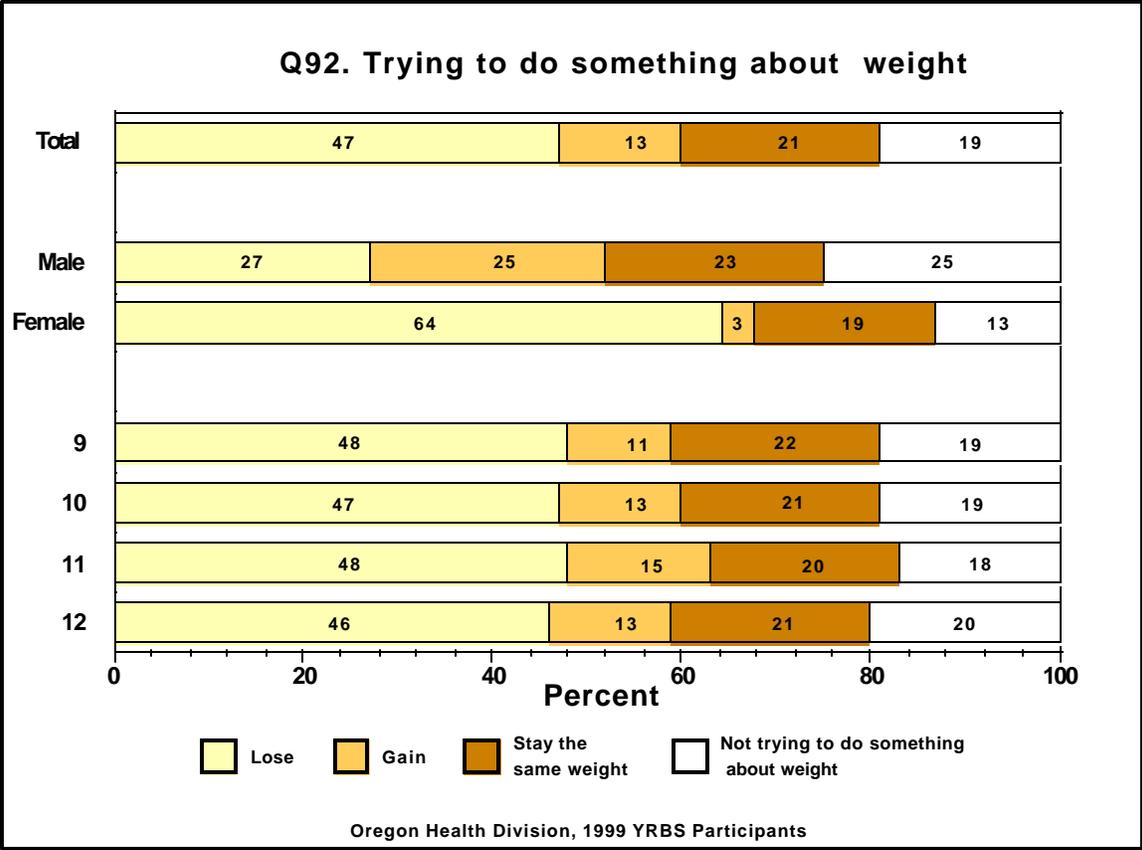


Over half (54 percent) of Oregon 1999 YRBS participants felt they were about the right weight. However, almost a third of participants (30 percent) felt they were overweight, and 16 percent reported being underweight or very underweight.

Males were more likely than females to feel that they weighed about what they should (59 vs. 50 percent). Almost twice as many females than males described themselves as overweight or very overweight (39 vs. 21 percent). This ratio was reversed for those who described themselves as underweight; males were almost twice as likely as females to report being slightly or very underweight (20 vs. 11 percent).

Students' perceptions about their weight did not change greatly by grade level, although there appears to have been a small rise by grade in the percentage of students describing themselves as overweight.

Q92. Which of the following are you trying to do about your weight?



Of Oregon 1999 YRBS participants, almost half (47 percent) reported that they were trying to lose weight. Those trying to maintain their current weight and those who weren't trying to do anything about their weight totaled 40 percent, while only 13 percent were trying to gain weight.

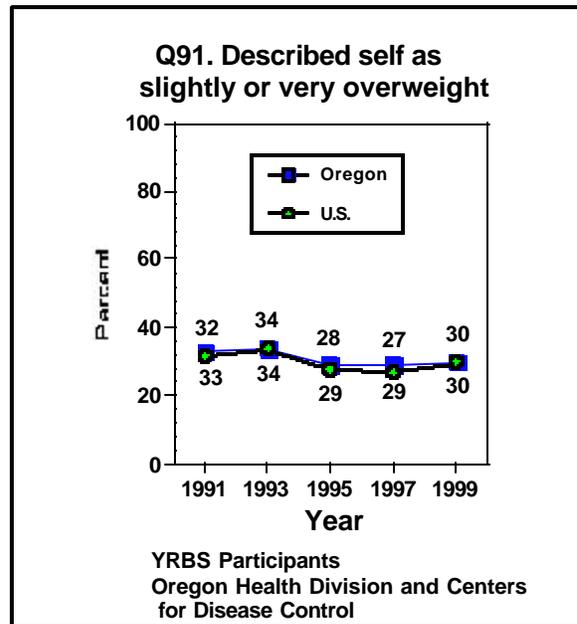
Over twice as many females as males were trying to lose weight (64 vs. 27 percent), while eight times more males than females were trying to gain weight (25 vs. 3 percent). Males were one and a half times more likely than females to try maintaining or doing nothing about their weight (48 vs. 32 percent).

Among grade levels, the percentage of those trying to gain weight was highest for 11th graders (15 percent). However, the differences between grades in the percentage of students reporting any action towards losing, maintaining or gaining weight remained minimal.

**Q91. How do you describe your weight?
(Those who said that they were either slightly or very overweight)**

About the same proportion of national and Oregon 1999 YRBS participants described themselves as either slightly or very overweight (30 percent). The proportion has remained similar over the years in which the survey has been administered.

In the 1999 survey nationally, females were about one and a half times more likely than males to describe themselves as overweight (36 vs. 24 percent). As in Oregon, variation by grade was slight.



Q92. Which of the following are you trying to do about your weight? (Those who said that they were attempting weight loss)

Nationally, 43 percent of 1999 YRBS participants said that they were trying to lose weight.

Oregonian participants appeared to be slightly more likely to report that they were attempting to lose weight. However, in past years, Oregon and national proportions are very similar, and do not appear to have changed significantly over time.

Nationally, females were over twice as likely as males to be attempting to lose weight (59 vs. 26 percent).

