

# Clark County Youth: Nutrition, Physical Activity, and Weight Status



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Health Assessment Unit  
Clark County Public Health



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## **Acknowledgements**

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# **Executive Summary**

This report provides nutrition, physical activity, and weight status information for Clark County and Washington State students.

Specific health behaviors and characteristics analyzed in this report include consumption of soda, fruits/vegetables, and breakfast; physical activity; and weight status.

## **Students' Health Status**

Clark County and Washington State students were assessed for all health behaviors and characteristics mentioned above. Findings for Clark County students in 2006 include:

### Nutrition

- Nine percent (9%) of sixth grade, 15% of eighth grade, 16% of tenth grade, and 17% of twelfth grade students drank two or more non-diet sodas on the day prior to the survey.
- Seventy-eight percent (78%) of sixth grade, 67% of eighth grade, 60% of tenth grade, and 53% of twelfth grade students ate breakfast the morning of the survey.
- Thirty percent (30%) of eighth grade, 23% of tenth grade, and 20% of twelfth grade students ate fruits and vegetables five or more times per day.

### Physical Activity

- Forty-nine percent (49%) of eighth grade, 40% of tenth grade, and 37% of twelfth grade students met the new recommendation for physical activity. The new recommendation for physical activity is 60 minutes of physical activity on most, preferably all, days of the week.

### Weight Status

- Nine percent (9%) of eighth grade, 10% of tenth grade, and 11% of twelfth grade students were classified as overweight.
- Twenty-four percent (24%) of eighth, 25% of tenth, and 24% of twelfth grade students were either overweight or at risk for overweight.

## **Recommendations for School-Based Interventions**

Many school-based interventions are available to improve students' nutrition and physical activity level. Clark County Public Health recommends the following interventions to support good health in our students.

### Nutrition

#### School Breakfast Programs

- Implement school breakfast programs in all schools
- Evaluate existing school breakfast programs to identify barriers and increase utilization
- Provide breakfast and/or lunch without charge to all students regardless of their eligibility for free or reduced price meals

#### Restricting Access to Soft Drinks and Other Vended Food

- Invite public discussion before making a decision to create a food/beverage vending contract
- Avoid selling soft drinks as part of or in competition with the school lunch program
- Avoid placing vending machines within the cafeteria space where lunch is sold
- Turn off vending machines with foods of minimal nutritional value (including soft drinks) during lunch hours and ideally, during school hours
- Eliminate vended soft drinks and fruit-flavored drinks in all elementary schools

- Limit the number of machines vending sweetened drinks
- Preferentially vend drinks that are sugar-free or low in sugar
- Provide real fruit and vegetable juices, water, and low-fat white or flavored milk for sale as healthful alternatives to soft drinks

#### Food Sales

- Implement food-pricing strategies that encourage the purchase of nutritious foods (e.g., increasing the price of unhealthy foods and decreasing the price of healthy foods)
- Disallow sales of foods that compete with school breakfast or lunch
- Develop a district or school policy that requires the establishment of salad bars in all K-12 schools
- Provide more nutritious foods through a la carte, snack bar, fundraisers, and vending

#### Nutrition Labeling

- Require that nutrition information be either posted or appear on the food labels of all food sold on school grounds or at school-sponsored events
- Require or provide incentives for the creation and implementation of a nutrition labeling system to identify food items that meet certain nutrition standards

#### Additional Interventions

- Develop nutrition standards for all food and beverages available on campus to be consistent with established national nutrition standards
- Create a school nutrition advisory council as one component of a school district's health advisory council
- Implement a fruit/vegetable program in all schools, which provides children with a variety of free fresh fruits and vegetables throughout the school day

#### Physical Activity

##### Enhanced School-Based Physical Education Classes

- Provide enhanced school-based physical education classes

##### Creating or Improving Access to Places for Physical Activity

- Create or improve access to places for physical activity, combined with distribution of information
- Provide after-hours access to recreational facilities
- Provide or enhance funding for physical activity facilities in schools
- Consider the effect of a new school design or remodel project on student health

##### Increasing Students' Walking or Biking to School

- Implement a Safe Routes to Schools program to increase the number of children walking and biking to school

#### Weight Status

There is some evidence that weight intervention programs at schools may be effective at reducing students' weight, but evidence for such programs is sparse and more studies are needed in this area.

# Introduction

Physical activity and nutrition are essential for healthy childhood development. This report assesses physical activity, nutrition, and weight status among Clark County students. Specific health characteristics and behaviors analyzed in this report include soda consumption, fruit and vegetable consumption, breakfast consumption, physical activity, and weight status.

*“We need physical activity and healthy food choices in every school in America.”*

- *Dr. Richard H. Carmona  
Former US Surgeon General  
testimony to the US House of Representatives, July 16, 2003*

Interventions are available to address health behaviors in school, where students make critical health decisions. A list of interventions has been included in this report.

Our findings about student health can be used to inform schools’ policymaking and planning efforts that affect students’ health.

## Methods

Information on school-aged children in Washington State is collected through the Healthy Youth Survey every two years. This report is based on information collected from students in Clark County and Washington State who took the survey in the fall of 2004 and 2006.\*

All Healthy Youth Survey data were self-reported by students. Because sixth graders took a shorter survey than their older counterparts, fewer factors were analyzed among sixth grade students.

Healthy People 2010 is a set of national health indicators which identify significant preventable health issues in the nation and goals related to these issues.<sup>1</sup> When available, Healthy People 2010 goals are included for comparison with Clark County data. Synthetic high school estimates are provided to compare with Healthy People 2010 physical activity goals. These high school estimates represent an estimate of the health behavior among high school students in grades nine through twelve, and were calculated using methodology developed by the Washington State Department of Health.\*

When analyzing data, we determined how likely an apparent difference between two figures represented a real difference between the two figures, versus being due to chance. Ninety-five percent (95%) confidence intervals were used in this report to approximate statistical significance. If two confidence intervals did not overlap, we were 95% confident that there was a real difference between two figures. In this report, the terms “significantly higher/lower” or “increased/decreased significantly” indicate that two confidence intervals did not overlap and we are 95% confident that there exists a real difference between the two figures. If two figures are described as “similar” or “did not change significantly,” this indicates that even if they appear to be different, this difference is likely due to chance as opposed to a real difference.



**Healthy People 2010 is a set of national health indicators which identify significant preventable health issues in the nation and goals related to these issues.**



\* See Appendix B for more detail.



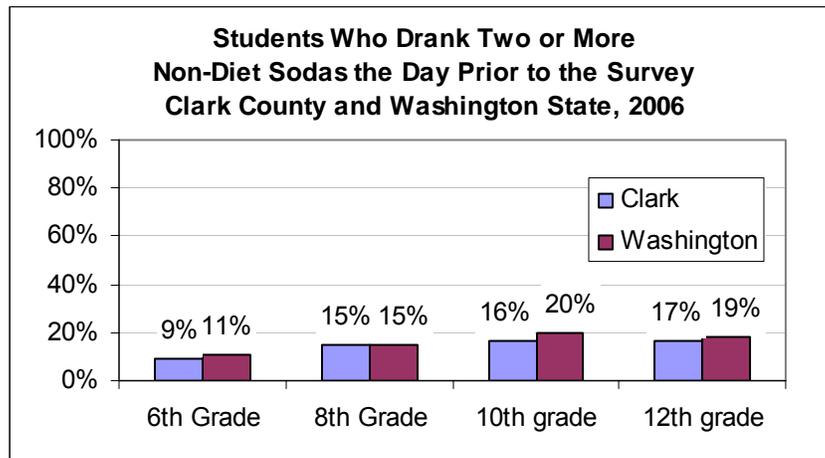
## **Nutrition**

Information on students' soda consumption, breakfast consumption, and consumption of fruits and vegetables is provided in this section.

### **Soda Consumption**

Limiting non-diet soda consumption can benefit students' health in several ways. Limiting sugar-containing beverages is one way to reduce the incidence of dental caries.<sup>2</sup> Additionally, added sugars in foods supply calories but few or no nutrients.<sup>2</sup> Children and adolescents are recommended to limit their consumption of soft drinks as one way to prevent overweight and obesity.<sup>3</sup> The Washington State Department of Health has defined "excessive soda consumption" as two or more non-diet sodas consumed on the day prior to the survey.

*In Clark County in 2006, 9% of sixth grade, 15% of eighth grade, 16% of tenth grade, and 17% of twelfth grade students drank two or more non-diet sodas on the day prior to the survey.*

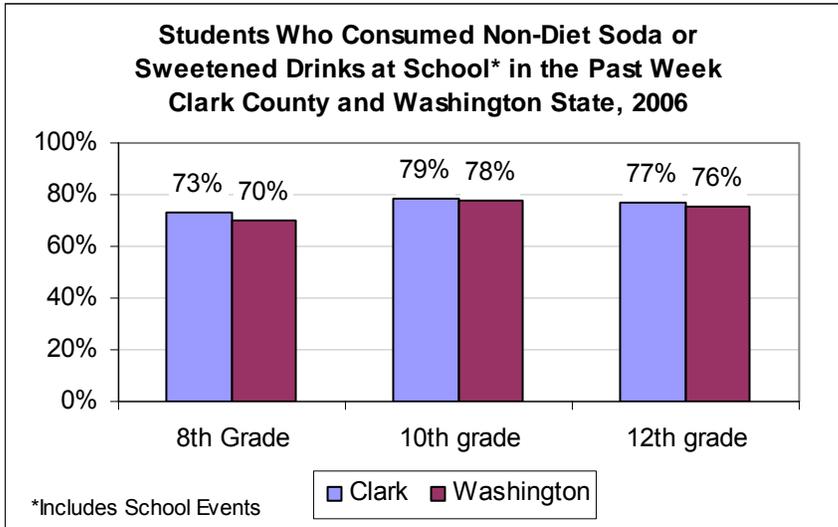


In Clark County in 2006, 9% of sixth grade, 15% of eighth grade, 16% of tenth grade, and 17% of twelfth grade students drank two or more non-diet sodas on the day prior to the survey.

Clark County figures are similar to Washington State for all grade levels. Soda consumption decreased significantly among Clark County sixth, eighth, tenth, and twelfth grade students between 2004 and 2006. In 2004, 14% of sixth grade, 19% of eighth grade, 23% of tenth grade, and 22% of twelfth grade students drank two or more non-diet sodas on the day prior to the survey.

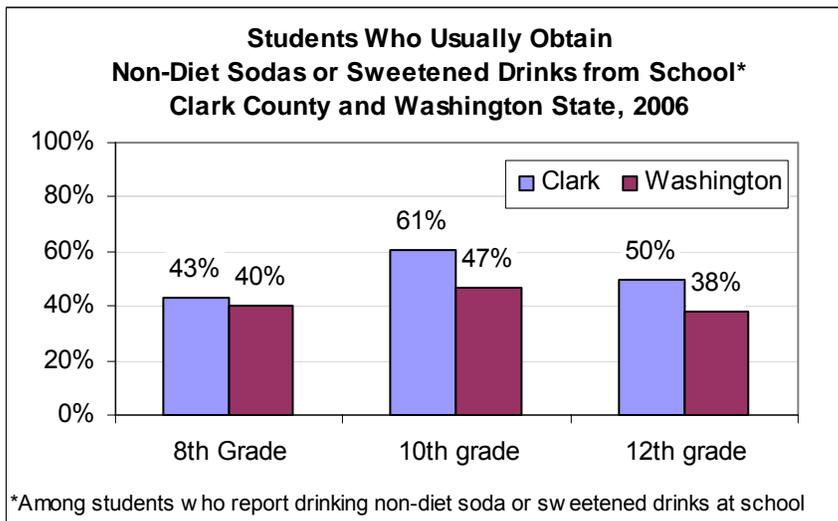
In addition to being asked about overall soda consumption, students were asked about soda and other sweetened drink consumption specifically while at school or school events.





In Clark County in 2006, 73% of eighth, 79% of tenth, and 77% of twelfth grade students reported consuming non-diet soda or other sweetened drinks at school or school-related activities in the past week. Clark County figures are similar to Washington State for all grade levels.

Students were also asked where they usually obtained the non-diet soda or other sweetened drinks that they drank at school.



In Clark County in 2006, among students who reported consuming these drinks at school or school events in the past week, 43% of eighth, 61% of tenth, and 50% of twelfth grade students reported usually obtaining their drinks at school. Clark County figures were similar to Washington State for eighth grade students. Clark County figures were significantly higher than Washington State as a whole among tenth and twelfth grade students.

Sixth grade students were asked if they bought any of the sodas they drank on the day prior to the survey from school. In Clark County in 2006, 13% of sixth grade students who drank soda the day prior bought soda from school.<sup>†</sup> This figure is similar to Washington State as a whole.

<sup>†</sup> Data on consumption of soda specifically at school/school events is not available for sixth grade students.



*In Clark County in 2006, 73% of eighth, 79% of tenth, and 77% of twelfth grade students reported consuming non-diet soda or other sweetened drinks at school or school-related activities in the past week.*

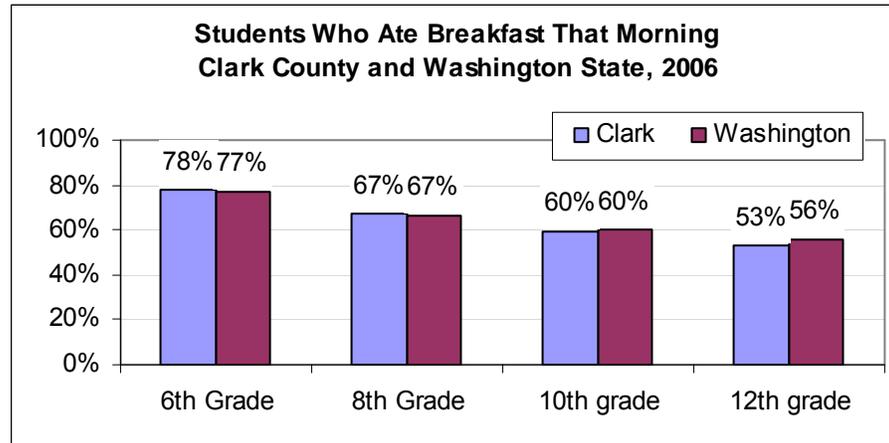
*In Clark County in 2006, 43% of eighth, 61% of tenth, and 50% of twelfth grade students reported usually obtaining non-diet soda or other sweetened drinks at school.*





## Breakfast Consumption

Healthy eating contributes to overall healthy growth and development. Additionally, there is evidence that missing breakfast can negatively affect children's intellectual performance.<sup>4</sup> While these data do not include information on the nutritional content of breakfast, we can measure how many children are consuming breakfast.



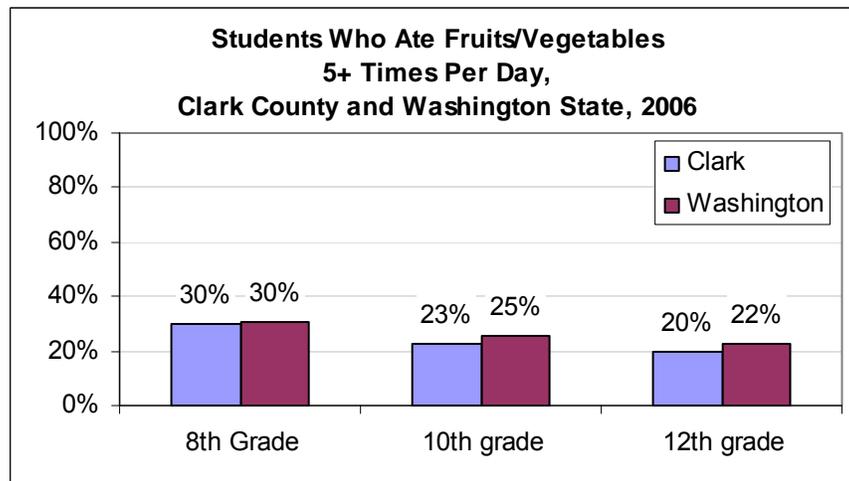
*In Clark County in 2006, 78% of sixth grade, 67% of eighth grade, 60% of tenth grade, and 53% of twelfth grade students ate breakfast the morning of the survey.*

In Clark County in 2006, 78% of sixth grade, 67% of eighth grade, 60% of tenth grade, and 53% of twelfth grade students ate breakfast the morning of the survey. Clark County figures are similar to Washington State for all grade levels.

## Fruit/Vegetable Consumption

Fruits and vegetables are an important component of an overall healthy diet.<sup>2</sup>

*In Clark County in 2006, 30% of eighth grade, 23% of tenth grade, and 20% of twelfth grade students ate fruits and vegetables five or more times per day in the week prior to the survey.*



In Clark County in 2006, 30% of eighth grade, 23% of tenth grade, and 20% of twelfth grade students ate fruits and vegetables five or more times per day in the week prior to the survey.

Clark County figures are similar to Washington State for all grade levels. Fruit and vegetable consumption increased significantly among Clark County eighth graders between 2004 and 2006, from 25% to 30%, but did not change significantly among tenth or twelfth grade students.

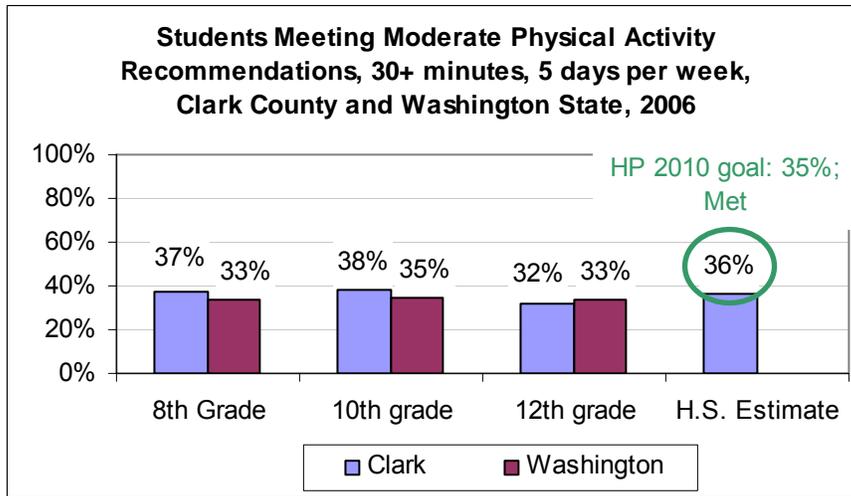


# Physical Activity

Regular physical activity is beneficial for people of all ages, including children.<sup>5</sup>

## Moderate Physical Activity

The Healthy People 2010 goal indicates that 35% of adolescents in grades nine through twelve (i.e., high school) engage in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days.<sup>‡,1</sup>



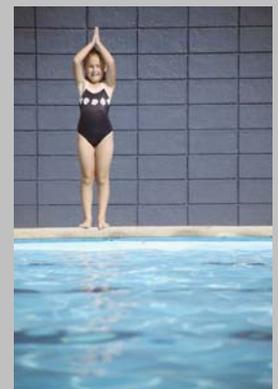
*In Clark County in 2006, 37% of eighth, 38% of tenth, and 32% of twelfth grade students met the recommendation for moderate physical activity.*

In Clark County in 2006, 37% of eighth, 38% of tenth, and 32% of twelfth grade students met the recommendation for moderate physical activity. An estimated 36% of Clark County high school students in grades nine through twelve met the recommendation for moderate physical activity, which meets the Healthy People 2010 goal of 35%.

The percent of Clark County eighth grade students who meet the recommendation for moderate physical activity is significantly higher than Washington State as a whole. Clark County figures are similar to Washington State for tenth and twelfth grades. Moderate physical activity among Clark County youth did not change significantly between 2004 and 2006 for any grade level, or high school students combined.

## Vigorous Physical Activity

The Healthy People 2010 goal indicates that 85% of adolescents in grades nine through twelve (i.e., high school) engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.<sup>§,1</sup>

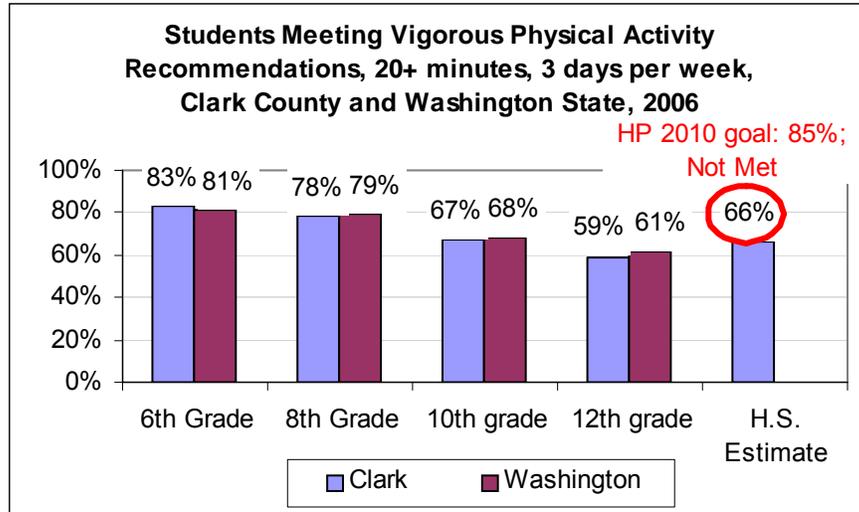


<sup>‡</sup> Moderate physical activity is was defined on the survey as "physical activity for at least 30 minutes that did not make [the student] sweat or breathe hard, such as fast walking, slow bicycling, skating, pushing a lawn mower, or mopping floors."

<sup>§</sup> Vigorous physical activity was defined on the survey as "physical activity for at least 20 minutes that made [the student] sweat and breathe hard, such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activities."



**In Clark County in 2006, 83% of sixth grade, 78% of eighth grade, 67% of tenth grade, and 59% of twelfth grade students met the recommendation for vigorous physical activity.**

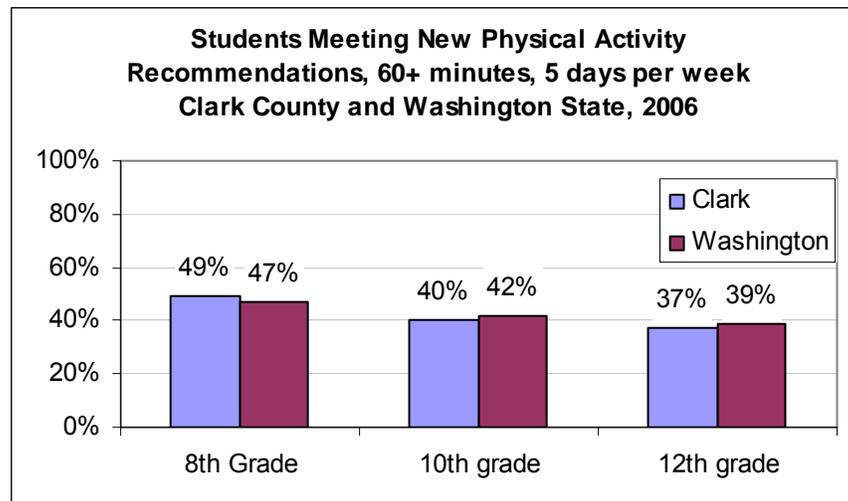


In Clark County in 2006, 83% of sixth grade, 78% of eighth grade, 67% of tenth grade, and 59% of twelfth grade students met the recommendation for vigorous physical activity. An estimated 66% of Clark County high school students met the recommendation for vigorous physical activity, which does not meet the Healthy People 2010 goal of 85%.

Clark County figures are similar to Washington State for all grade levels. Vigorous physical activity among Clark County youth did not change significantly between 2004 and 2006 for any grade level, or high school students combined.

## New Physical Activity Recommendation

The U.S. Departments of Health and Human Services and Agriculture published the *Dietary Guidelines for Americans, 2005*. This report established a new recommendation for physical activity for children and adolescents of at least sixty minutes of physical activity\*\* on most, preferably all,†† days of the week.<sup>2</sup>



In Clark County in 2006, 49% of eighth grade, 40% of tenth grade, and 37% of twelfth grade students met the new recommendation for physical activity. Clark County figures are similar to Washington State for all grade levels.

\*\* Defined as activity that increases [the student's] heart rate or makes [them] breathe hard some of the time  
 †† The cutoff point for this indicator is set at 5 days by the Washington State Department of Health.

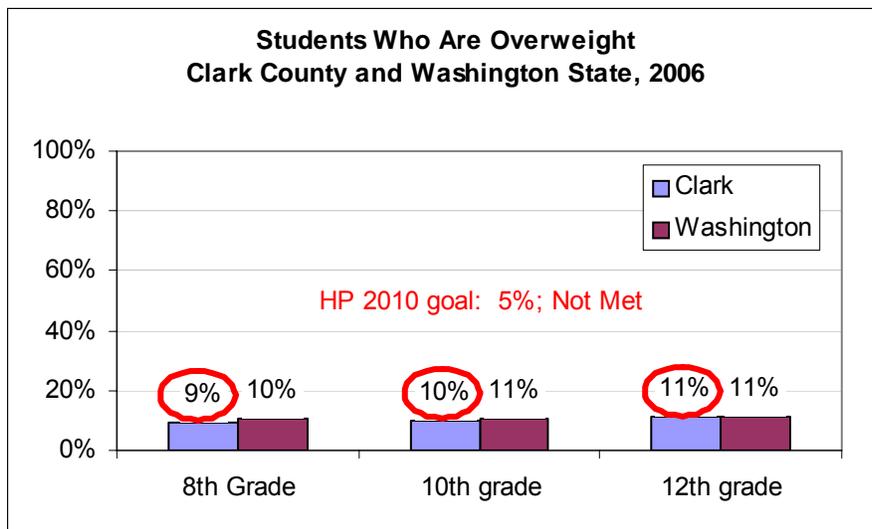


# Weight Status

Nationally, the prevalence of overweight among children and adolescents has increased substantially in the past two decades.<sup>6</sup> Additionally, type II diabetes, which is closely related to overweight and obesity, has increased in children and adolescents.<sup>3</sup> Children who are overweight are likely to be overweight as adolescents and adults.<sup>3</sup> Adult obesity is associated with an increased risk of several adverse health consequences, including heart disease, type II diabetes, and mortality.<sup>6</sup>

“Overweight” is defined as being in the top 5% of the Centers for Disease Control and Prevention’s age- and sex-based growth charts. “At Risk for Overweight” is defined as being between the top 5% and 15% of the growth charts.<sup>7</sup>

The Healthy People 2010 goal indicates that no more than 5% of children and adolescents aged 6 to 19 are overweight (in the top 5% of growth charts).<sup>1</sup>



In Clark County in 2006, 9% of eighth grade, 10% of tenth grade, and 11% of twelfth grade students were classified as overweight.

Clark County figures are similar to Washington State for all grade levels. Overweight among Clark County eighth, tenth, and twelfth grade students did not change significantly between 2004 and 2006.

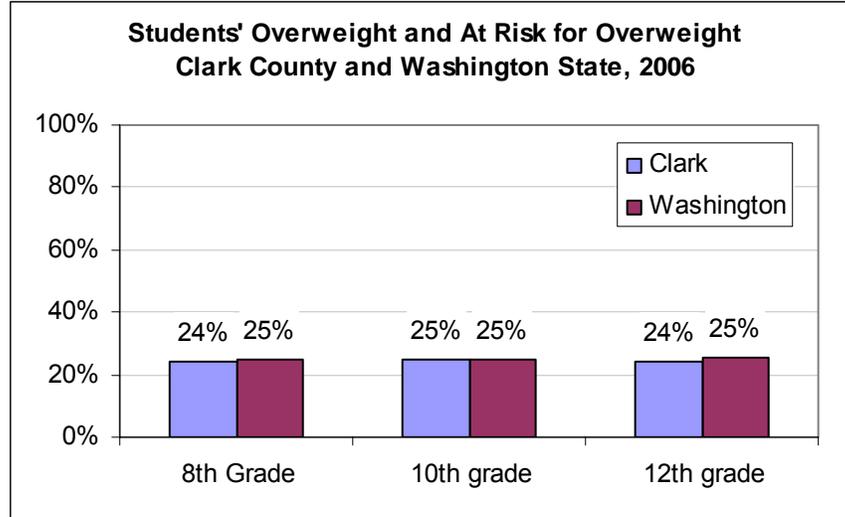


*In Clark County in 2006, 9% of eighth grade, 10% of tenth grade, and 11% of twelfth grade students were classified as overweight.*





***In Clark County in 2006, 24% of eighth, 25% of tenth, and 24% of twelfth grade students were either overweight or at risk for overweight.***



In Clark County in 2006, 24% of eighth, 25% of tenth, and 24% of twelfth grade students were either overweight or at risk for overweight.

Clark County figures are similar to Washington State for all grade levels. Overweight and at risk for overweight among Clark County eighth, tenth, and twelfth grade students did not change significantly between 2004 and 2006.



## **Recommended Interventions**

Because student health is so critical to children's healthy physical and mental development, schools have a significant role to play in prevention and intervention.

Policy work has been done at the national, state, and local levels around schools improving children's health. In the Child Nutrition and WIC Reauthorization Act of 2004, the U.S. Congress required that all school districts with a federally-funded school meals program develop and implement wellness policies that address nutrition and physical activity by the start of the 2006-2007 school year.<sup>8</sup>

Washington State Senate Bill 5436 was signed into law in March of 2004, and called for the development of a model policy regarding access to nutritious foods, opportunities for developmentally appropriate exercise, and accurate information related to these topics.<sup>9</sup> Washington State Senate Bill 5093, signed into law in March of 2007, mandates 150 minutes per week of quality physical activity for children in grades one through eight, as well as providing only healthy foods and beverages on school campuses during school hours or for school-sponsored activities.<sup>10</sup>

In 2006, the Clark County Public Health Advisory Council wrote a letter to Clark County school boards encouraging them to provide healthy options in vending machines and at student stores. Also in 2006, the Clark County Board of Health approved a fee waiver for all food preparation inspection fees for schools that are 100% compliant with the new regulations outlined in Senate Bill 5436 and the Child Nutrition and WIC Reauthorization Act of 2004.

The following sections provide information on interventions that schools can implement to improve their students' health. Interventions indicated as "Evidence-Based" or "Effective" have been labeled as such by the entity referenced, based on a review of the literature which found evidence of effectiveness based on one or more well-designed studies. "Promising" interventions have been labeled as such by the entity referenced, based on a review of the literature.<sup>11</sup> Interventions which are not labeled as either "evidence-based" or "promising" have been recommended by various national organizations even though research-based evidence of the interventions' effectiveness may not be available. Ideally, if schools decide to implement these interventions, an evaluation component should be included to ensure that the program has its intended result. Further studies are needed to provide a research basis for these programs.

### **Nutrition**

#### **School Breakfast Programs**

The School Breakfast Program (SBP) is a national program intended to "be made available in all schools where it is needed to provide adequate nutrition for children in attendance."<sup>11</sup> Currently, 83% of Clark County schools offer a free and reduced breakfast program.<sup>12</sup>

Schools that do not currently offer a SBP can implement one. Additionally, schools can evaluate the percent of eligible students that participate in the programs, as well as barriers for eligible students who do not participate, in order to increase utilization of existing programs.

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<sup>11</sup>Specific definitions for "evidence-based", "effective", and "promising" vary somewhat by entity; more information can be found on specific criteria for each entity's scoring can be found on the entities' websites, included in Appendix E: References.



***Washington State Senate Bill 5093, signed into law in March of 2007, mandates 150 minutes per week of quality physical activity for children in grades one through eight, as well as providing only healthy foods and beverages on school campuses during school hours or for school-sponsored activities.***





**Schools play an important role in determining what students eat and should include healthy foods among the options available to students.**



One promising intervention is to provide free breakfast and/or free lunch to all students, regardless of their eligibility for free or reduced price meals.<sup>13</sup>

#### Restricting Access to Soft Drinks and Other Vended Food

The American Academy of Pediatrics released a Policy Statement in 2004 addressing soft drink consumption in schools.<sup>14</sup> They cited several health issues related to high intake of sweetened drinks, including overweight, displacement of more nutritious foods, and adverse dental consequences.

The Statement encourages schools that do not currently have a food/beverage vending contract in place to invite public discussion before making a decision to create such a contract.<sup>14</sup>

Other interventions around restricting access to soft drinks and other vended food include:

- Avoid selling soft drinks as part of or in competition with the school lunch program
- Avoid placing vending machines within the cafeteria space where lunch is sold
- Turn off vending machines with foods of minimal nutritional value (including soft drinks) during lunch hours and ideally, during school hours
- Eliminate vended soft drinks and fruit-flavored drinks in all elementary schools
- Limit the number of machines vending sweetened drinks
- Preferentially vend drinks that are sugar-free or low in sugar
- Provide real fruit and vegetable juices, water, and low-fat white or flavored milk for sale as healthful alternatives to soft drinks

#### Food Sales

Schools play an important role in determining what students eat and should include healthy foods among the options available to students.

Implementing food-pricing strategies that encourage purchase of nutritious foods (e.g., increasing the price of unhealthy food and decreasing the price of healthy foods) is an evidence-based intervention to improve students' nutrition.<sup>13</sup>

Promising interventions include:

- Disallow sales of foods that compete with school breakfast or lunch<sup>13</sup>
- Develop a district or school policy that requires the establishment of salad bars in all K-12 schools<sup>13</sup>

Other interventions include:

- Provide more nutritious foods through a la carte, snack bar, fundraisers, and vending

#### Nutrition Labeling

Nutrition labeling is another promising intervention to increase students' nutrition.

Interventions include:

- Require that nutrition information be either posted or appear on the food labels of all food sold on school grounds or at school-sponsored events<sup>13</sup>
- Require or provide incentives for the creation and implementation of a nutrition labeling system to identify food items that meet certain nutrition standards, such as the *Dietary Guidelines for Americans*<sup>2,13</sup>

#### Additional Interventions

Additional promising interventions around improving students' nutrition include:

- Develop nutrition standards for all food and beverages available on campus to be consistent with the *Dietary Guidelines for Americans*<sup>2</sup> or other nutrient standards<sup>13</sup>

Other interventions include:

- Create a school nutrition advisory council as one component of a school district's

- health advisory council
- Implement a fruit/vegetable program in all schools, which provides children with a variety of free fresh fruits and vegetables throughout the school day

## Physical Activity

### Enhanced School-Based Physical Education Classes

The Community Guide, published by the Centers for Disease Control and Prevention (CDC), recommends enhanced school-based physical education classes as an effective way to increase physical activity among school-aged children.<sup>15</sup> There is no evidence that attendance at physical education classes harms students' academic performance.<sup>15-18</sup>

### Creating or Improving Access to Places for Physical Activity

The Community Guide also recommends creating or improving access to places for physical activity, combined with distribution of information.<sup>15</sup> Providing after-hours access to recreational facilities is considered an effective intervention,<sup>13</sup> while providing or enhancing funding for physical activity facilities in schools is considered a promising intervention.<sup>13</sup> Schools can also consider the effect of a new school design or remodel project on student health.

### Increasing Students' Walking or Biking to School

The National Highway Traffic Safety Administration (NHTSA) recommends Safe Routes to Schools programs to increase the number of children walking and biking to school.<sup>19</sup> Approaches include:

- Encouragement: use events and contests to entice students to try walking and biking
- Education: teach students important safety skills and launch driver safety campaigns
- Engineering: focus on creating physical improvements to the infrastructure surrounding the school, reducing speeds and establishing safer crosswalks and pathways
- Enforcement: use local law enforcement to ensure drivers obey traffic laws

They recommend using data, innovation, and imagination to develop a program that is best suited for an individual community.

Safe Routes to School Programs are also indicated as a promising policy idea by Washington State Department of Health's *Nutrition and Physical Activity: A Policy Resource Guide*.<sup>13</sup>

## Weight Status

There is some evidence that weight intervention programs at schools may be effective at reducing students' weight,<sup>20</sup> but evidence for such programs is sparse and more studies in this area are needed.<sup>21</sup>

Overweight and obesity can result from excess calorie consumption and inadequate physical activity.<sup>6</sup> Therefore, despite the lack of evidence for programs that focus specifically on weight, improvements in students' nutrition along with an increase in physical activity should result in improved weight status.



***There is no evidence that attendance at physical education classes harms students' academic performance.***

***Schools can consider the effect of a new school design or remodel project on student health.***





***Action for Healthy Kids addresses the epidemic of overweight, sedentary, and undernourished youth by focusing on changes in schools to improve nutrition and increase physical activity.***

***Farm to School programs connect schools with local farms.***



## **Additional Online Resources**

There are a large number of research and advocacy organizations offering online tools that provide a roadmap for how schools can strengthen physical activity and nutrition programs and policies. Program and policy strategies located on these sites usually provide an evidence base to show their effectiveness.

We highly recommend that, when considering an intervention to implement, schools look for an evaluation of the specific strategy which demonstrates effectiveness, or at least a rationale that the strategy was based on comparative research.

### **Online Resources for Schools**

#### Action for Healthy Kids

Action for Healthy Kids addresses the epidemic of overweight, sedentary, and undernourished youth by focusing on changes in schools to improve nutrition and increase physical activity. Their website can be found at

<http://www.actionforhealthykids.org/resources.php>.

#### Center for Health and Healthcare in Schools

The Center for Health and Healthcare in Schools provides resources to address childhood overweight. These resources can be found online at

<http://www.healthinschools.org/Health-in-Schools/Health-Services/Schools-and-Childhood-Overweight.aspx>.

#### Coordinated School Health Programs

A Coordinated School Health Program model consists of eight interactive components which involve many agencies that reach youth. Schools can provide a critical facility in which these agencies can work together to maintain the well-being of young people. More information can be found online at

<http://www.cdc.gov/HealthyYouth/CSHP>.

#### Environmental Nutrition and Activity Community Tool (ENACT)

The Strategic Alliance for Healthy Food and Activity Environments created the Environmental Nutrition and Activity Community Tool (ENACT). ENACT is a menu of strategies designed to help improve nutrition and activity in seven environments, including both "School" and "After School". ENACT can be found online at

<http://www.preventioninstitute.org/sa/enact/members/index.php>.

#### Farm to School

Farm to School programs connect schools with local farms with the objectives of serving healthy meals in school cafeterias, improving student nutrition, providing health and nutrition education opportunities that will last a lifetime, and supporting local small farmers. Information is available online at <http://www.farmtoschool.org/>.

#### Fresh Fruit and Vegetable Program Handbook for Schools

The Fresh Fruit and Vegetable Program provides all children in participating schools with a variety of free fresh fruits and vegetables throughout the school day. Information is available at: [www.fns.usda.gov/cnd/FFVP/Guidance/handbook.pdf](http://www.fns.usda.gov/cnd/FFVP/Guidance/handbook.pdf).

#### Healthy Schools Successful Students

Several Washington State agencies partnered to develop the Healthy Schools Successful Students website, which provides resources for schools around student health. Information is available at:

<http://depts.washington.edu/waschool/index.html>.

### Model Local School Wellness Policies on Physical Activity and Nutrition

Model school policies which meet the Child Nutrition and WIC Reauthorization Act of 2004 requirements can be found online at <http://www.schoolwellnesspolicies.org/>.

### MyPyramid.gov

The Center for Nutrition Policy and Promotion, of the United States Department of Agriculture, has developed a children's' version of MyPyramid, available online at <http://www.mypyramid.gov/kids/index.html>.

### National Alliance for a Healthier Generation Toolkit

The National Alliance for a Healthier Generation has created a "School Beverage Toolkit". This helps schools understand and implement the Alliance School Beverage Guidelines, which offer lower-calorie and more nutritious beverages to students during the school day. The toolkit can be found online at

<http://healthiergeneration.org/beveragekit/>.

### Safe Routes to School

Safe Routes to School programs assist communities in enabling and encouraging children to safely walk and bike to school.

The Marin County Bicycle Coalition developed a national model Safe Routes to Schools program, which can be found online at <http://www.saferoutestoschools.org>.

The Washington State Department of Transportation Safe Routes to School Program can be found online at <http://www.wsdot.wa.gov/bike/saferoutesresources.htm>.

The National Center for Safe Routes to School website can be found online at <http://www.saferoutesinfo.org/>. One intervention recommended by this organization is a walking school bus, where a group of children walks to school with one or more adults.

## **Additional Online Resources**

### Active Living by Design

Active Living by Design is a national program that establishes innovative approaches to increase physical activity through community design, public policies, and communications strategies. Their website can be found at

<http://www.activelivingbydesign.org/>.

### Active Living Research

Active Living Research supports research to identify environmental factors and policies that influence physical activity. Their website can be found at

<http://www.activelivingresearch.org/>.

### Complete the Streets

The National Complete Streets Coalition seeks to fundamentally transform the look, feel and function of the roads and streets in our community, by changing the way most roads are planned, designed, and constructed. Their website can be found at

<http://www.completestreets.org/>.

### Food \$ense

Food \$ense, a program of the Washington State University, teaches youth and adults with limited incomes skills and behaviors to eat healthfully and maximize the value of their food dollars and food assistance benefits. Information can be found online at

<http://nutrition.wsu.edu/foodsense/>.



***The National Alliance for a Healthier Generation helps schools offer lower-calorie and more nutritious beverages to students during the school day.***

***Active Living by Design is a national program that establishes innovative approaches to increase physical activity through community design, public policies, and communications strategies.***





***The Healthy Transportation Network works with local communities to foster safer bicycle and pedestrian behaviors, foster more walking and bicycling for routine transportation, and create community and urban environments that are walkable and bicycle-friendly.***



### Healthy Places

The Centers for Disease Control and Prevention's Healthy Places section includes information on Children's Health and the Built Environment, which can be found at

<http://www.cdc.gov/healthyplaces/healthtopics/children.htm>.

### Healthy Transportation Network

The Healthy Transportation Network works with local communities to foster safer bicycle and pedestrian behaviors, foster more walking and bicycling for routine transportation, and create community and urban environments that are walkable and bicycle-friendly. Their website can be found at

<http://www.healthytransportation.net>.

### Local Government Commission

The Local Government Commission provides inspiration, technical assistance, and networking to local elected officials and other dedicated community leaders who are working to create healthy, walkable, and resource-efficient communities. Their website can be found at

<http://www.lgc.org/>.

### National Center for Biking and Walking

National Center for Bicycling & Walking strives to create bicycle-friendly and walkable communities across North America. They can be found at

<http://bikewalk.org/>.

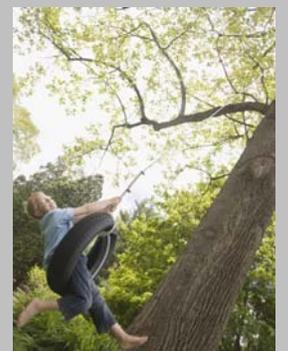
## **Closing Remarks**

This report assessed physical activity, nutrition, and weight status among Clark County students, and found both areas of improvement as well as areas of concern. Clark County students' level of moderate physical activity meets the Healthy People 2010 Goal. On the other hand, we have not met the Vigorous Physical Activity Goal or Overweight Goal, nor have either of these indicators changed significantly since 2004.

It is our intention that the information provided in this report be used to inform schools' policymaking and planning efforts that affect students' health. We believe that implementing health-related school policies and interventions will result in improved student health status.



***The information provided in this report can be used to inform schools' policymaking and planning efforts that affect students' health.***



# **Appendix A- Technical Notes**

This section provides technical details on data used in this report.

## **Health Youth Survey**

This report was based on data from the Washington State Healthy Youth Survey (HYS).<sup>22</sup> The Healthy Youth Survey is conducted every two years in the fall among children in sixth, eighth, tenth, and twelfth grades in Washington State. The Department of Health, Office of Superintendent of Public Instruction, Department of Social and Health Services, and Department of Community, Trade, and Economic Development jointly fund the survey. Survey information, results, and the surveys themselves are available online, at <https://fortress.wa.gov/doh/hys/>. The most recent survey was completed in the Fall of 2006.

There are three HYS forms administered to students: Forms A, B, and C. Forms A and B are administered to eighth, tenth, and twelfth grade students (half of students receive Form A and half receive Form B). All of these students have the same “core” questions in their surveys. Youth who complete Form A answer additional questions about risk/protective factors while youth who complete Form B answer additional questions about health, health risks and outcomes. Form C is administered to sixth grade students. It is a single version of the survey with fewer questions. Data used in this report come from Forms B and C.

## **Sampling Methods**

The Healthy Youth Survey in Clark County was sampled using a census sampling frame; all Clark County public schools with sixth, eighth, tenth, and/or twelfth grade students were eligible to participate. For the Washington State sample, a simple random sample was drawn from all schools in the public school system, among schools with sixth, eighth, tenth, and/or twelfth grade students which had at least 15 students in each grade to be included in the sample. All students in the surveyed grades were asked to participate. More detailed information on sampling methodology can be found online at <https://fortress.wa.gov/doh/hys/>.

Not all eligible schools participated in the survey. Additionally, not all eligible students at participating schools took the survey. Information on the limitations of the findings related to sampling can be found in “Study Limitations”, below.

## **Number of Students Responding to the Survey**

The table below provides information on the number of students who responded to Forms A, B, and C in 2004 and 2006 in Clark County and Washington State. Data from students who were surveyed with Forms B and C were included in this report because those forms included the questions of interest.

<b>Form Type</b>	<b>Clark County</b>		<b>Washington State</b>	
	<b>2004</b>	<b>2006</b>	<b>2004</b>	<b>2006</b>
A	4,858	4,935	11,288	11,848
B	4,849	4,876	11,113	11,858
C	4,001	4,514	7,862	8,825

## **Study Limitations**

This report’s findings come with certain limitations that must be mentioned.

All data are self-reported by students. As such, students may intentionally or unintentionally respond to questions inaccurately. This limitation is present in all self-report data.

While all public schools in Clark County were eligible to participate in the Healthy Youth Survey, not all did so, and not all participating schools had a 100% response rate. Linear regression analysis was conducted to determine if an association existed between schools’ participation rates (including 0% for schools who did not participate) and the percent of students who are eligible for free and reduced lunch.<sup>23</sup> This association approached significance ( $p=0.067$ ). Health prevalence estimates were recalculated using weights which took into account the differing response rates by school district. These estimates were similar to estimates not weighted to account for district response rates. Therefore, estimates included in this report were not weighted by district response rates.

Washington State Department of Health guidelines for the use of Healthy Youth Survey data indicate that participation rates below 70% may or may not be representative of all students in the county. Participation rates of less than 40% should not be interpreted as representative of all students. In 2006, 77% of sixth graders, 69% of eighth graders, 53% of tenth graders, and 45% of twelfth graders responded to the Healthy Youth Survey. This indicates that sixth grade data are probably representative of all Clark County sixth graders, but that eighth grade, tenth grade, and twelfth grade data may or may not be representative of all eighth, tenth, and twelfth graders. Analysis was conducted to weight the data based on school district response rate, which produced estimates very similar to those produced with data not weighted for school district response rates. This supports the generalizability of our findings. However, eighth, tenth, and twelfth grade estimates should be interpreted with caution. In 2004, Clark County Healthy Youth Survey response rates for sixth, eighth, tenth, and twelfth grades were 73%, 68%, 61%, and 45%, respectively.

In addition to varying response rates among Clark County schools, not all students who took the survey responded to all survey questions. Consequently, all variables have some levels of missing data. Variables with a higher percent of missing data should be interpreted with caution.

## **Appendix B- Data Analysis Methods**

All data analysis was conducted using Intercooled Stata 9, from StataCorp LP, College Station, TX. All data used in this report, unless specifically identified as 2004 data, are from the 2006 Healthy Youth Survey.

### **Dataset Preparation**

The Washington State Department of Health provided a dataset of all Healthy Youth Survey data for Clark and Skamania Counties, as well as a portion of the state sample, for the years 2002, 2004, and 2006. To facilitate data analysis, responses were kept if they were from the years 2004 or 2006, and data files were divided up by year and location (ie, Clark vs. State sample).

The term “weights” in this Appendix refers to a tool used in statistical analysis where some respondents’ data contributes more heavily to the overall estimate than others. A weight of “1” for all respondents, used in most of the analysis, allows all responses to count equally toward the estimate. Weights other than “1” were used in the calculation of high school estimates to enable responses from students in different grade levels to contribute unequally to the overall high school estimate. More details are provided below.

### **Individual Grade Estimates**

A “fake” weight of 1 was generated for use with sixth and eighth grade estimates because the data were analyzed for only one grade level and year.

In Clark County, each student was their own primary sampling unit. Unique sampling unit values were generated in Stata for use in survey data analysis. This process was the same for both 2004 and 2006 data.

For Washington State, each school was the primary sampling unit and data were analyzed accordingly with unique sampling identifiers provided by the Washington State Department of Health.

### **2006 High School Estimates**

For the moderate and vigorous physical activity indicators, eighth, tenth, and twelfth grade students were combined to create a synthetic high school estimate, based on methodology developed by the Washington State Department of Health. Weights were created based on 2006 Clark County grade-specific high school enrollment data from OSPI.<sup>24</sup> Enrollment data is provided below:

<b>Grade</b>	<b>2006 Grade-Specific Enrollment</b>	<b>Percent of High School Enrollment</b>
Nine	6,104	26.0387%
Ten	5,884	25.1002%
Eleven	5,545	23.6541%
Twelve	5,909	25.2069%
Total	23,442	100%

Weights were calculated for eighth, tenth, and twelfth grades to determine how much each grade level should contribute to the overall high school estimate.

Weight formulas, and reasoning behind each weight, for each of eighth, tenth, and twelfth grades are below:

<b>Grade</b>	<b>Weight Calculation</b>	<b>Rationale</b>
Eight	$0.260387 * 0.5 = \mathbf{0.130194}$	Eighth grade student responses contributed to ½ of the ninth grade estimate.
Ten	$(0.260387 * 0.5) + 0.251002 + (0.236541 * 0.5) = \mathbf{0.499467}$	Tenth grade student responses contributed to ½ of the ninth grade estimate, all of the tenth grade estimate, and ½ of the eleventh grade estimate.
Twelve	$(0.236541 * 0.5) + 0.252069 = \mathbf{0.370340}$	Twelfth grade student responses contributed to ½ of the eleventh grade estimate and all of the twelfth grade estimate.

Using these weights resulted in a high school estimate equivalent to an average of ninth, tenth, eleventh, and twelfth grade estimates.

In Clark County, each student was their own primary sampling unit. Unique sampling unit values were generated in Stata for use in survey data analysis.

**2004 High School Estimates**

Weights for 2004 high school estimates were calculated using the same methodology as 2006 high school weights. Relevant data are displayed below.

<b>Grade</b>	<b>2004 Grade-Specific Enrollment</b>	<b>Percent of High School Enrollment</b>
Nine	3,049	26.52837%
Ten	5,821	25.528462%
Eleven	5,337	23.405842%
Twelve	5,595	24.537321%
Total	22,082	100%

<b>Grade</b>	<b>Weight Calculation</b>
Eight	$0.2652837 * 0.5 = \mathbf{0.13264187}$
Ten	$(0.2652837 * 0.5) + 0.25528462 + (0.23405842 * 0.5) = \mathbf{0.50495571}$
Twelve	$(0.23405842 * 0.5) + 0.24537321 = \mathbf{0.36240242}$

**Prevalence Estimates**

Population-based prevalence estimates were displayed in graphs in the and “Students’ Health Status” section. These were calculated using survey data crosstab commands. Crosstabs between each health variable and grade level were calculated for individual grades as well as high school estimates; 95% confidence intervals were also calculated for each prevalence estimate. Estimates whose confidence intervals did not overlap were identified as being statistically significantly different.

**Soda Consumption**

Additional data on students’ soda consumption were analyzed to determine from where students obtained their soda.

Sixth grade analysis: Responses were included if students indicated that they drank one or more sodas the day prior to the survey. Prevalence estimates excluded students who responded “I did not drink sodas or pop yesterday” when asked if they bought any of their sodas at school.

Eighth/tenth/twelfth grade analysis: Responses were included if students indicated that they consumed soda/sweetened drinks at school/school events at least once in the past week. Prevalence estimates excluded students who responded “I did not drink sodas, sports drinks, or other flavored drinks at school” when asked from where they usually obtained their sodas.

Survey data commands were used to analyze these data.

## **Appendix C- Detailed Variable Definitions**

The following is a list of the variables analyzed in this report.

### **Nutrition**

The following questions were asked to assess students' nutrition status.

- **Breakfast Consumption-** Students were asked "Did you eat breakfast today?" Students responded "Yes" or "No". This question was asked of all students.
- **Fruit/Vegetable Consumption-** Students were asked 6 questions about their fruit and vegetable consumption: "During the past 7 days, how many times did you: Drink 100% fruit juice such as orange juice, apple juice or grape juice?; Eat fruit?; Eat green salad?; Eat potatoes?; Eat carrots?; Eat other vegetables (do not count green salad, potatoes, or carrots)". Response options included "I did not [consume specified fruit/vegetable] during the past 7 days", "1-3 times", "4-6 times", "1 time per day", "2 times per day", "3 times per day", and "4 or more times per day". Responses were combined into one variable which indicated the number of fruits/vegetables the student had consumed on average per day. Responses were further combined into two categories: "5+ Times Per Day" and "<5 Times Per Day". This question was asked only of eighth, tenth, and twelfth grade students.
- **Soda Consumption-** Students were asked "How many sodas or pops did you drink yesterday? (Do not count diet soda.)" Responses were combined into "Less than two per day" (response of "None" or "1") and "Two or more per day" (responses of "2", "3", or "4 or more"). This question was asked of all students.

### **Soda-Related**

Students were asked about consumption of soda/sweetened drinks at school or school events as well as the usual source of those drinks. Students who responded consuming these drinks at least once in the past 7 days at school/school events were categorized as consuming these drinks at school/school events.

- **Soda/Sweetened Drink Consumption at School-** Students were asked, "During the past 7 days, how many times did you drink regular soda, sports drinks (such as Gatorade) and other flavored sweetened drinks (such as Snapple or SoBe) at school (including any after-school and weekend activities)? Do not include diet drinks." Responses included "0 times", "1-3 times", "4-6 times", "7-9 times", and "10 times or more". This question was only asked of eighth, tenth, and twelfth grade students.
- **Usual Source of Soda/Sweetened Drinks Consumed at School-** Students were asked, "During the past 7 days, where did you **usually** get the soda or other sweetened drinks that you drank at school? (Choose only one answer.)" Responses included "I did not drink sodas, sports drinks, or other flavored drinks at school", "I brought them from home", "I got them from friends", "I bought them at school", and "Other". This question was only asked of eighth, tenth, and twelfth grade students.
- **Bought any Sodas from School-** After being asked "How many sodas or pops did you drink yesterday? (Do not count diet soda.)", students were asked "Did you buy any of these at school?". Responses included "I did not drink sodas or pop yesterday", "Yes", and "No". The latter question was only asked of sixth grade students.

### **Physical Activity**

The following questions were asked to assess students' physical activity levels.

- **Moderate Physical Activity Recommendation-** The Healthy People 2010 goal indicates that at least 35% of students in grades 9-12 participate in moderate physical activity for at least 30 minutes on five or more days of the week.<sup>1</sup> On this survey, students were asked, "On how many of the past 7 days did you: Do physical activity for at least 30 minutes that did not make you sweat and breathe hard, such as fast walking, slow bicycling, skating, pushing a lawn mower, or mopping floors?" Students were classified as having met the recommendation if they indicated 5 or more days;

students who indicated 4 or fewer days were classified as not having met the recommendation. This question was asked only of eighth, tenth, and twelfth grade students.

- **Vigorous Physical Activity Recommendation-** The Healthy People 2010 goal indicates that 85% of students in grades 9-12 participate in vigorous physical activity for at least 20 minutes on three or more days of the week.<sup>1</sup> Students were asked, “On how many of the past 7 days did you: Exercise or participate in physical activity for at least 20 minutes that made you sweat and breathe hard, such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activities?” Students were classified as having met the recommendation if they indicated three or more days; students who indicated 2 or fewer days were classified as not having met the recommendation. This question was asked of all students.
- **New Physical Activity Recommendation-** The U.S. Department of Health and Human Services and U.S. Department of Agriculture recommend that children and adolescents engage in at least 60 minutes of physical activity on most, preferably all, days of the week.<sup>2</sup> On this survey, students were asked, “In the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spent in any kind of physical activity that increases your heart rate or makes you breathe hard some of the time.)” Responses were grouped as followed: “Meets Physical Activity Recommendations” (responses of 5, 6, or 7 days) and “Does Not Meet Physical Activity Recommendations” (responses of 0, 1, 2, 3, or 4 days). This question was asked only of eighth, tenth, and twelfth grade students.

### **Weight Status**

The following questions were asked to assess students’ weight status.

- **Weight-** Students were asked, “How tall are you without your shoes on?”, “How much do you weigh without your shoes on?”, and “How old are you?”. This information, combined with their gender, was combined to calculate their weight status based on growth charts developed by the Centers for Disease Control and Prevention (CDC).<sup>7</sup> These questions were asked only of eighth, tenth, and twelfth grade students. “Overweight” includes students who are in the top 5% for body mass index (BMI) based on these charts, and “at risk for overweight” includes students who are in the top 5% to 15% for BMI.

## **Appendix D- Detailed Data Tables**

The tables in this section display detailed health data that describe the students in the sample used for analysis.

“Sample Number” refers to the number of students who responded within each response category. “Sample Percent” refers to the crude percent of students in each response category, including missing responses.

“Students Percent” refers to the weighted percent of students who responded within each category; these figures are considered representative of each grade level, or high school students as a whole, and are used in this report. These figures exclude missing responses. Because the high school percents are weighted, they may not match exactly with the percents that would be if calculated from the raw numbers (“Sample Number”), or the figures found in the Healthy Youth Survey reports provided by RMC Research Corporation.

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Clark County Health Characteristics, 2004 <sup>#</sup>		Sixth Grade Students				Eighth Grade Students			
		<u>%<sup>^</sup></u>	<u>95% CI<sup>°</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>	<u>%<sup>^</sup></u>	<u>95% CI<sup>°</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>
<b>Nutrition</b>									
Soda Consumption	One or no sodas per day	86%	(85%-87%)	76%	3,056	81%	(79%-83%)	78%	1,497
	Excessive soda consumption	14%	(13%-15%)	12%	485	19%	(17%-21%)	18%	352
	Missing	Δ	Δ	12%	460	Δ	Δ	4%	68
Fruit/Vegetable Consumption	Eats fruits/vegetables 5+ times per day	&	&	&	&	25%	(23%-27%)	24%	460
	Eats fruits/vegetables <5 times per day	&	&	&	&	75%	(73%-77%)	71%	1,361
	Missing	&	&	&	&	Δ	Δ	5%	96
<b>Physical Activity</b>									
Moderate Physical Activity Recommendations	Meets recommendations	&	&	&	&	35%	(33%-38%)	34%	650
	Does not meet recommendations	&	&	&	&	65%	(62%-67%)	62%	1,186
	Missing	&	&	&	&	Δ	Δ	4%	81
Vigorous Physical Activity Recommendations	Meets recommendations	82%	(81%-83%)	81%	3,234	77%	(75%-79%)	74%	1,415
	Does not meet recommendations	18%	(17%-19%)	18%	716	23%	(21%-25%)	22%	427
	Missing	Δ	Δ	1%	51	Δ	Δ	4%	75
<b>Weight Status</b>									
Weight Status	Overweight	&	&	&	&	12%	(11%-14%)	10%	189
	Overweight or At Risk for Overweight	&	&	&	&	28%	(26%-30%)	23%	433
	Not Overweight or At Risk	&	&	&	&	72%	(70%-74%)	58%	1,120
	Missing	&	&	&	&	Δ	Δ	19%	364
Total		Δ	Δ	100%	4,001	Δ	Δ	100%	1,917

<sup>#</sup>Breakfast consumption, source of beverages consumed, and meeting new physical activity recommendation requirements were not asked in 2004.

<sup>^</sup>Percents may not add up to 100% due to rounding.

<sup>°</sup>95% Confidence Interval. If two confidence intervals do not overlap, we are 95% confident that there is a real difference between two figures.

<sup>&</sup>This item not asked of students in this grade level.

<sup>Δ</sup>Not Calculated

<u>Tenth Grade Students</u>				<u>Twelfth Grade Students</u>				<u>High School Students</u>			
<u>Students</u>		<u>Sample</u>		<u>Students</u>		<u>Sample</u>		<u>Students</u>		<u>Sample</u>	
<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>	<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>	<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>
77%	(75%-79%)	74%	1,247	78%	(75%-80%)	77%	963	Δ	Δ	Δ	Δ
23%	(21%-25%)	22%	371	22%	(20%-25%)	22%	277	Δ	Δ	Δ	Δ
Δ	Δ	3%	56	Δ	Δ	1%	18	Δ	Δ	Δ	Δ
21%	(19%-23%)	20%	330	18%	(16%-20%)	18%	224	Δ	Δ	Δ	Δ
79%	(77%-81%)	76%	1,266	82%	(80%-84%)	80%	1,008	Δ	Δ	Δ	Δ
Δ	Δ	5%	78	Δ	Δ	2%	26	Δ	Δ	Δ	Δ
35%	(32%-37%)	34%	563	34%	(32%-37%)	34%	424	35%	(33%-36%)	Δ	Δ
65%	(63%-68%)	63%	1,060	66%	(63%-68%)	65%	818	65%	(64%-67%)	Δ	Δ
Δ	Δ	3%	51	Δ	Δ	1%	16	Δ	Δ	Δ	Δ
67%	(64%-69%)	64%	1,082	63%	(60%-65%)	62%	781	67%	(66%-69%)	Δ	Δ
33%	(31%-36%)	33%	545	37%	(35%-40%)	37%	463	33%	(31%-34%)	Δ	Δ
Δ	Δ	3%	47	Δ	Δ	1%	14	Δ	Δ	Δ	Δ
10%	(9%-12%)	10%	160	11%	(9%-13%)	11%	133	Δ	Δ	Δ	Δ
23%	(21%-26%)	21%	356	23%	(21%-26%)	22%	275	Δ	Δ	Δ	Δ
77%	(74%-79%)	70%	1,170	77%	(74%-79%)	73%	918	Δ	Δ	Δ	Δ
Δ	Δ	9%	148	Δ	Δ	5%	65	Δ	Δ	Δ	Δ
Δ	Δ	100%	1,674	Δ	Δ	100%	1,258	Δ	Δ	Δ	Δ

Clark County Health Characteristics, 2006		Sixth Grade Students				Eighth Grade Students			
		% <sup>^</sup>	95% CI <sup>°</sup>	% <sup>^</sup>	n	% <sup>^</sup>	95% CI <sup>°</sup>	% <sup>^</sup>	n
<b>Nutrition</b>									
Soda Consumption	One or no sodas per day	91%	(90%-92%)	78%	3,531	85%	(84%-87%)	83%	1,742
	Excessive soda consumption	9%	(8%-10%)	8%	357	15%	(13%-16%)	14%	301
	Missing	Δ	Δ	14%	626	Δ	Δ	3%	54
Consumption of Sodas/Sweetened Beverages at School/ School Events	Yes	&	&	&	&	73%	(71%-75%)	72%	1,506
	No	&	&	&	&	27%	(25%-29%)	27%	558
	Missing	&	&	&	&	Δ	Δ	2%	33
Usual Source of Sodas/Sweetened Beverages Consumed at School/School Events*	Bought at school	&	&	&	&	43%*	(40%-46%)	36%	538
	Brought from home	&	&	&	&	36%*	(34%-39%)	30%	456
	Got from friends	&	&	&	&	8%*	(7%-10%)	7%	105
	Other	&	&	&	&	12%*	(11%-14%)	10%	153
	No Sodas Consumed	&	&	&	&	Δ	Δ	15%	227
	Missing	&	&	&	&	Δ	Δ	2%	27
Bought any sodas from school <sup>†</sup>	Yes	13%	(12%-16%)	12%	156	&	&	&	&
	No	87%	(85%-88%)	80%	1,007	&	&	&	&
	No Sodas Consumed	Δ	Δ	7%	88	&	&	&	&
	Missing	Δ	Δ	1%	15	&	&	&	&
Breakfast Consumption	Ate breakfast that morning	78%	(77%-79%)	67%	3,044	67%	(65%-69%)	66%	1,378
	Didn't eat breakfast that morning	22%	(21%-23%)	19%	857	33%	(31%-35%)	32%	679
	Missing	Δ	Δ	14%	613	Δ	Δ	2%	40
Fruit/Vegetable Consumption	Eats fruits/vegetables 5+ times per day	&	&	&	&	30%	(28%-32%)	25%	520
	Eats fruits/vegetables <5 times per day	&	&	&	&	70%	(68%-72%)	57%	1,201
	Missing	&	&	&	&	Δ	Δ	18%	376
Total		Δ	Δ	100%	4,514	Δ	Δ	100%	2,097

<sup>^</sup>Percents may not add up to 100% due to rounding.

<sup>°</sup>95% Confidence Interval. If two confidence intervals do not overlap, we are 95% confident that there is a real difference between two figures.

<sup>&</sup>This item not asked of students in this grade level.

<sup>Δ</sup>Not Calculated

\*This section only includes students who report consuming soda at school/school events on a separate question

<sup>†</sup>This section only includes students who report consuming soda the day before on a separate question

<u>Tenth Grade Students</u>				<u>Twelfth Grade Students</u>				<u>High School Students</u>			
<u>Students</u>		<u>Sample</u>		<u>Students</u>		<u>Sample</u>		<u>Students</u>		<u>Sample</u>	
<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>	<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>	<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>
84%	(82%-85%)	83%	1,256	83%	(81%-85%)	82%	1,030	Δ	Δ	Δ	Δ
16%	(15%-18%)	16%	245	17%	(15%-19%)	17%	209	Δ	Δ	Δ	Δ
Δ	Δ	1%	18	Δ	Δ	2%	21	Δ	Δ	Δ	Δ
79%	(76%-81%)	78%	1,180	77%	(74%-79%)	76%	953	Δ	Δ	Δ	Δ
21%	(19%-24%)	21%	321	23%	(21%-26%)	23%	291	Δ	Δ	Δ	Δ
Δ	Δ	1%	18	Δ	Δ	1%	16	Δ	Δ	Δ	Δ
61%	(58%-64%)	55%	653	50%	(47%-53%)	46%	438	Δ	Δ	Δ	Δ
22%	(19%-24%)	20%	234	25%	(22%-28%)	23%	219	Δ	Δ	Δ	Δ
8%	(6%-9%)	7%	81	4%	(3%-6%)	4%	35	Δ	Δ	Δ	Δ
10%	(8%-12%)	9%	108	21%	(19%-24%)	20%	186	Δ	Δ	Δ	Δ
Δ	Δ	8%	98	Δ	Δ	7%	69	Δ	Δ	Δ	Δ
Δ	Δ	1%	6	Δ	Δ	1%	6	Δ	Δ	Δ	Δ
&	&	&	&	&	&	&	&	Δ	Δ	Δ	Δ
&	&	&	&	&	&	&	&	Δ	Δ	Δ	Δ
&	&	&	&	&	&	&	&	Δ	Δ	Δ	Δ
&	&	&	&	&	&	&	&	Δ	Δ	Δ	Δ
60%	(57%-62%)	59%	895	53%	(50%-56%)	53%	662	Δ	Δ	Δ	Δ
40%	(38%-43%)	40%	609	47%	(44%-50%)	46%	585	Δ	Δ	Δ	Δ
Δ	Δ	1%	15	Δ	Δ	1%	13	Δ	Δ	Δ	Δ
23%	(21%-25%)	20%	302	20%	(17%-22%)	18%	225	Δ	Δ	Δ	Δ
77%	(75%-79%)	67%	1,014	80%	(78%-83%)	73%	924	Δ	Δ	Δ	Δ
Δ	Δ	13%	203	Δ	Δ	9%	111	Δ	Δ	Δ	Δ
Δ	Δ	100%	1,519	Δ	Δ	100%	1,260	Δ	Δ	Δ	Δ

Clark County Health Characteristics, 2006 (Continued)		Sixth Grade Students				Eighth Grade Students			
		Students		Sample		Students		Sample	
		% <sup>^</sup>	95% CI <sup>°</sup>	% <sup>^</sup>	n	% <sup>^</sup>	95% CI <sup>°</sup>	% <sup>^</sup>	n
<b>Physical Activity</b>									
Moderate Physical Activity	Meets recommendations	&	&	&	&	37%	(35%-39%)	36%	751
Recommendations	Does not meet recommendations	&	&	&	&	63%	(61%-65%)	61%	1,273
	Missing	&	&	&	&	Δ	Δ	3%	73
Vigorous Physical Activity	Meets recommendations	83%	(82%-84%)	82%	3,702	78%	(77%-80%)	76%	1,596
Recommendations	Does not meet recommendations	17%	(16%-18%)	17%	749	22%	(20%-23%)	21%	440
	Missing	Δ	Δ	1%	63	Δ	Δ	3%	61
Meets New Physical Activity Recommendations	Meets recommendations	&	&	&	&	49%	(47%-52%)	48%	1,003
	Does not meet recommendations	&	&	&	&	51%	(48%-53%)	49%	1,026
	Missing	&	&	&	&	Δ	Δ	3%	68
<b>Weight Status</b>									
Weight Status	Overweight	&	&	&	&	9%	(8%-11%)	8%	159
	Overweight or At Risk for Overweight	&	&	&	&	24%	(22%-26%)	20%	411
	Not Overweight or At Risk	&	&	&	&	76%	(74%-78%)	62%	1,301
	Missing	&	&	&	&	Δ	Δ	18%	385
Total		Δ	Δ	100%	4,514	Δ	Δ	100%	2,097

<sup>^</sup>Percents may not add up to 100% due to rounding.

<sup>°</sup>95% Confidence Interval. If two confidence intervals do not overlap, we are 95% confident that there is a real difference between two figures.

<sup>&</sup>This item not asked of students in this grade level.

<sup>Δ</sup>Not Calculated

<b>Tenth Grade Students</b>				<b>Twelfth Grade Students</b>				<b>High School Students</b>			
<b>Students</b>		<b>Sample</b>		<b>Students</b>		<b>Sample</b>		<b>Students</b>		<b>Sample</b>	
<b>%<sup>^</sup></b>	<b>95% CI<sup>o</sup></b>	<b>%<sup>^</sup></b>	<b>n</b>	<b>%<sup>^</sup></b>	<b>95% CI<sup>o</sup></b>	<b>%<sup>^</sup></b>	<b>n</b>	<b>%<sup>^</sup></b>	<b>95% CI<sup>o</sup></b>	<b>%<sup>^</sup></b>	<b>n</b>
38%	(36%-41%)	38%	574	32%	(30%-35%)	32%	401	36%	(35%-38%)	Δ	Δ
62%	(59%-64%)	61%	920	68%	(65%-70%)	67%	843	64%	(62%-65%)	Δ	Δ
Δ	Δ	2%	25	Δ	Δ	1%	16	Δ	Δ	Δ	Δ
67%	(65%-69%)	66%	1,007	59%	(56%-61%)	58%	727	66%	(65%-68%)	Δ	Δ
33%	(31%-35%)	33%	494	41%	(39%-44%)	41%	513	34%	(32%-35%)	Δ	Δ
Δ	Δ	1%	18	Δ	Δ	2%	20	Δ	Δ	Δ	Δ
40%	(38%-43%)	40%	600	37%	(35%-40%)	37%	466	Δ	Δ	Δ	Δ
60%	(57%-62%)	59%	898	63%	(60%-65%)	62%	778	Δ	Δ	Δ	Δ
Δ	Δ	1%	21	Δ	Δ	1%	16	Δ	Δ	Δ	Δ
10%	(9%-12%)	9%	141	11%	(10%-13%)	11%	134	Δ	Δ	Δ	Δ
25%	(23%-27%)	23%	345	24%	(22%-26%)	23%	287	Δ	Δ	Δ	Δ
75%	(73%-77%)	69%	1,050	76%	(74%-78%)	72%	912	Δ	Δ	Δ	Δ
Δ	Δ	8%	124	Δ	Δ	5%	61	Δ	Δ	Δ	Δ
Δ	Δ	100%	1,519	Δ	Δ	100%	1,260	Δ	Δ	Δ	Δ

Washington State Health Characteristics, 2004 <sup>#</sup>		Sixth Grade Students				Eighth Grade Students			
		Students		Sample		Students		Sample	
		% <sup>^</sup>	95% CI <sup>°</sup>	% <sup>^</sup>	n	% <sup>^</sup>	95% CI <sup>°</sup>	% <sup>^</sup>	n
<b>Nutrition</b>									
Soda Consumption	One or no sodas per day	87%	(86%-88%)	76%	5,937	80%	(78%-82%)	78%	3,265
	Excessive soda consumption	13%	(12%-14%)	12%	906	20%	(18%-22%)	19%	814
	Missing	Δ	Δ	13%	1,019	Δ	Δ	3%	124
Fruit/Vegetable Consumption	Eats fruits/vegetables 5+ times per day	&	&	&	&	26%	(25%-28%)	25%	1,057
	Eats fruits/vegetables <5 times per day	&	&	&	&	74%	(72%-75%)	70%	2,958
	Missing	&	&	&	&	Δ	Δ	4%	188
<b>Physical Activity</b>									
Moderate Physical Activity	Meets recommendations	&	&	&	&	35%	(33%-36%)	33%	1,401
	Does not meet recommendations	&	&	&	&	65%	(64%-67%)	63%	2,652
	Missing	&	&	&	&	Δ	Δ	4%	150
Vigorous Physical Activity	Meets recommendations	82%	(81%-83%)	81%	6,345	77%	(75%-79%)	75%	3,149
	Does not meet recommendations	18%	(17%-19%)	18%	1,400	23%	(21%-25%)	22%	933
	Missing	Δ	Δ	1%	117	Δ	Δ	3%	121
<b>Weight Status</b>									
Weight Status	Overweight	&	&	&	&	10%	(9%-12%)	8%	344
	Overweight or At Risk for Overweight	&	&	&	&	25%	(23%-28%)	21%	868
	Not Overweight or At Risk	&	&	&	&	75%	(72%-77%)	61%	2,555
	Missing	&	&	&	&	Δ	Δ	19%	780
Total									

<sup>#</sup>Breakfast consumption, source of beverages consumed, and meeting new physical activity recommendation requirements were not asked in 2004.

<sup>^</sup>Percents may not add up to 100% due to rounding.

<sup>°</sup>95% Confidence Interval. If two confidence intervals do not overlap, we are 95% confident that there is a real difference between two figures.

<sup>&</sup>This item not asked of students in this grade level.

<sup>Δ</sup>Not Calculated

<u>Tenth Grade Students</u>				<u>Twelfth Grade Students</u>				<u>High School Students</u>			
<u>Students</u>		<u>Sample</u>		<u>Students</u>		<u>Sample</u>		<u>Students</u>		<u>Sample</u>	
<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>	<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>	<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>
77%	(75%-79%)	75%	2,979	79%	(77%-81%)	78%	2,276	Δ	Δ	Δ	Δ
23%	(21%-25%)	22%	868	21%	(19%-23%)	20%	596	Δ	Δ	Δ	Δ
Δ	Δ	3%	129	Δ	Δ	2%	62	Δ	Δ	Δ	Δ
23%	(22%-25%)	22%	878	21%	(20%-23%)	21%	611	Δ	Δ	Δ	Δ
77%	(75%-78%)	73%	2,900	79%	(77%-80%)	76%	2,234	Δ	Δ	Δ	Δ
Δ	Δ	5%	198	Δ	Δ	3%	89	Δ	Δ	Δ	Δ
33%	(32%-35%)	32%	1,282	34%	(32%-36%)	33%	966	Δ	Δ	Δ	Δ
67%	(65%-68%)	64%	2,548	66%	(64%-68%)	65%	1,901	Δ	Δ	Δ	Δ
Δ	Δ	4%	146	Δ	Δ	2%	67	Δ	Δ	Δ	Δ
70%	(67%-72%)	67%	2,675	61%	(58%-63%)	60%	1,748	Δ	Δ	Δ	Δ
30%	(28%-33%)	29%	1,170	39%	(37%-42%)	38%	1,126	Δ	Δ	Δ	Δ
Δ	Δ	3%	131	Δ	Δ	2%	60	Δ	Δ	Δ	Δ
10%	(9%-11%)	9%	363	10%	(9%-11%)	10%	280	Δ	Δ	Δ	Δ
22%	(20%-25%)	21%	819	24%	(21%-26%)	22%	652	Δ	Δ	Δ	Δ
78%	(75%-80%)	71%	2,825	76%	(74%-79%)	72%	2,115	Δ	Δ	Δ	Δ
Δ	Δ	8%	332	Δ	Δ	6%	167	Δ	Δ	Δ	Δ

Washington State Health Characteristics, 2006		Sixth Grade Students				Eighth Grade Students			
		Students		Sample		Students		Sample	
		% <sup>^</sup>	95% CI <sup>°</sup>	% <sup>^</sup>	n	% <sup>^</sup>	95% CI <sup>°</sup>	% <sup>^</sup>	n
<b>Nutrition</b>									
Soda Consumption	One or no sodas per day	89%	(88%-90%)	81%	7,137	85%	(84%-86%)	83%	3,731
	Excessive soda consumption	11%	(10%-12%)	10%	853	15%	(14%-17%)	15%	656
	Missing	Δ	Δ	9%	835	Δ	Δ	2%	90
Consumption of Sodas/Sweetened Beverages at School/ School Events	Yes	&	&	&	&	70%	(68%-72%)	69%	3,104
	No	&	&	&	&	30%	(28%-32%)	29%	1,313
	Missing	&	&	&	&	Δ	Δ	1%	60
Usual Source of Sodas/Sweetened Beverages Consumed at School/School Events*	Bought at school	&	&	&	&	40%	(35%-45%)	34%	1,055
	Brought from home	&	&	&	&	37%	(32%-41%)	31%	958
	Got from friends	&	&	&	&	8%	(7%-9%)	6%	199
	Other	&	&	&	&	16%	(14%-18%)	13%	409
	No Sodas Consumed	&	&	&	&	Δ	Δ	14%	445
	Missing	&	&	&	&	Δ	Δ	1%	38
Bought any sodas from school <sup>†</sup>	Yes	13%	(10%-16%)	12%	340	&	&	&	&
	No	87%	(84%-90%)	80%	2,260	&	&	&	&
	No Sodas Consumed	Δ	Δ	7%	184	&	&	&	&
	Missing	Δ	Δ	1%	27	&	&	&	&
Breakfast Consumption	Ate breakfast that morning	77%	(75%-79%)	70%	6,161	67%	(64%-69%)	66%	2,942
	Didn't eat breakfast that morning	23%	(21%-25%)	21%	1,865	33%	(31%-36%)	33%	1,468
	Missing	Δ	Δ	9%	799	Δ	Δ	2%	67
Fruit/Vegetable Consumption	Eats fruits/vegetables 5+ times per day	&	&	&	&	30%	(29%-32%)	26%	1,159
	Eats fruits/vegetables <5 times per day	&	&	&	&	70%	(68%-71%)	59%	2,656
	Missing	&	&	&	&	Δ	Δ	15%	662
Total		Δ	Δ	Δ	8,825	Δ	Δ	Δ	4,477

<sup>^</sup>Percents may not add up to 100% due to rounding.

<sup>°</sup>95% Confidence Interval. If two confidence intervals do not overlap, we are 95% confident that there is a real difference between two figures.

<sup>&</sup>This item not asked of students in this grade level.

<sup>Δ</sup>Not Calculated

\*This section only includes students who report consuming soda at school/school events on a separate question.

<sup>†</sup>This section only includes students who report consuming soda the day before the survey on a separate question

<u>Tenth Grade Students</u>				<u>Twelfth Grade Students</u>				<u>High School Students</u>			
<u>Students</u>		<u>Sample</u>		<u>Students</u>		<u>Sample</u>		<u>Students</u>		<u>Sample</u>	
<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>	<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>	<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>
80%	(78%-82%)	79%	3,372	81%	(79%-83%)	80%	2,467	Δ	Δ	Δ	Δ
20%	(18%-22%)	19%	833	19%	(17%-21%)	18%	562	Δ	Δ	Δ	Δ
Δ	Δ	2%	84	Δ	Δ	2%	63	Δ	Δ	Δ	Δ
78%	(76%-80%)	76%	3,278	76%	(73%-78%)	74%	2,302	Δ	Δ	Δ	Δ
22%	(20%-24%)	22%	943	24%	(22%-27%)	24%	737	Δ	Δ	Δ	Δ
Δ	Δ	2%	68	Δ	Δ	2%	53	Δ	Δ	Δ	Δ
47%	(42%-51%)	43%	1,403	38%	(34%-43%)	35%	804	Δ	Δ	Δ	Δ
30%	(26%-34%)	28%	906	33%	(30%-36%)	30%	695	Δ	Δ	Δ	Δ
7%	(6%-8%)	7%	219	5%	(4%-6%)	4%	103	Δ	Δ	Δ	Δ
16%	(13%-20%)	15%	489	24%	(20%-28%)	22%	501	Δ	Δ	Δ	Δ
Δ	Δ	7%	242	Δ	Δ	8%	185	Δ	Δ	Δ	Δ
Δ	Δ	1%	19	Δ	Δ	1%	14	Δ	Δ	Δ	Δ
&	&	&	&	&	&	&	&	Δ	Δ	Δ	Δ
&	&	&	&	&	&	&	&	Δ	Δ	Δ	Δ
&	&	&	&	&	&	&	&	Δ	Δ	Δ	Δ
&	&	&	&	&	&	&	&	Δ	Δ	Δ	Δ
60%	(57%-62%)	59%	2,528	56%	(53%-59%)	55%	1,699	Δ	Δ	Δ	Δ
40%	(38%-43%)	39%	1,693	44%	(41%-47%)	44%	1,349	Δ	Δ	Δ	Δ
Δ	Δ	2%	68	Δ	Δ	1%	44	Δ	Δ	Δ	Δ
25%	(24%-27%)	22%	953	22%	(21%-24%)	20%	621	Δ	Δ	Δ	Δ
75%	(73%-76%)	65%	2,800	78%	(76%-79%)	70%	2,165	Δ	Δ	Δ	Δ
Δ	Δ	13%	536	Δ	Δ	10%	306	Δ	Δ	Δ	Δ
Δ	Δ	Δ	4,289	Δ	Δ	Δ	3,092	Δ	Δ	Δ	Δ

Washington State Health Characteristics, 2006 (Continued)		Sixth Grade Students				Eighth Grade Students			
		Students		Sample		Students		Sample	
		% <sup>^</sup>	95% CI <sup>°</sup>	% <sup>^</sup>	n	% <sup>^</sup>	95% CI <sup>°</sup>	% <sup>^</sup>	n
<b>Physical Activity</b>									
Moderate Physical Activity Recommendations	Meets recommendations	&	&	&	&	33%	(32%-35%)	33%	1,463
	Does not meet recommendations	&	&	&	&	67%	(65%-68%)	65%	2,917
	Missing	&	&	&	&	Δ	Δ	2%	97
Vigorous Physical Activity Recommendations	Meets recommendations	81%	(80%-82%)	81%	7,108	79%	(77%-81%)	77%	3,468
	Does not meet recommendations	19%	(18%-20%)	18%	1,630	21%	(19%-23%)	21%	916
	Missing	Δ	Δ	1%	87	Δ	Δ	2%	93
Meets New Physical Activity Recommendations	Meets recommendations	&	&	&	&	47%	(44%-50%)	46%	2,050
	Does not meet recommendations	&	&	&	&	53%	(50%-56%)	51%	2,302
	Missing	&	&	&	&	Δ	Δ	3%	125
<b>Weight Status</b>									
Weight Status	Overweight	&	&	&	&	10%	(9%-12%)	9%	387
	Overweight or At Risk for Overweight	&	&	&	&	25%	(23%-27%)	21%	933
	Not Overweight or At Risk	&	&	&	&	75%	(73%-77%)	62%	2,786
	Missing	&	&	&	&	Δ	Δ	17%	758
Total		Δ	Δ	Δ	8,825	Δ	Δ	Δ	4,477

<sup>^</sup>Percents may not add up to 100% due to rounding.

<sup>°</sup>95% Confidence Interval. If two confidence intervals do not overlap, we are 95% confident that there is a real difference between two figures.

<sup>&</sup>This item not asked of students in this grade level.

<sup>Δ</sup>Not Calculated

<u>Tenth Grade Students</u>				<u>Twelfth Grade Students</u>				<u>High School Students</u>			
<u>Students</u>		<u>Sample</u>		<u>Students</u>		<u>Sample</u>		<u>Students</u>		<u>Sample</u>	
<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>	<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>	<u>%<sup>^</sup></u>	<u>95% CI<sup>o</sup></u>	<u>%<sup>^</sup></u>	<u>n</u>
35%	(33%-37%)	34%	1,459	33%	(31%-35%)	33%	1,006	Δ	Δ	Δ	Δ
65%	(63%-67%)	64%	2,727	67%	(65%-69%)	65%	2,021	Δ	Δ	Δ	Δ
Δ	Δ	2%	103	Δ	Δ	2%	65	Δ	Δ	Δ	Δ
68%	(66%-71%)	67%	2,865	61%	(58%-64%)	60%	1,865	Δ	Δ	Δ	Δ
32%	(29%-34%)	31%	1,337	39%	(36%-42%)	38%	1,174	Δ	Δ	Δ	Δ
Δ	Δ	2%	87	Δ	Δ	2%	53	Δ	Δ	Δ	Δ
42%	(40%-44%)	41%	1,752	39%	(36%-41%)	38%	1,171	Δ	Δ	Δ	Δ
58%	(56%-60%)	57%	2,434	61%	(59%-64%)	60%	1,856	Δ	Δ	Δ	Δ
Δ	Δ	2%	103	Δ	Δ	2%	65	Δ	Δ	Δ	Δ
11%	(9%-12%)	10%	416	11%	(10%-13%)	10%	321	Δ	Δ	Δ	Δ
25%	(22%-27%)	23%	966	25%	(23%-28%)	24%	735	Δ	Δ	Δ	Δ
75%	(73%-78%)	69%	2,951	75%	(72%-77%)	70%	2,149	Δ	Δ	Δ	Δ
Δ	Δ	9%	372	Δ	Δ	7%	208	Δ	Δ	Δ	Δ
Δ	Δ	Δ	4,289	Δ	Δ	Δ	3,092	Δ	Δ	Δ	Δ

## Appendix E- References

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