



Vision 4: Health Promoting

National Trends:

Our relationship to our local food system, and the consumption choices we make play a role in whether food helps nourish us or causes adverse health risks. These potential health risks, including obesity and diabetes have been rapidly increasing across the United States over the past 20 years. Currently more than one third of U.S. adults and approximately 17% of all children and adolescents are obese.¹²⁹ Diabetes, which can be a consequence of obesity, currently affects 25.8 million people in the U.S, approximately 8.3% of the population.¹³⁰

In order to prevent obesity and other chronic diseases such as diabetes, heart disease, high blood pressure and cancer, the Center for Disease Control recommends that citizens eat a diet high in fruits and vegetables. However, currently fewer than 1 in 10 Americans eat enough fruits and vegetables to meet current dietary recommendations.¹³¹

Strategies to combat obesity and other chronic diseases include increasing the access and availability of fruits and vegetables. One way of increasing fruit and vegetable consumption among children and adolescents is through farm-to-school programs. Currently farm-to-school programs across the nation reach over 5.5 million students in over 12 thousand schools.¹³²

San Luis Obispo County Trends:

San Luis Obispo County experiences many of the same trends in health indicators as the nation as a whole. However, health indicators such as incidences of diabetes, healthy fitness zones, and intake of sugary drinks are generally lower in San Luis Obispo County than in the rest of the state of California.

To improve nutritional health for all residents, San Luis Obispo County has worked on increasing consumption of fresh, regional fruits and vegetables through opportunities such as salad bars in schools, school gardens and farm-to-school programs—all of which are currently on the rise.

Goal 4.1: San Luis Obispo County's food system promotes community health

A food system that provides fresh, local food helps promote a healthier community. One indicator of a food system's ability to adequately promote community health is the rate of chronic disease such as diabetes in a county. The following indicators provide a picture of diabetes rates, specifically those related to the food system in San Luis Obispo County.

129 "Overweight and Obesity Facts," *Centers for Disease Control and Prevention*, accessed April 17, 2013, <http://www.cdc.gov/obesity/data/facts.html>.

130 "Diabetes Public Health Resource: 2011 National Diabetes Fact Sheet," *Centers for Disease Control and Prevention*, accessed April 3, 2013, <http://www.cdc.gov/diabetes/pubs/estimates11.htm>.

131 *Strategies to Prevent Obesity and Other Chronic Diseases: The CDC Guide to Strategies to Increase the Consumption of Fruits and Vegetables*, Centers for Disease Control and Prevention (U.S. Department of Health and Human Services, 2011).

132 "California Profile."

Indicator 4.1a: Percent of population diagnosed with diabetes in San Luis Obispo County

Background: As of 2010, 25.8 million people, 8.3% of the population in the U.S. have been diagnosed with diabetes.¹³³ Of these, over 90% are attributed to Type 2 diabetes, which is associated with obesity and inactivity. Data on diabetes in youth and young adults in San Luis Obispo County is being gathered by the California Health Interview Survey (CHIS); however the number of cases is relatively small for this age group and cannot be accurately reported at this time. Therefore, the data reported below only looks at adults.

San Luis Obispo County Trends:

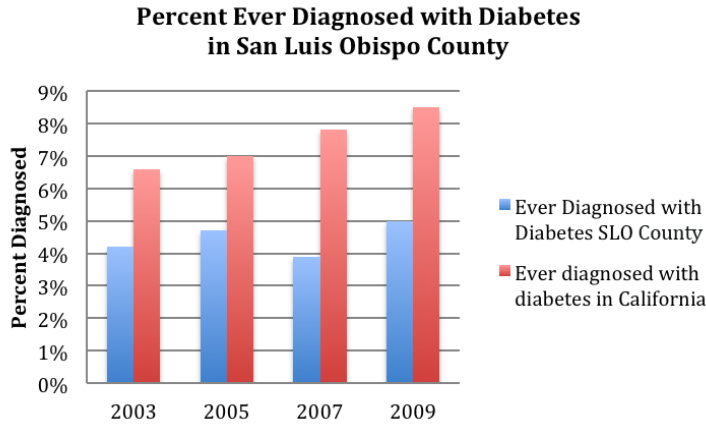


Figure 56: Source: California Health Interview Survey (CHIS), UCLA Center For Health Policy Research, Table: Ever Diagnosed With Diabetes. Note: Data Only For Adults

Trends: According to CHIS, the overall rate of adult diabetes in San Luis Obispo County in 2009 was 5%, up from 4.2% in 2003, but much lower than the rate in California (~8.5%). Of these diagnoses, more than 88.3% are Type II, which is often associated with a lack of physical activity or overweight. The rate in San Luis Obispo County is also higher than the Type II rate in CA (~83%). This may suggest that these adults in San Luis Obispo County may also have related health issues such as overweight or obesity.¹³⁴

Indicator 4.1b: Percent of 5th - 9th graders not in a healthy fitness zone or of healthy Body Mass Index (BMI)

Background: Since 1980, childhood obesity had doubled in children and tripled in adolescents. According to the 2009-2010 National Health and Nutritional Examination Survey (NHANES) approximately 17% of children under the age of 19 are obese.¹³⁵ Children and adolescents who are obese are likely to be obese as adults and are therefore more at risk for adult health problems such as heart disease, Type II diabetes, stroke, several types of cancer, and osteoarthritis.¹³⁶ In order to monitor adolescent health and fitness, the California Department of Education (DOE) administers the physical fitness testing which includes a BMI measurement in its assessment. For these physical fitness tests the DOE uses a chart called the Healthy Fitness Zone; the standards were established by The Cooper Institute to represent levels of fitness that offer some degree of protection against diseases that can result from sedentary living.

133 "Diabetes Public Health Resource: 2011 National Diabetes Fact Sheet."
 134 This data is pulled from the California Health Interview Survey (CHIS) which only asked questions about Type II diabetes to the 5% of respondents who responded to ever having diabetes, which means that this data was pulled from a relatively small sample size.
 135 Carroll Ogden, Margaret D. Carroll, Brian K. Kit, and Katherine M. Flegal, "Prevalence of Obesity and Trends in Body Mass Index Among U.S. Children and Adolescents, 1999-2010," *JAMA* 307, no. 5 (2012): 483-490.
 136 "Childhood Obesity Facts," *Centers for Disease Control and Prevention*, accessed April 3, 2013, <http://www.cdc.gov/healthyouth/obesity/facts.htm>.

San Luis Obispo County Trends:

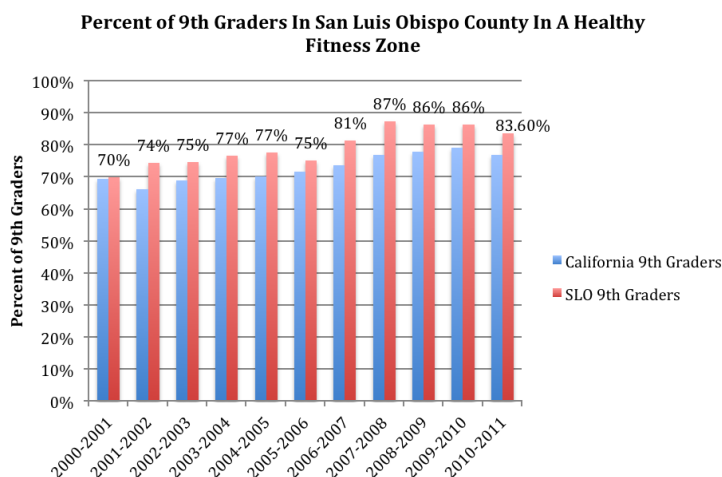


Figure 57: Source: California Department of Education, Physical Fitness Report. Average Percentage of all the components of the physical fitness test

Trends: Physical fitness as measured through testing of school age children in grades five, seven, and nine has improved over the last decade. For youth in ninth grade, the percentage who were in a “healthy fitness zone” in 2010-2011 is 83.6%. This rate is higher than the state of California, in which the average score is 79%.

Goal 4.2: Schools in San Luis Obispo County serve more fresh, local food.

Farm-to-school programs connect school age children and youth with area farms through local sourcing of school food, farm visits and other agriculturally related curricula. These programs are intended to improve the health and nutrition of youth as well as support regional farmers. The following indicators will provide a snapshot of the current state of farm-to-school programs in San Luis Obispo County.

Indicator 4.2a: Number of salad bars in San Luis Obispo County Schools

Background: Salad bars are one growing venue for delivering fresh fruits and vegetables to children in schools. Many school children increase their consumption of fruit and vegetables when given a variety of choices.¹³⁷ Additionally, increased daily access to fruit and vegetables provide students with a personal experience about choices that can shape behavior beyond the cafeteria.

Trends: Since data on how many schools there are with salad bars in San Luis Obispo County does not exist, each Food Service Director for every school district in the county was contacted by phone and asked if their schools had salad bars. There are currently 62 salad bars in San Luis Obispo County public schools (75% of the county’s public schools). Not all of the salad bars are available daily, however, some of the weekly or monthly salad bars attempt to source their fruits and vegetables from their school gardens. Food service directors who were interviewed for this study expressed interest in sourcing more local food for their salad bars, representing an opportunity to increase local produce in San Luis Obispo schools through salad bars.

For more information on salad bars in San Luis Obispo County, see indicator 1.2c.

137 Anupama Joshi, Andrea Misako Azuma, and Gail Feenstra, “Do Farm to School Programs Make A Difference? Findings and Future Research Needs,” *Journal of Hunger & Environmental Nutrition* 3, no. 2/3 (2008): 229–246.



Indicator 4.2b: Number of school gardens in San Luis Obispo County

Background: School gardens provide a dynamic environment to enhance student health, achievement and serve as a vehicle to connect students with their food. While integrating gardens into the curriculum is not new, increased interest in local food production has led to the establishment of school garden programs across the United States. In California, the passage of AB 1352, the California Instructional School Garden Program, in 2006, enabled the disbursement of \$11 million for the establishment of school gardens throughout the state.

Trends: Fifty-nine school gardens currently exist in 80 schools (approximately 73% of all schools in San Luis Obispo County), with a range in focus, including native species, job skills training, nutrition, and food preparation. These programs provide a unique opportunity for engaged hands-on-learning.

For more information on school gardens in San Luis Obispo County, see indicator 1.2c.

Goal 4.3: San Luis Obispo County residents make healthy food choices

What people choose to eat is influenced by what is available locally. In California, fast food restaurants are four times as prevalent as fresh food outlets or grocery stores. In San Luis Obispo County this number is lower, with only two times as many fast food restaurants as fresh food outlets and grocery stores.¹³⁸ The prevalence of fast food restaurants and low consumption of fruits and vegetables across the nation puts residents at high risk for a number of chronic diseases including obesity, heart disease and diabetes. A local food system, which makes fresh, local food available for everyone, helps lower the rate of chronic diseases and therefore promotes community health. The following indicators will provide a picture of the current health status of many of the residents of San Luis Obispo County through an exploration of what kind of foods youth in the county are consuming on a daily basis.

Indicator 4.3a: Percent of youth that consumed two or more sugary drinks within the past day

Background: The quantity and quality of food consumed plays a significant role in the overall health and well being of individuals. Choosing foods that provide essential nutrients without excessive saturated fat, sugar or salt is necessary to avoid chronic and diet related diseases. Diets rich in fruits and vegetables have been shown to reduce risk of heart disease, diabetes, stroke and high blood pressure.

¹³⁸ *Searching for Healthy Food: The Food Landscape in San Luis Obispo County* (Davis, CA: California Center for Public Health Advocacy, 2007).

San Luis Obispo County Trends:

Percent of Youth Consuming 2 or More Sugary drinks within the past day

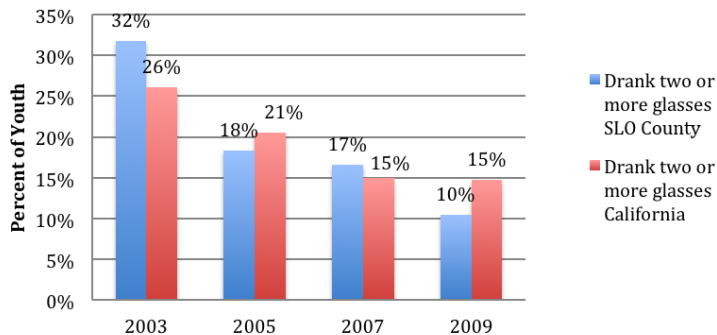


Figure 58: Source: California Health Interview Survey (CHIS), UCLA Center For Health Policy Research, Table: Percent of Youth Consuming 2 or More Sugary Drinks within the past day.

Trends: The amount of sugary drinks consumed by youth in San Luis Obispo has declined by 67% since 2003, from 31.8% of youth consuming two or more sugary drinks a day in 2003 to only 10.4% in 2009. This reduction in consumption may be attributed to two different pieces of state legislation; the first banning soda sales in elementary schools and middle schools in 2003 and the second banning sales in high schools in 2005. Sugary drink consumption in San Luis Obispo County is also much lower than in California.

Indicator 4.3b: Number of teens in San Luis Obispo County who eat five or more fruit and vegetables a day

Percent of Teens in San Luis Obispo County who Eat 5 or More fruit and Vegetables a Day

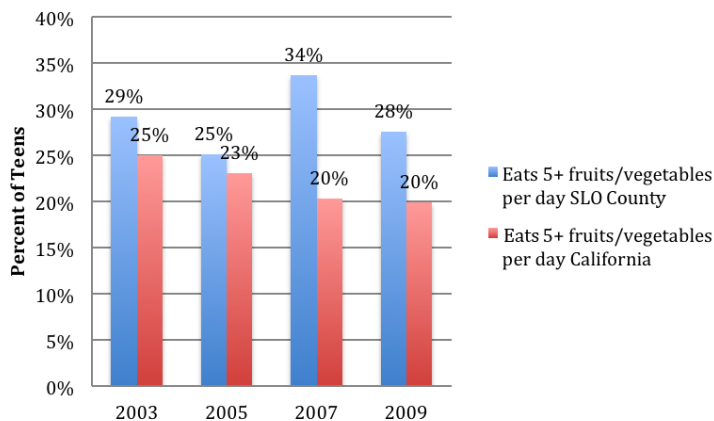


Figure 59: Source: California Health Interview Survey (CHIS), UCLA Center For Health Policy Research, Table: Percent of Teens Who Eat 5 or More Fruits and Vegetables A Day. Note: Data statistically unstable due to small sample size.

Trends: The number of teens in San Luis Obispo County who meet the CDC recommended daily servings of fruits and vegetables (5+ servings) has fluctuated since 2003. According to the CHIS survey, the percentage of teens consuming the recommended servings declined by 2% from 2003 to 2009, from 29% to 27%; nevertheless, the rates remain above the state average.