

Obesity in Washington State

Obesity contributes to a host of chronic diseases and causes a greater likelihood of premature death.^{1,2,3} Obesity is epidemic in Washington and the nation. The epidemic is driven by changes in the physical, social and economic environment that make it easy to consume excess calories while making it harder to get enough physical activity to offset those extra calories. Many barriers make it difficult for people to change their eating and physical activity habits. To be successful in reducing obesity, government, communities, and individuals need to work together to create environments that support healthy diets and opportunities for physical activity.

Prevalence and Trends⁴

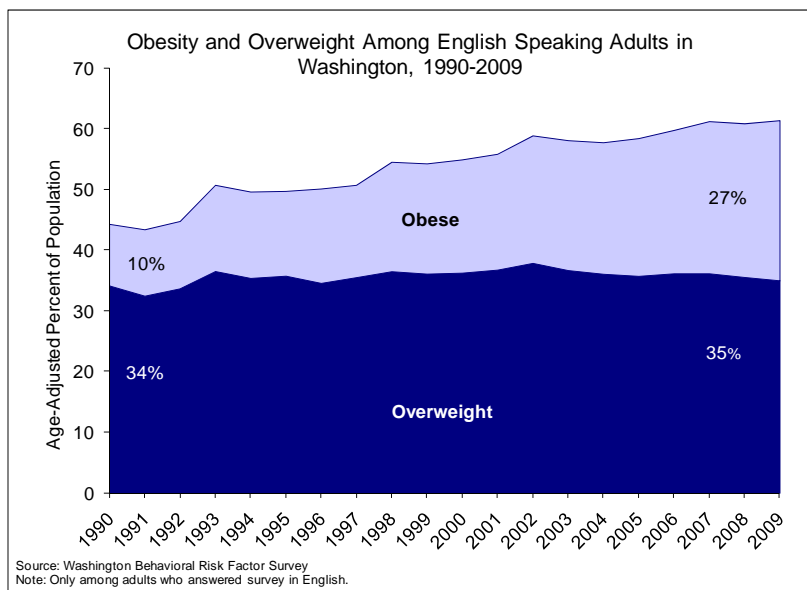
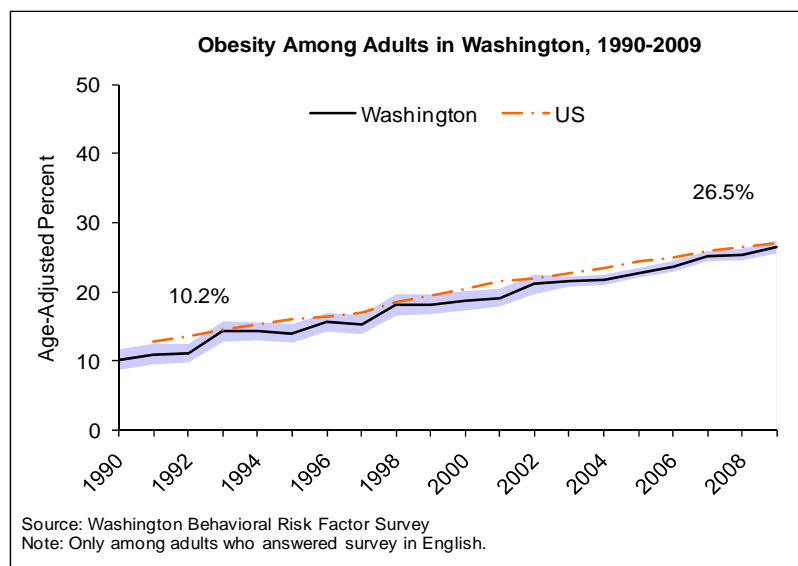
* More and more people in Washington are becoming obese⁵.

* The fraction of adults who are obese more than doubled over the past 19 years, increasing from 10% in 1990 to 27% in 2009.

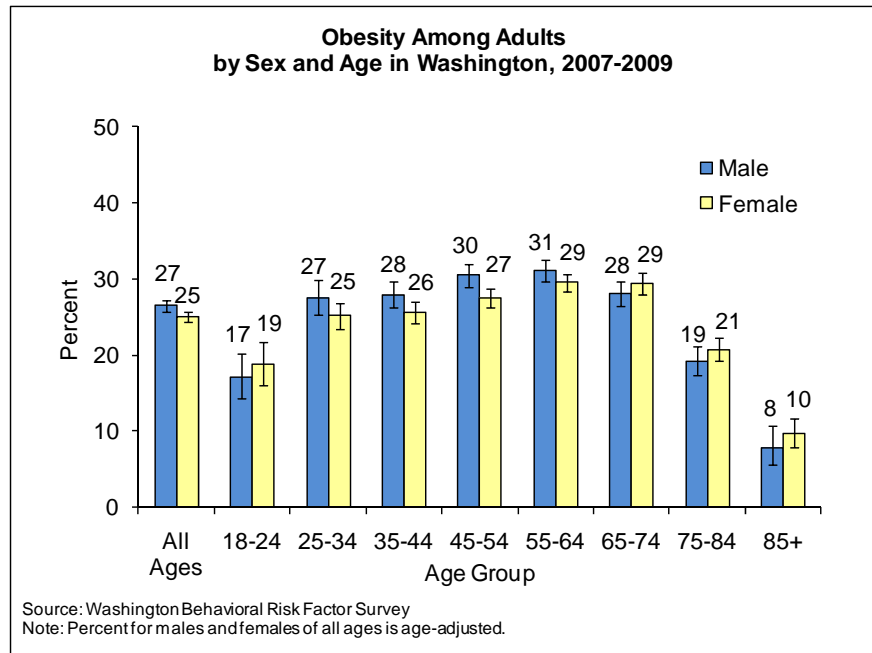
* In Washington State and the nation⁶, obesity has increased steadily from 1991-2009. Obesity prevalence in Washington State increases by nearly a percentage point each year (slope = 0.85).

* Unlike obesity, the percent of adults who are overweight remained fairly level from 1991-2009, between 34-36%.

* Overall, 62% of adults were either overweight or obese in 2009.



* Men and women between the ages of 45-74 have the highest prevalence of obesity. The prevalence of obesity is lower among older adults age, 75 or older, and younger adults, age 18-24.



* Between 1999 and 2009, the fastest growth in obesity prevalence was in younger adults between the ages of 18-34. The slowest growth in obesity prevalence was in men age 45-54 and women age 55-64.

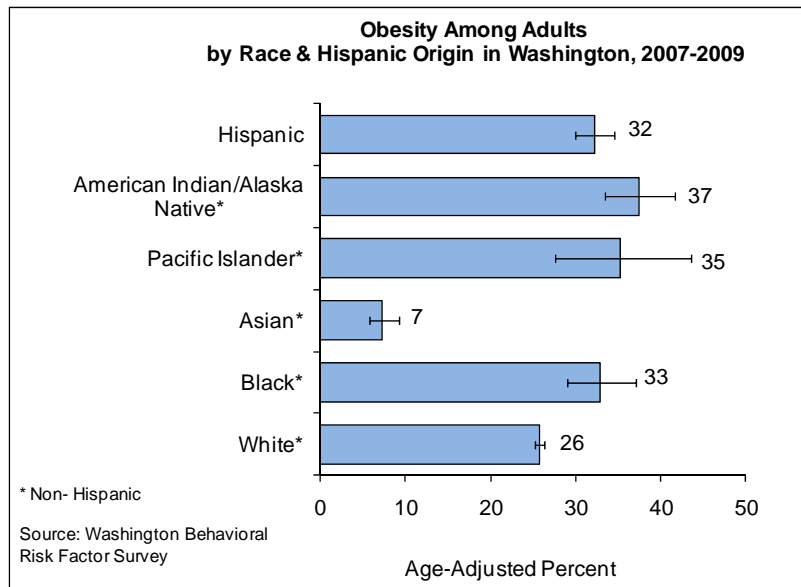
* Obesity prevalence has increased faster among women than among men.

Change in Obesity Prevalence Over Time in Washington Comparing 3-year averages: 1997-1999 and 2007-2009						
Age (years)	Men			Women		
	Obesity 1997-1999	Obesity 2007-2009	Percent Change	Obesity 1997-1999	Obesity 2007-2009	Percent Change
All Ages	18.1	26.5	46%	16.2	24.8	53%
18-24	10.5	17.2	63%	10.4	18.9	82%
25-34	14.2	27.4	92%	13.1	24.6	88%
35-44	18.4	28.0	52%	15.8	25.0	59%
45-54	26.0	30.4	17%	17.8	27.2	53%
55-64	23.2	31.1	34%	24.0	29.3	22%
65+	15.8	23.5	48%	17.6	23.5	34%

Race and Hispanic Origin⁴

* American Indians and Alaska Natives, Pacific Islanders, Blacks, and adults of Hispanic origin have a higher prevalence of obesity compared to non-Hispanic whites. Asians have the lowest prevalence of obesity of all racial / ethnic groups.

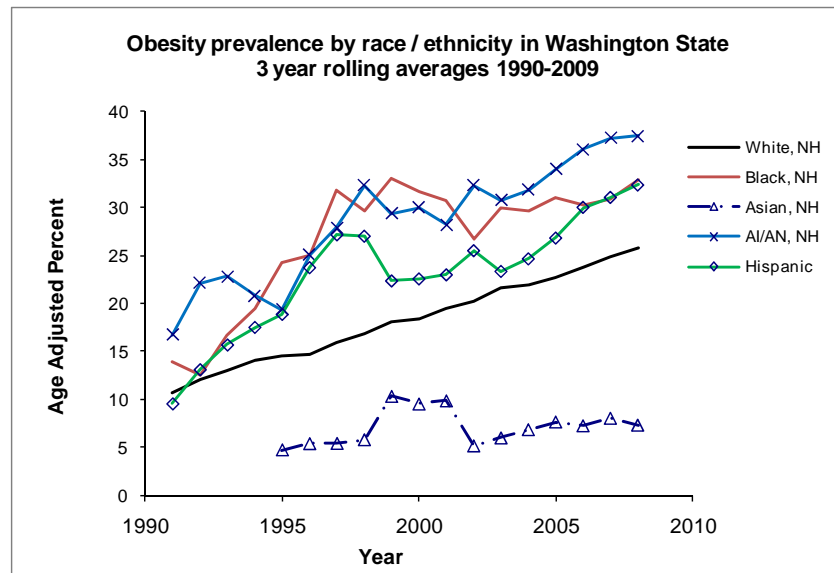
* After controlling for gender, age, income and education, American Indians / Alaska Natives and Native Hawaiian / Other Pacific Islanders still had significantly higher prevalence than non-Hispanic whites, while Asians had lower prevalence than non-Hispanic whites.



* These patterns probably reflect a combined effect of differential access to health care and to social and economic opportunities, and experiences of racial discrimination, in addition to cultural and genetic factors.⁷

* Racial /ethnic disparities in obesity have developed differently for each group. Obesity among blacks increased dramatically in the 1990's but has leveled off since 1999.

Obesity among Hispanics and American Indians / Alaska natives has been increasing steadily at a rate slightly higher than that for non-Hispanic whites. Obesity remains low among Asians. Asians in Washington State do not appear to have been affected by the forces driving the obesity epidemic among other demographic groups.



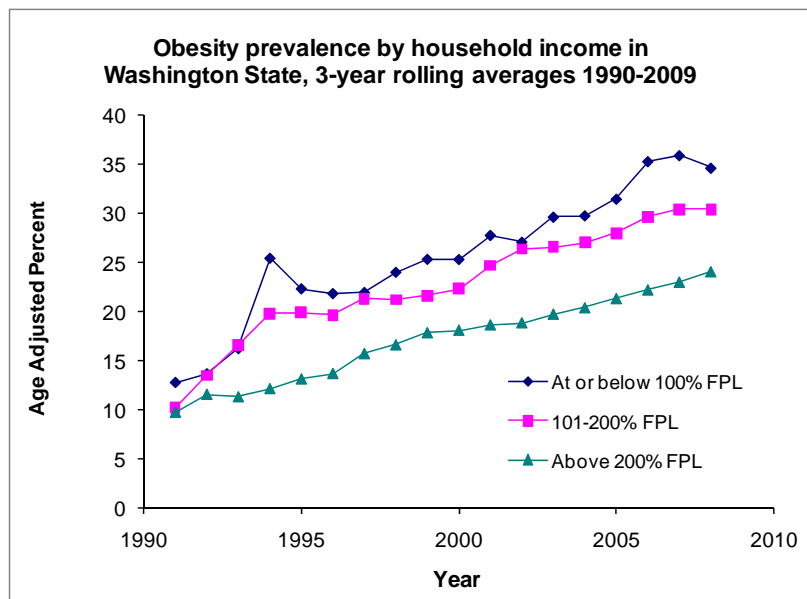
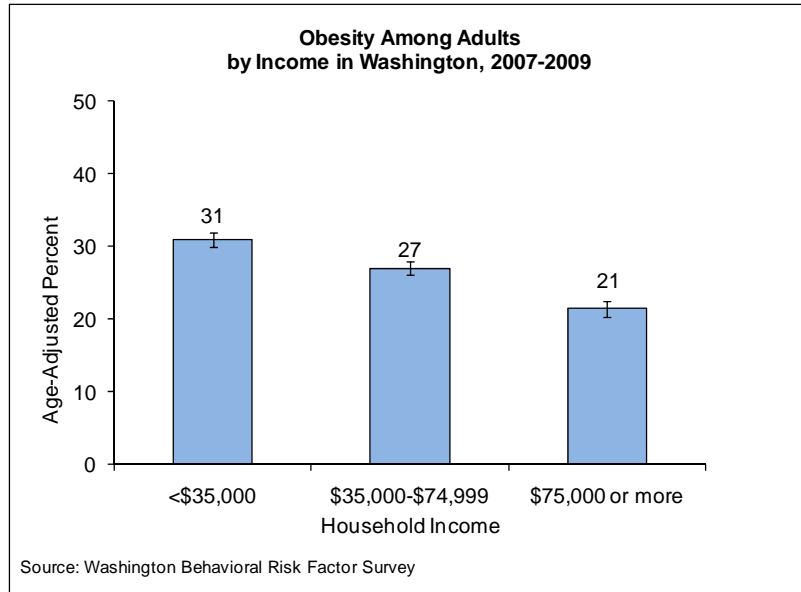
Income and Education⁴

* Higher prevalence of obesity is associated with lower levels of income and education.

* Risk of obesity increases with every step down the economic ladder. Adults with annual household incomes of less than \$35,000 are 44% more likely to be obese than those in households with annual incomes of \$75,000 or more. Adults with income \$35-75,000 are 26% more likely to be obese than those earning \$75,000 or more.

* Obesity prevalence has increased as nearly the same rate in all income groups since 1993.

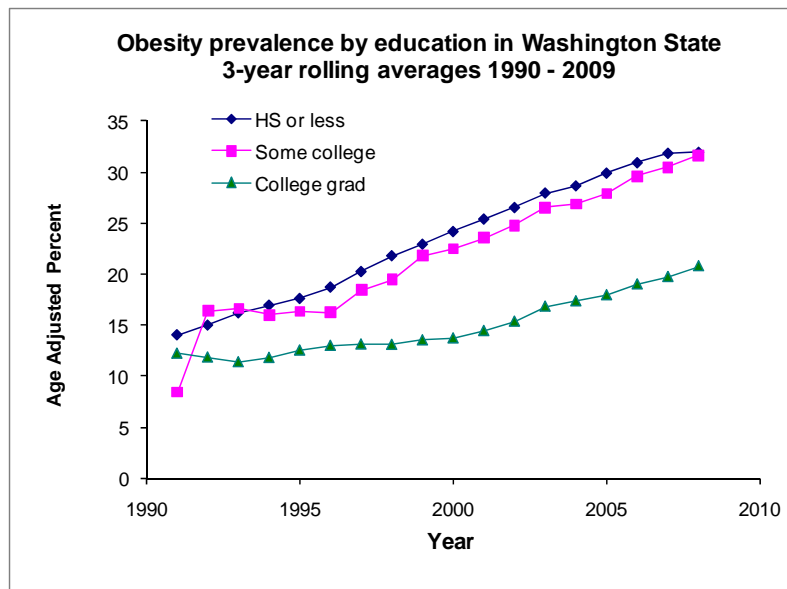
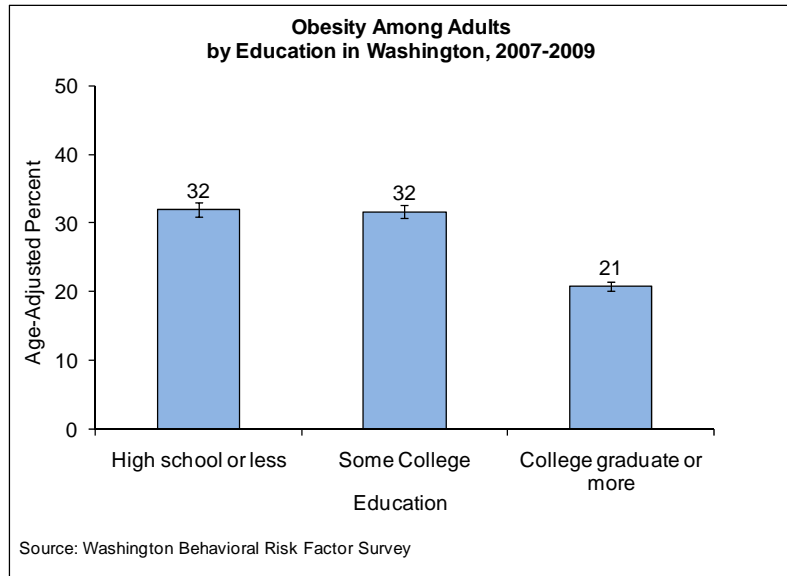
* The pattern for income is statistically significant even after accounting for education, age, gender, race, and Hispanic origin.



* There is a sharp division between college graduates and those without a college degree. Adults without a college degree are 52% more likely to be obese than college graduates.

* The pattern for education is statistically significant even after accounting for income, age, gender, race, and Hispanic origin.

* The gap between those with and without college education has widened. Obesity among college graduates has increased more slowly than among non college graduates, especially before 2000.

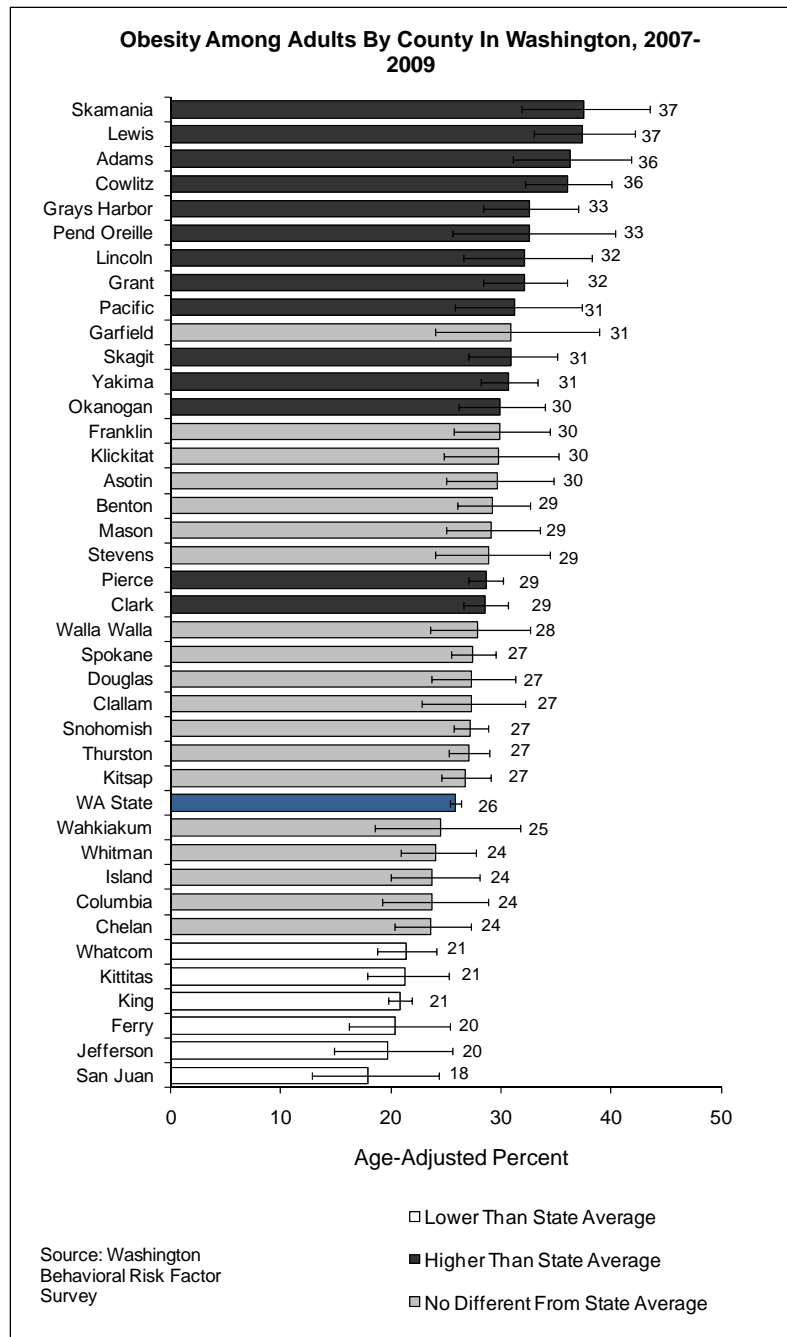


Geographic Variation⁴

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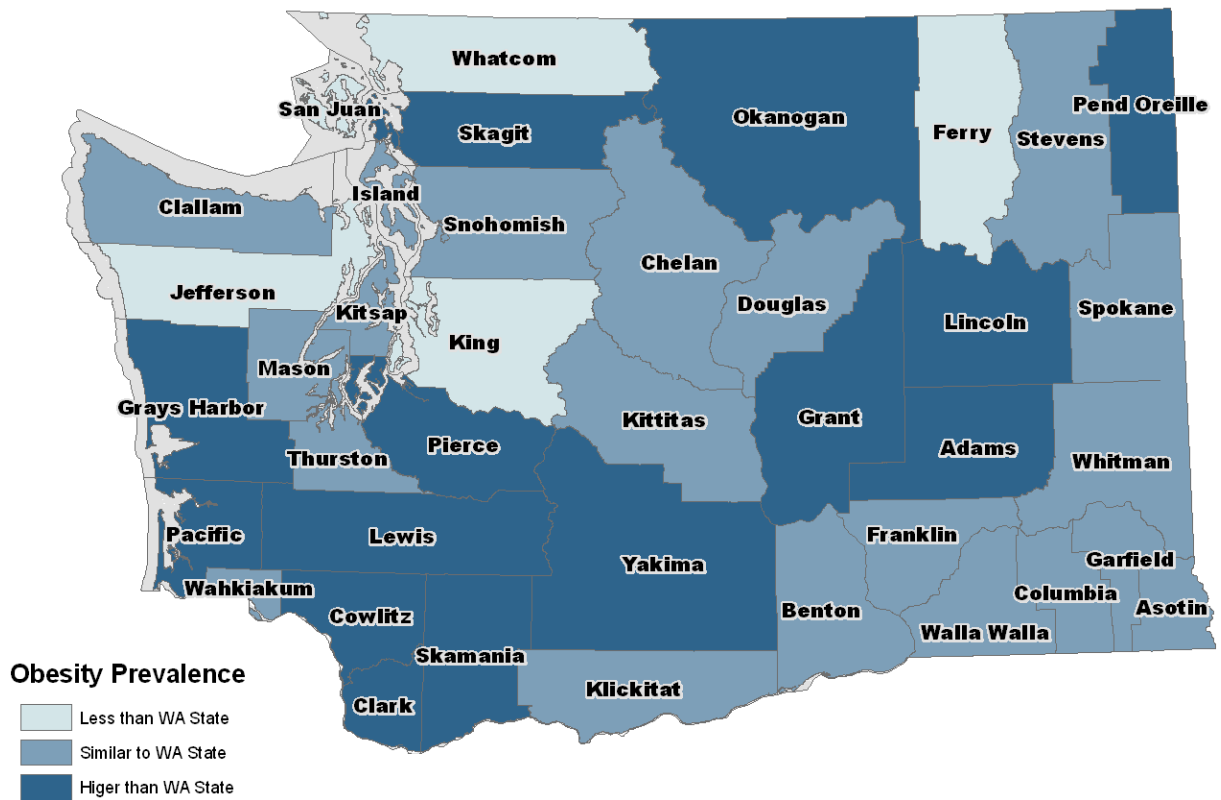
* Age-adjusted prevalence for obesity ranges from 18% in San Juan County to 37% in Skamania County.

* Skamania, Lewis, Adams, Cowlitz, Grays Harbor, Pend Oreille, Lincoln, Grant, Pacific, Skagit, Yakima, Okanogan, Pierce, and Clark Counties have higher obesity prevalence than the state average. Whatcom, Kittitas, King, Ferry, Jefferson, and San Juan Counties have prevalence of obesity below the state average.



* The prevalence of obesity is not distributed evenly throughout Washington. Obesity in Washington is highest in the southwest and central regions of the state.

Obesity in Washington State by County, 2007 - 2009



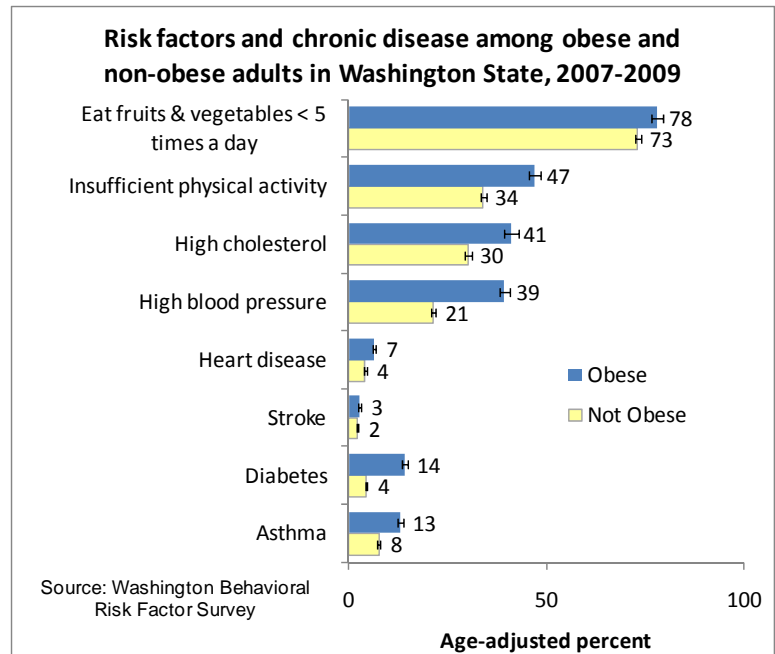
Source: Washington Behavioral Risk Factor Surveillance System (2007-2009)

Risk Factors and Chronic Disease⁴

* Adults who are obese are less likely to have diets that are rich in fruits and vegetables or to be physically active at recommended levels.

* Obese adults are more likely to have cardiovascular risk factors of high blood cholesterol and hypertension, and more likely to have a chronic disease like heart disease, stroke, diabetes, or asthma.

* To prevent obesity, we must improve nutrition and boost physical activity.



Overweight Among Youth

* Several factors contribute to the increasing rates of overweight among children, including fewer opportunities for physical activity, fewer meals eaten at home, media and marketing that target children with food advertisements, increased portion sizes, and increased amount of time in sedentary activities, watching television and using computers.⁸

* Other factors, such as fetal weight gain⁹, parental obesity¹⁰, and the age at which a child's "adiposity rebound" begins¹¹, also contribute to overweight and obesity among children.

* In 2008, 11% of 10th grade students in Washington were obese and another 14% were overweight.^{12,13}

* Additional data on overweight in adolescents is collected as part of Washington State's Healthy Youth Survey:: <http://www.askhys.net/layout.asp?page=intro>. Click on the HYS Fact Sheets Menu to access data.

References

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3. Mokdad, A. H., Ford, E. S., Bowman, B. A., Dietz, W. H., Vinicor, F., Bales, V. S., et al. (2003). Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. *Journal of the American Medical Association*, 289(1), 76–79.
4. Washington State Department of Health, Behavioral Risk Factor Surveillance System Survey.
5. For adults, overweight and obesity ranges are determined by using weight and height to calculate a number called the “body mass index” (BMI). BMI is used because, for most people, it correlates with their amount of body fat. An adult who has a BMI between 25 and 29.9 kg/m² is considered overweight. An adult who has a BMI of 30 kg/m² or higher is considered obese. (Centers for Disease Control and Prevention. Overweight and Obesity: Defining Overweight and Obesity. Available: <http://www.cdc.gov/nccdphp/dnpa/obesity/defining.htm>. Accessed January 4, 2008.)
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7. Washington State Department of Health. *The Health of Washington State*. Olympia, WA: Washington State Department of Health, 2007. Available: <http://www.doh.wa.gov/hws>. Accessed January 4, 2008.
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11. Dietz, W. H. (2000). Adiposity rebound: reality or epiphenomenon? *The Lancet*, 356, 2027-2028.
12. Washington State, Healthy Youth Survey.
13. The U.S. Centers for Disease Control and Prevention (CDC) generally does not use the term “obesity” for children. Overweight and risk for overweight are based on age and gender specific growth charts developed by the CDC (Kuzmarski, Ogden, Grummer-Strawn, et al., 2000). Body mass index is obtained by dividing a person's weight (in kilograms) by the square of his or her height (in centimeters). Individuals in the top 5 percent for body mass index (based on the growth charts) are considered overweight and those in the top 15 percent, but not the top 5 percent, are considered at risk for overweight.

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