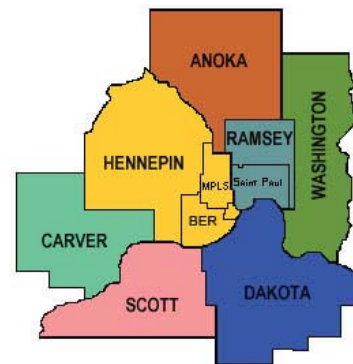


Data Matters

Minnesota Student Survey: Nutrition, Physical Activity, and Weight, 2010



Volume 2011, Number 1

A publication of local public health agencies in the metropolitan area of Minnesota

Key Findings

- 22% of 6th, 19% of 9th and 19% of 12th grade Metro students get the recommended number of servings of fruits and vegetables.
- 47% of 6th, 55% of 9th and 43% of 12th grade Metro students get the recommended amount of moderate physical activity.
- 22% of 9th and 21% of 12th grade Metro students are overweight or obese.
- Although rates for all nutrition, physical activity and weight status indicators are worse for students who get free or reduced-price lunch, the rates improve when students feel that adults in the community care about them.

Introduction

This report summarizes county-level results on the nutrition, physical activity, and weight of 6th, 9th and 12th grade students based on results from the 2010 Minnesota Student Survey (MSS). In this report, all references to students refer to students in 6th, 9th, and 12th grades who participated in the MSS. The term Metro refers to the seven-county metropolitan area of Minnesota.

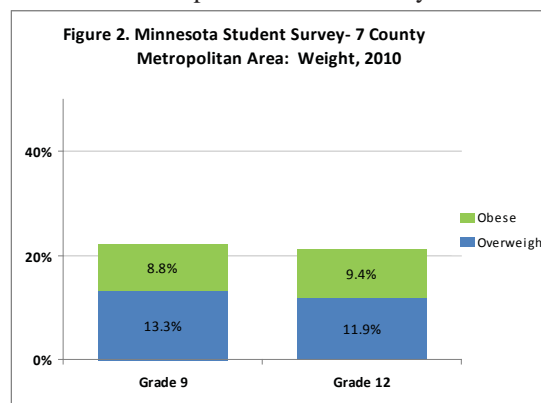
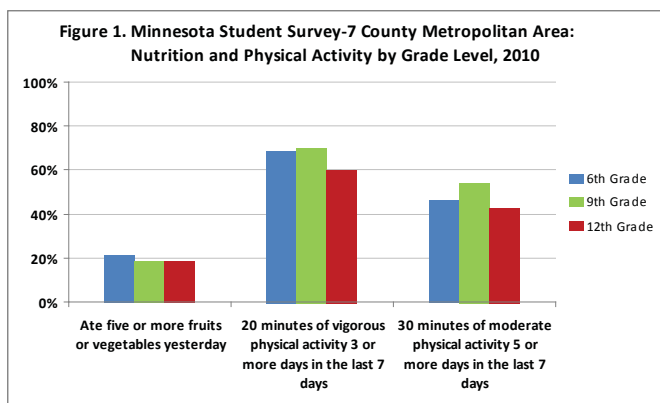
Minnesota State Survey

The Minnesota Student Survey is a statewide survey that collects information on 6th, 9th and 12th grade students in public schools. The survey was conducted in the Spring of 2010; 295 of the 335 public operating districts agreed to participate. Students were not required to participate in this anonymous survey. Among public school students 79% of sixth graders, 75% of ninth graders and 59% of 12th graders participated in the survey with an overall participation rate of 71%.

Nutrition, Physical Activity and Weight

Four measures are used to determine the percentage of students that meet standards for healthy behaviors and weight. These measures reflect nutrition through fruit and vegetable intake, physical activity through moderate and vigorous physical activity and weight through weight status. Standards recommend 5 or more servings of fruit and vegetables per day. For physical activity it is recommended that students participate in 20 minutes of vigorous physical activity 3 or more days per week and 30 minutes of moderate physical activity 5 or more days per week. The percentage of students considered overweight or obese is also calculated. Figures 1 and 2 represent Metro data for 6th, 9th and 12th graders on fruit and vegetable intake, vigorous and moderate physical activity and weight status.

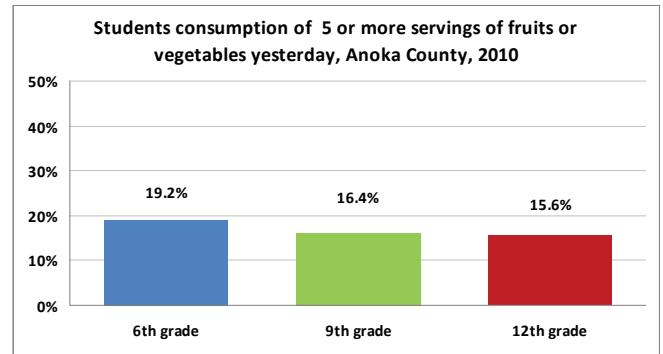
While the Metro rates for getting the recommended number of servings of fruits and vegetables is slightly higher than those for Outstate Minnesota students, the Metro rates for getting the recommended moderate physical activity and for not being overweight or obese are lower. On the following pages, each of the four indicators is presented with county-level data.



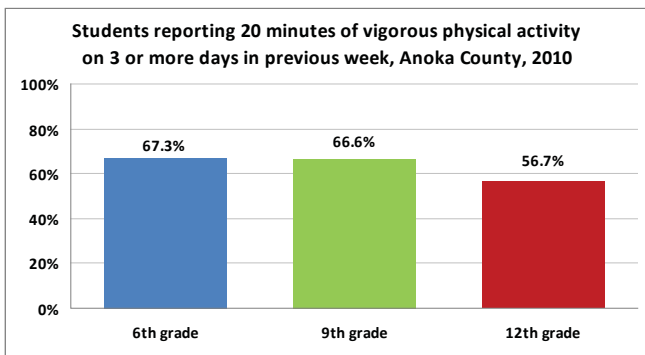
Anoka County

Fruit and Vegetable Intake

In 2010, the percentage of students in Anoka County reporting consumption of the recommended five servings of fruits and vegetables per day is fewer than 1 in 5. Reported consumption slightly decreases as grade level increases, particularly between 6th and 9th grades.



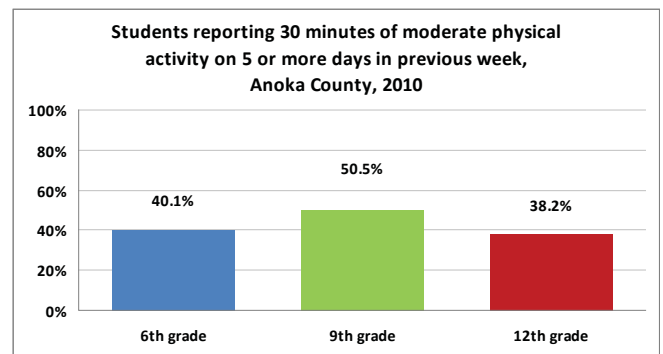
Vigorous Physical Activity



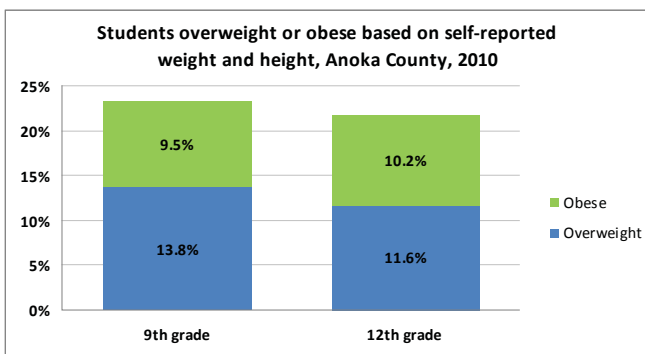
In 2010, less than 68% of students in Anoka County reported 20 minutes of vigorous physical activity 3 or more days a week. A similar percentage of 6th graders at 67.3% and 9th graders at 66.6% met the recommended amount of vigorous activity. A smaller percentage of 12th grade students, 56.7%, met the recommendation.

Moderate Physical Activity

In 2010, the percentage of students in Anoka County who reported 30 minutes of moderate physical activity 5 or more days a week varied. The percentage was highest for 9th graders at 50.5% and about equal for 6th graders at 40.1% and 12 graders at 38.2% of students.



Weight Status

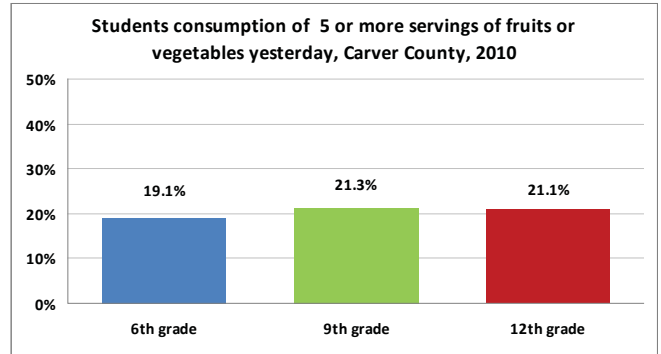


In 2010, a similar percentage of 9th grade students in Anoka County were classified as overweight or obese compared to 12th graders. Approximately 23% of 9th graders were classified as overweight or obese and 22% of 12th graders were so classified. A larger percentage of students in both 9th grade and 12th grade were classified as overweight versus obese.

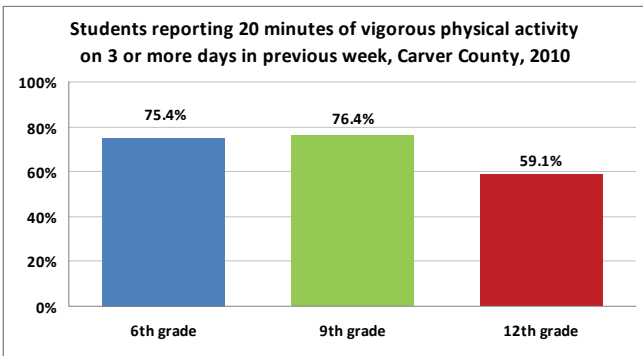
Carver County

Fruit and Vegetable Intake

In 2010, the percentage of Carver County students reporting consumption of the recommended five or more servings of fruits and vegetables per day is about 1 in 5. Reported consumption slightly increases from 6th grade to 9th grade.



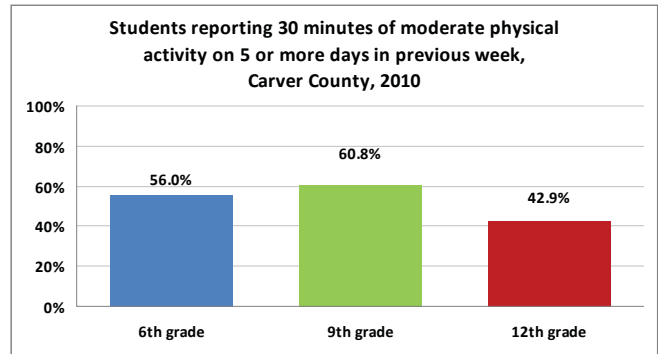
Vigorous Physical Activity



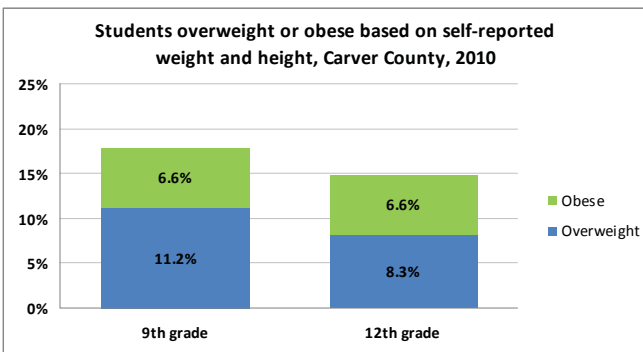
In 2010, over 70% of Carver County students reported 20 minutes of vigorous physical activity on 3 or more days a week. The percentage varied by grade level. Just over 76% of students in 9th grade reported meeting standards for vigorous physical activity. Students in 6th grade reported slightly lower rates of meeting standards of vigorous physical activity at approximately 75%; 12th grade students reported the lowest rate at 59.1%.

Moderate Physical Activity

In 2010, over half of Carver County students reported 30 minutes of moderate physical activity on 5 or more days a week. The percentage varied by grade level. Similar to those that reported 20 minutes of vigorous activity 5 or more days a week, it was highest for 9th graders at 60.8% and lowest for 12th graders at 42.9%.



Weight Status

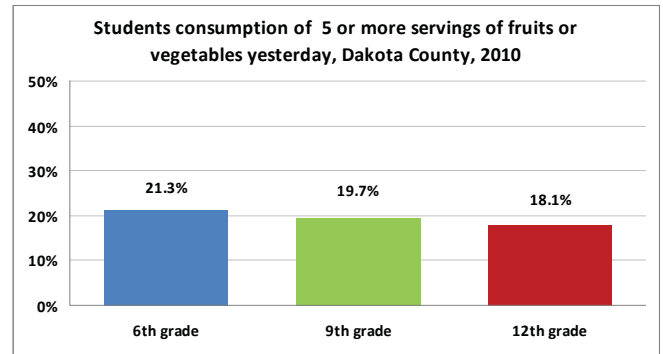


In 2010, a higher percentage of Carver County 9th graders were classified as overweight (11.2%) as compared with 12th graders (8.3%). Approximately 18% of 9th graders, and 15% of 12th graders, were classified as overweight or obese. A larger percentage of students in both 9th and 12th grade were classified as overweight versus obese.

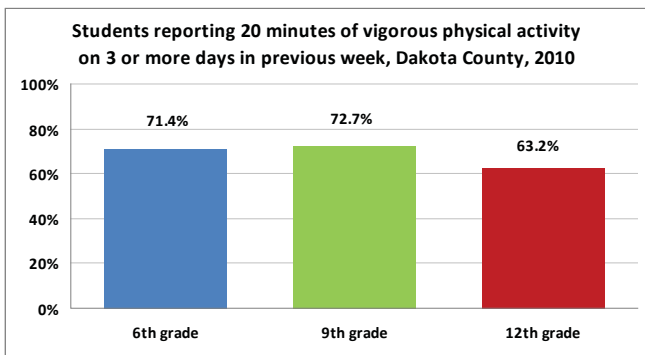
Dakota County

Fruit and Vegetable Intake

In 2010, the percentage of Dakota County students reporting consumption of the recommended five servings and fruits and vegetables per day is fewer than 1 in 4. Reported consumption slightly decreases as grade level increases. The percentage of 6th graders meeting the recommended 5 servings is higher than 9th graders, which is higher than the percentage of 12th graders.



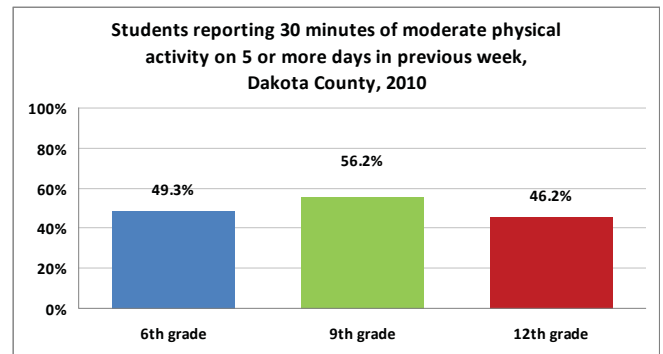
Vigorous Physical Activity



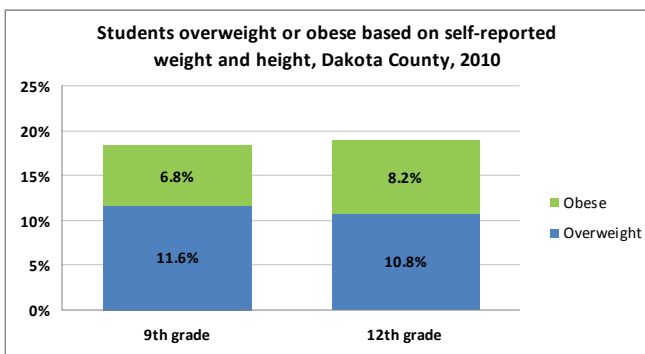
In 2010, less than 73% of Dakota County students reported 20 minutes of vigorous physical activity 3 days a week. It was highest for 9th graders at 73%, next highest for 6th graders at 71% and lowest for 12th graders at 63%.

Moderate Physical Activity

In 2010, the percentage of Dakota County students who reported 30 minutes of moderate physical activity 5 days a week varied. Similar to those that reported 20 minutes of vigorous activity 5 days a week, it was highest for 9th graders at 56%, next highest for 6th graders at 49%, and lowest for 12th graders at 46%.



Weight Status

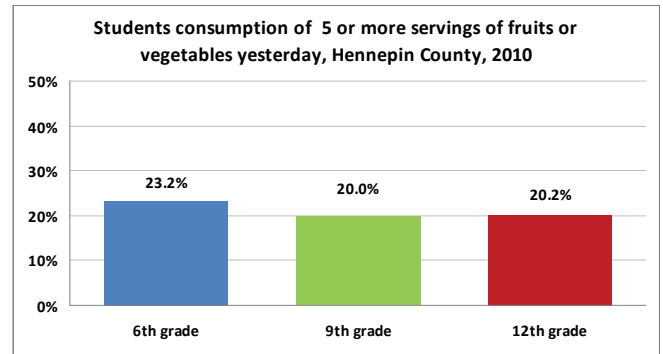


In 2010, the percent of Dakota County students who were classified as overweight or obese was similar in 9th and 12th graders. Approximately 18% of 9th and 19% of 12th graders were classified as overweight or obese. A larger percentage of students in both 9th grade and 12th grade were classified as overweight versus obese. The percent of students who were classified as overweight was similar in both grades, but a slightly higher proportion of 12th graders were classified as obese.

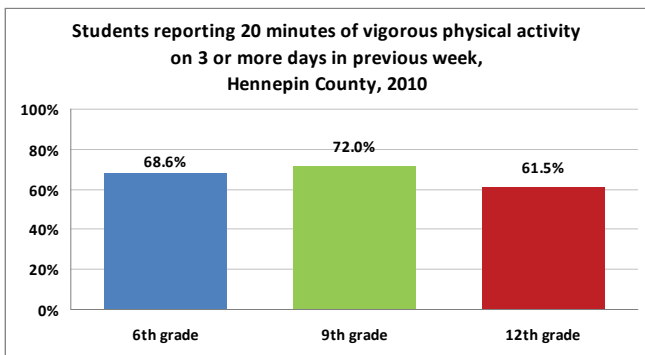
Hennepin County

Fruit and Vegetable Intake

In Hennepin County, only one out of five students reported consuming five or more servings of fruits or vegetables per day. The percentage of 6th graders meeting recommended standards of fruit and vegetable consumption was higher than the percentage of 9th and 12th graders. Of the three grade levels, 9th graders had the lowest percentage of students meeting recommended standards.



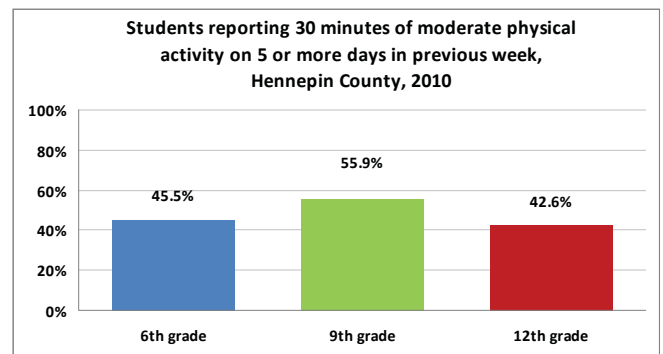
Vigorous Physical Activity



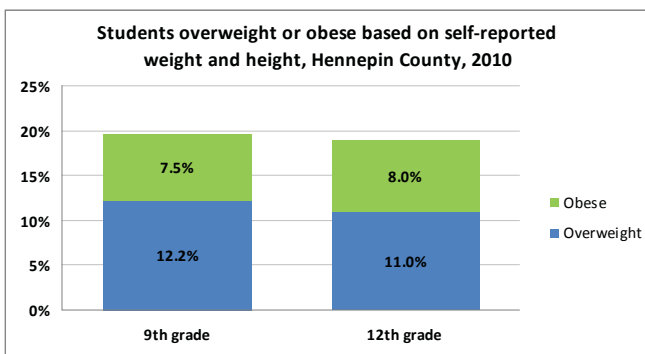
In Hennepin County overall, about two out of three students met the suggested guideline of 20 minutes of vigorous physical activity on 3 or more days of the week. However, the rates for 2010 varied notably across grade levels. The rate was highest for students in 9th grade (72%), followed by 68.6% of students in 6th grade, and only 61.5% of students in 12th grade.

Moderate Physical Activity

In Hennepin County, the percent of students in 2010 reporting 30 minutes of moderate physical activity on 5 or more days a week varied across grade levels. The highest percentage was observed for 9th graders with 55.9% of students meeting the standard. Percents were lower for 6th graders (45.5%), and 12th graders (42.6%).



Weight Status

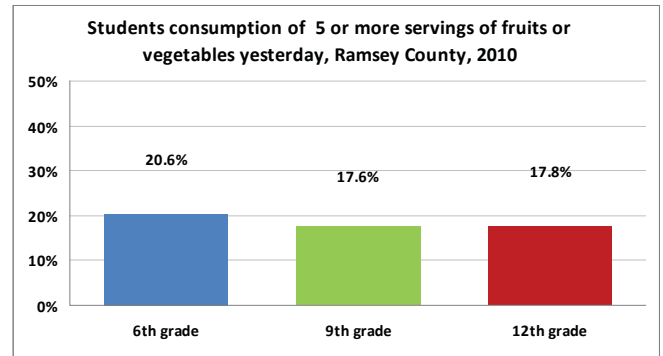


In Hennepin County, 9th grade and 12th grade students in 2010 had similar percentages of students classified as overweight or obese. Overall, 20% of 9th graders were considered overweight or obese, as compared to 19% of 12th graders. Among 9th graders, 12% were considered overweight as compared to 11% of 12th graders. Approximately 8% of 9th grade, as well as 12th grade students were classified as obese.

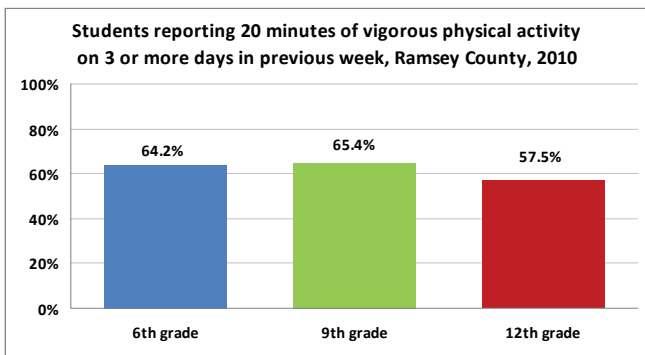
Ramsey County

Fruit and Vegetable Intake

In 2010, about one fifth of Ramsey County students report consuming the recommended five servings of fruits and vegetables per day. Consumption was best among 6th graders at about 21% and decreased to 18% among 9th and 12th grade students.



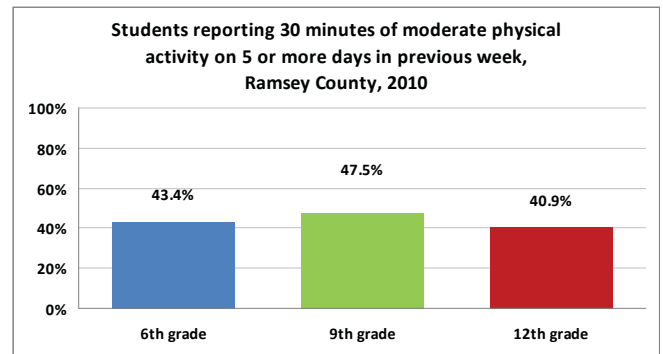
Vigorous Physical Activity



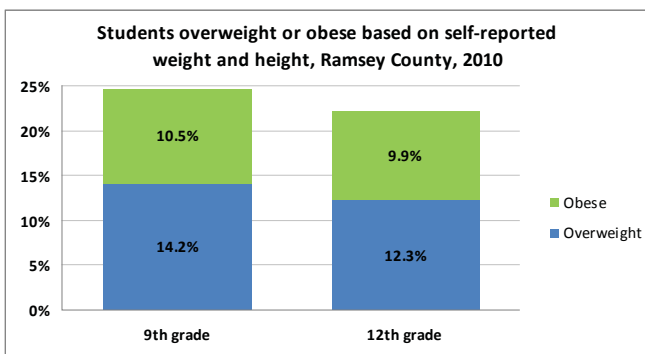
In 2010, less than 66% of Ramsey County students reported 20 minutes of vigorous activity 3 days a week. It was the highest for 9th graders at 66%, next highest for 6th graders at 64%, and lowest for 12th graders at 58%.

Moderate Physical Activity

In Ramsey County, less than half of all students reported 30 minutes of moderate physical activity 5 or more days a week. The percentage varied by grade level. The highest percentage was among 9th graders with 48% of students meeting the standard. Percents were lower among 6th and 12th graders at 43% and 41% respectively.



Weight Status

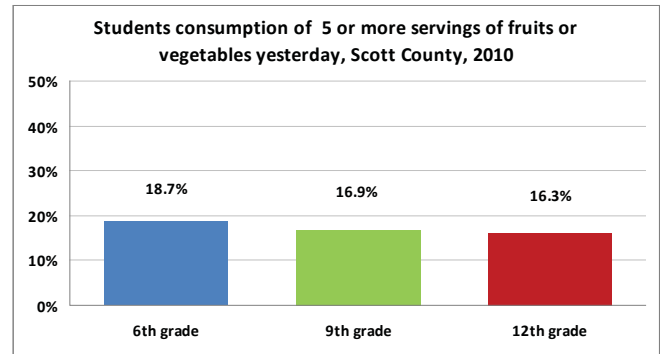


In 2010, a higher percentage of Ramsey County students in 9th grade were classified as overweight or obese compared to 12th graders in both categories. One fourth of 9th graders and about one fifth of 12th graders were classified as overweight or obese. A larger percentage of students in both 9th grade and 12th grade were classified as overweight versus obese.

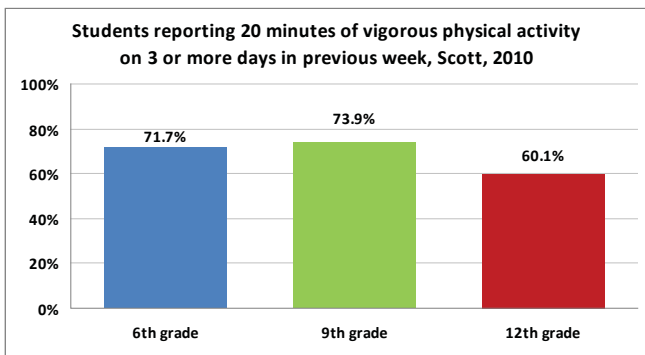
Scott County

Fruit and Vegetable Intake

In 2010, the percentage of Scott County students reporting consumption of five or more servings of fruits and vegetables per day is fewer than 1 in 5. Reported consumption slightly decreases as grade level increases. The percentage of 6th graders meeting the recommended 5 or more servings is higher than 9th graders, but then levels off in the 12th grade.



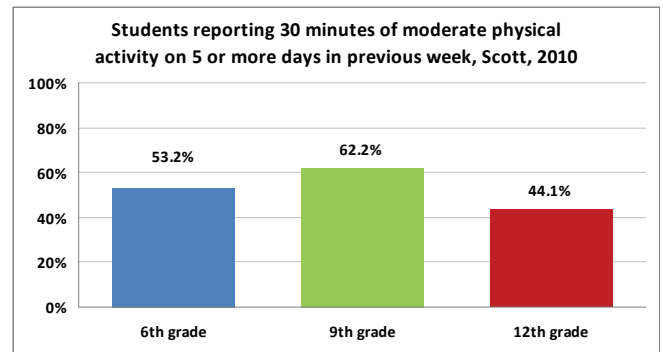
Vigorous Physical Activity



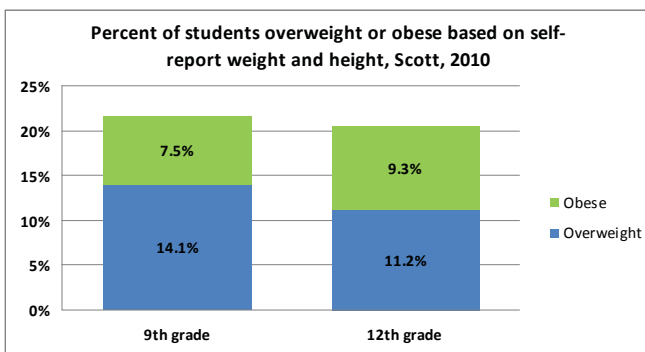
In 2010, the percentage of Scott County students who reported 20 minutes of vigorous physical activity 3 days a week varied. It was highest for 9th graders at 74% followed by 6th graders at 72% and 12th graders at 60%.

Moderate Physical Activity

In 2010, the percentage of Scott County students who reported 30 minutes of moderate physical activity 5 days a week varied. Similar to those that reported 20 minutes of vigorous activity 3 days a week, it was highest for 9th graders at 62% followed by 6th graders at 53% and 12th graders at 44%.



Weight Status



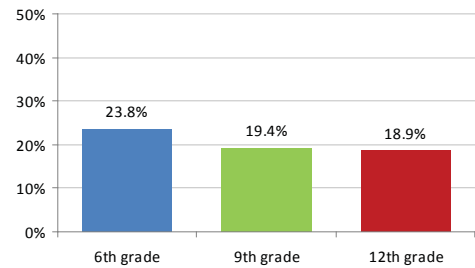
In 2010, nearly 45% of Scott County students did not answer the survey questions regarding height and weight. Of the remaining 55% that did supply information, a slightly higher percentage of Scott County students in 9th grade were classified as overweight or obese compared to 12th graders. Approximately 22% of 9th graders were classified as overweight or obese and 21% of 12th graders. A larger percentage of students in both 9th grade and 12th grade were classified as overweight versus obese.

Washington County

Fruit and Vegetable Intake

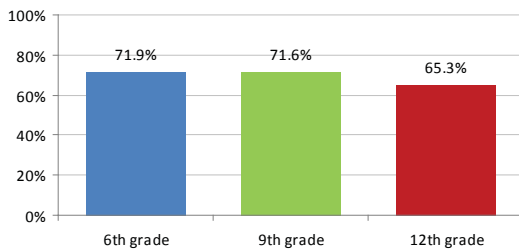
In 2010, fewer than 1 in 4 students in 6th grade and fewer than 1 in 5 students in grades 9 and 12 reported consuming 5 or more servings of fruits and vegetables per day. Nearly 24% of students in 6th grade reported consuming 5 or more fruits and vegetables yesterday while 12th graders reported the lowest level at 19%. Reported consumption levels decreased slightly with increasing grade levels.

Students consumption of 5 or more servings of fruits or vegetables yesterday, Washington County, 2010



Vigorous Physical Activity

Students reporting 20 minutes of vigorous physical activity on 3 or more days in previous week, Washington County, 2010

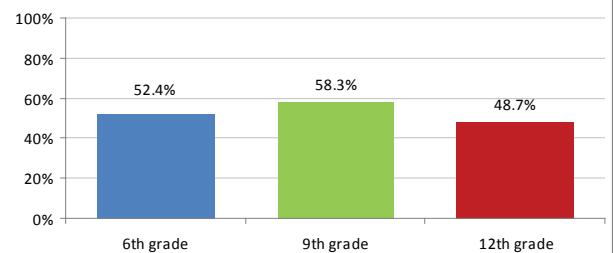


In 2010, approximately 72% of students in grades 6 and 9 reported engaging in 20 minutes or more of vigorous activity on 3 or more days a week. This includes exercise or participation in sports or other activities that made them sweat or breathe hard. Students in 12th grade reported the lowest level of vigorous activity per week at 65%.

Moderate Physical Activity

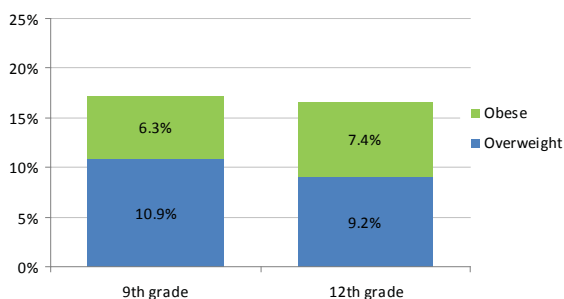
In 2010, slightly more than half of students in grades 6 and 9 reported engaging in 30 minutes of moderate physical activity on 5 or more days in the previous week. Slightly less than half of 12 graders, 49%, reported meeting the recommended level of moderate physical activity for the week. The highest percentage was reported among 9th graders, at 58%, followed by 6th graders at 52%.

Students reporting 30 minutes of moderate physical activity on 5 or more days in previous week, Washington County, 2010



Weight Status

Students overweight or obese based on self-reported weight and height, Washington County, 2010

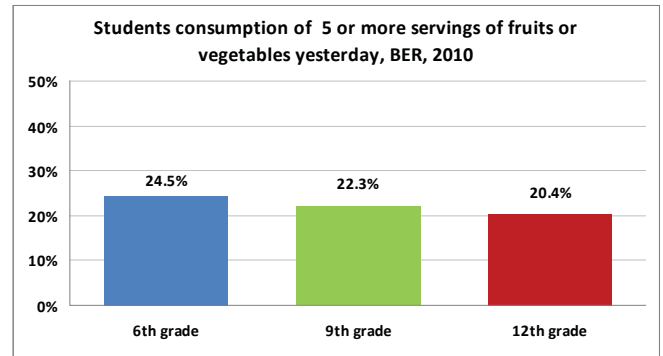


In 2010, approximately 17% of students in both 9th and 12th grade were classified as overweight or obese based on self-reported height and weight. Nearly 11% of 9th graders were classified as overweight, compared to 9% of 12 graders. The percentage of 12 grade students classified as obese was 7%, slightly higher than 6% for 9th grade students.

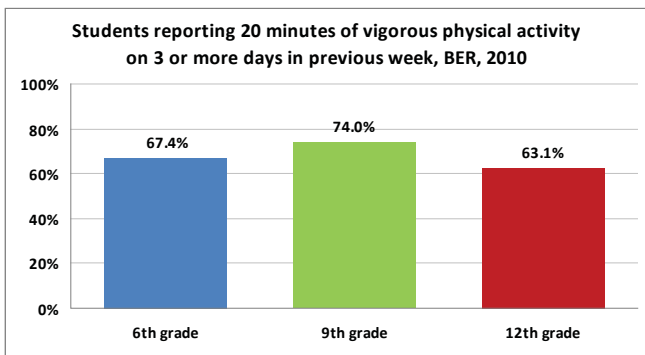
Bloomington, Edina and Richfield

Fruit and Vegetable Intake

In 2010, the percentage of Bloomington, Edina, and Richfield students reporting consumption of the recommended five servings and fruits and vegetables per day is fewer than 1 in 4. Reported consumption slightly decreases as grade level increases. The percentage of 6th graders meeting the recommended 5 servings is higher than 9th graders, which is higher than the percentage of 12th graders.



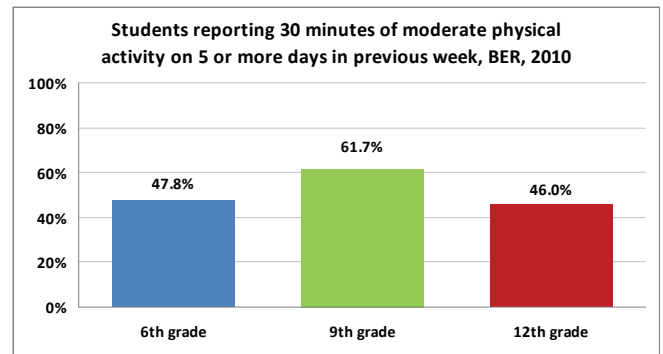
Vigorous Physical Activity



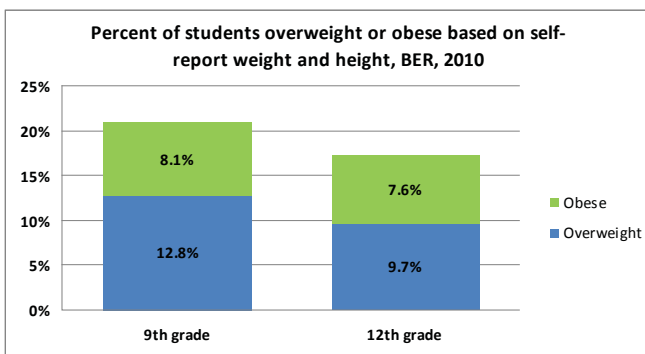
In 2010, the percentage of Bloomington, Edina, and Richfield students who reported 20 minutes of vigorous physical activity 3 days or more in the previous week varied. It was highest for 9th graders at 74%, followed by 6th graders at 67% and lowest for 12th graders at about 63% of students.

Moderate Physical Activity

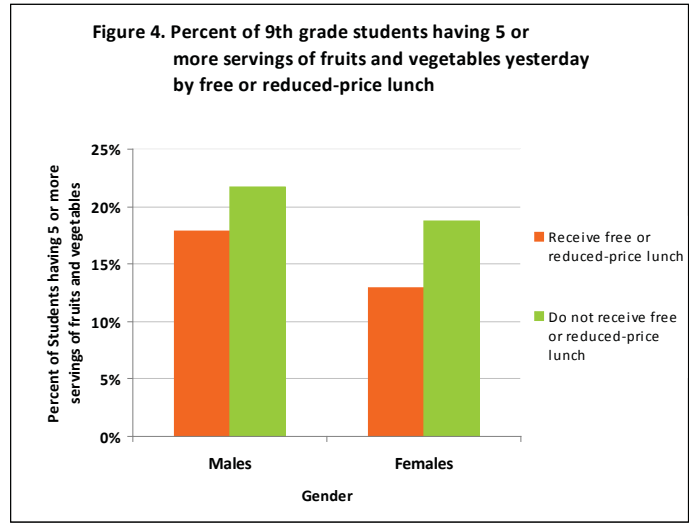
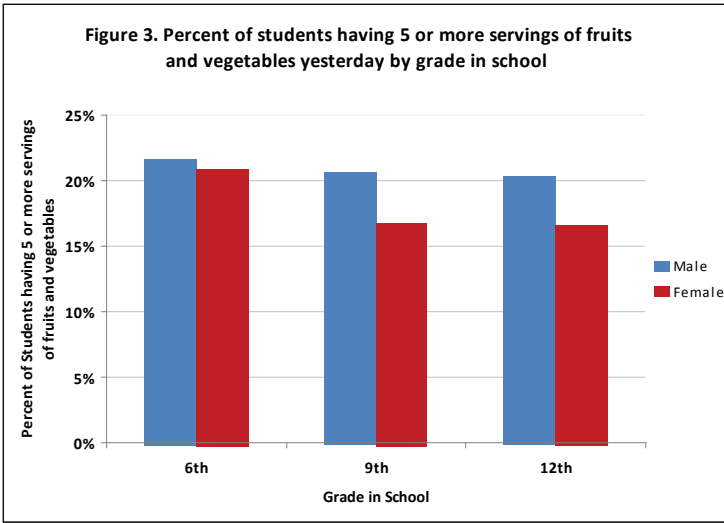
In 2010, the percentage of Bloomington, Edina, and Richfield students who reported 30 minutes of moderate physical activity 5 days a week varied. Similar to those that reported 20 minutes of vigorous activity 5 days a week, it was highest for 9th graders at 62% and about equal for 6th graders at 48% and 12th graders at 46% of students.



Weight Status

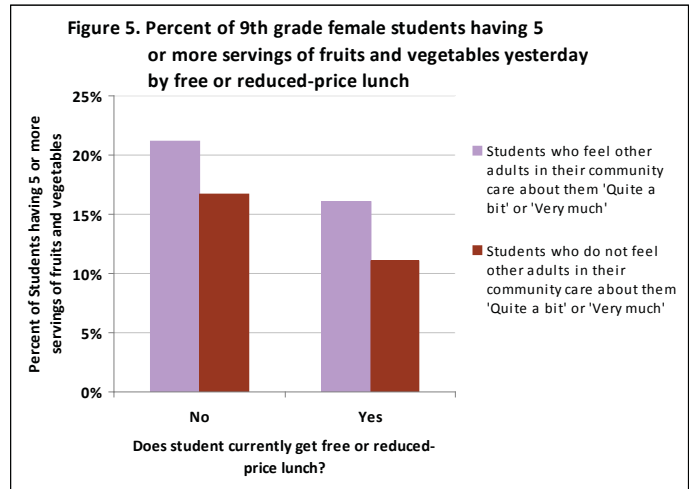


In 2010, a higher percentage of Bloomington, Edina, and Richfield students in 9th grade were classified as overweight or obese compared to 12th graders. Approximately 21% of 9th graders were classified as overweight or obese and 17% of 12th graders. A larger percentage of students in both 9th grade and 12th grade were classified as overweight versus obese.



The analysis earlier in this report shows that there are differences in the percentages of students consuming the recommended amount of fruits and vegetables between grades 6, 9 and 12. Figure 3 shows that there is also a gap between males and females in each of those grades. The gap between males and females increases in grades 9 and 12.

There is an additional gap between students who receive free and reduced-priced lunches and those who do not as far as the adequacy of their consumption of fruits and vegetables. This gap exists for both males and females. To illustrate, Figure 4 shows that 9th grade students receiving free or reduced-priced lunches are less likely to eat the recommended amount of fruits and vegetables than students who do not participate in those programs.



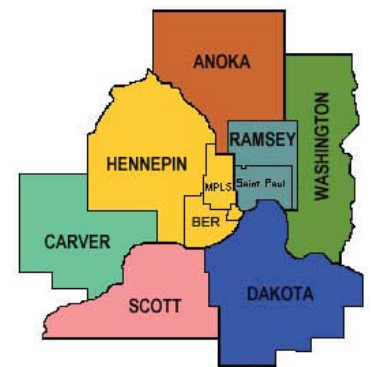
Fortunately some of the disparities based on income can be lessened when students feel that adults in the community care about them. Figure 5 illustrates that a higher percentage of 9th grade female students, for both those receiving free and reduced-price lunch and those not, eat the recommended number of servings of fruits and vegetables when they feel that an adult member of the community cares about them Quite a Bit, or Very Much compared to those who do not. The same pattern is true for males and for physical activity and weight.

Data Source: 2010 Minnesota Student Survey, Minnesota Department of Education, Minnesota Department of Health, Minnesota Department of Human Services, and Minnesota Department of Public Safety

For More Information

Data Matters is a project of the Metro Public Health Data Analysis Work Group, a collaborative effort among eight local public health agencies in the Minneapolis-Saint Paul area in Minnesota. These agencies include: Anoka County Community Health and Environmental Services, Bloomington Public Health also serving Edina and Richfield (BER), Carver County Public Health Division, Dakota County Public Health Department, Hennepin County Human Services and Public Health Department, Saint Paul-Ramsey County Department of Public Health, Scott County Public Health, and Washington County Department of Public Health and Environment.

For more information on **Data Matters** or other public health data for the seven-county metropolitan area, please contact PublicHealthData@gmail.com or go to <http://sites.google.com/site/PublicHealthData>



Metro Public Health Data Analysis Work Group