

## Childhood Overweight in Sonoma County December, 2008

The purpose of this summary is to describe recent trends for overweight among low-income participants in health programs in Sonoma County like the Child Health and Disability Prevention Program. Data from these programs is entered into the Pediatric Nutrition Surveillance System (PedNSS) and analyzed annually by the Centers for Disease Control and Prevention (CDC). Additional summary findings of local data on overweight from the Community Activity and Nutrition Coalition (CAN-C) are included in this report. CAN-C findings are not intended to represent any specific population, but are included to provide further contextual information about childhood overweight in Sonoma County.

### Definitions

Overweight is defined as falling between the 85<sup>th</sup> to the 95<sup>th</sup> percentile on the children's Body Mass Index (BMI) charts. Obese is defined as falling greater than the 95<sup>th</sup> percentile on the BMI chart.

### Pediatric Nutrition Surveillance System

The PedNSS data is gathered from Well Child Exams done on low-income children for the Child Health and Disability Prevention Program (CHDP). The data for weight status is reported separately for children 2 -<5 years and 5-20 years. Additionally, the report compares each county's rates to other counties so that #1 represents the best ranking. The most recent PedNSS report in Table 1 is from 2007.

**Table 1  
Prevalence of Overweight & Obesity in Children < 5 years and 5 - <20 years, 2007\***

	Number of participants	2 - <5 yrs BMI 85 <sup>th</sup> - <95 <sup>th</sup> % (rank)	2 - <5 yrs BMI >95% (rank)	Number of participants	5-<20 yrs 85-95%BMI (rank)	5-<20 yrs >95% BMI (rank)	<b>Combined 85<sup>th</sup>-&lt;95<sup>th</sup> &amp; &gt;95<sup>th</sup></b>
Sonoma Co.	2692	16.7% (35 of 65)	17.1% (34 of 65)	2,678	20.8% (54 of 65))	22.1% (24 of 65)	<b>42.9%</b>
California	312,190	16.2%	17.4%	473,184	18.4% (N/A)	23.1% (N/A)	41.5%
Nation (prior year)	2,945,212	16.4%	14.8%		Not available (N/A)	Not available (N/A)	

\*Source: Pediatric Nutrition Surveillance System (PedNSS), CA DHS Children's Medical Services Branch and the Centers for Disease Control, 2007.

### Community Activity and Nutrition Coalition (CAN-C)

CAN-C members have been measuring fifth graders (10-12 yrs/old) from Santa Rosa City Schools Fitness Day since 1999. A summary of the data is listed in Table 2. The combined totals of overweight and obese children from the eleven schools are slightly higher at 44.56% than the combined totals for PedNSS data of ages 5-20 years at 42.9%.

**Table 2  
1999-2008 Santa Rosa City Schools Body Mass Index from Fitness Day**

Year	Not at Risk	At Risk	Overweight	Total	Not at Risk	Overweight	Obese	Total
1999	358	122	135	615	58.21%	19.84%	21.95%	41.79%
2000	336	138	147	621	54.11%	22.22%	23.67%	45.89%
2001	331	124	169	624	53.04%	19.87%	27.08%	46.95%
2002	312	133	145	590	52.88%	22.54%	24.58%	47.12%
2003	341	126	164	631	54.04%	19.97%	25.99%	45.96%
2004	322	119	141	582	55.33%	20.45%	24.23%	44.68%
2005	286	129	161	576	49.65%	22.40%	27.95%	50.35%
2006	277	118	135	530	52.26%	22.26%	25.47%	47.73%
2007	291	102	141	534	54.49%	19.10%	26.40%	45.50%
<b>2008</b>	<b>270</b>	<b>86</b>	<b>131</b>	<b>487</b>	<b>55.44%</b>	<b>17.66%</b>	<b>26.90%</b>	<b>44.56%</b>
<b>TOTAL</b>	<b>3313</b>	<b>1242</b>	<b>1508</b>	<b>6063</b>	<b>54.64</b>	<b>20.48</b>	<b>24.87</b>	<b>45.36%</b>

Epidemiological analysis of the trends of the data from Table 2 is summarized in Table 3. It indicates that there was a significant decrease in rates of overweight or obesity among White, non-Hispanic 5<sup>th</sup> graders from 2006-2008. Overweight among Hispanic 5<sup>th</sup> graders has stabilized.

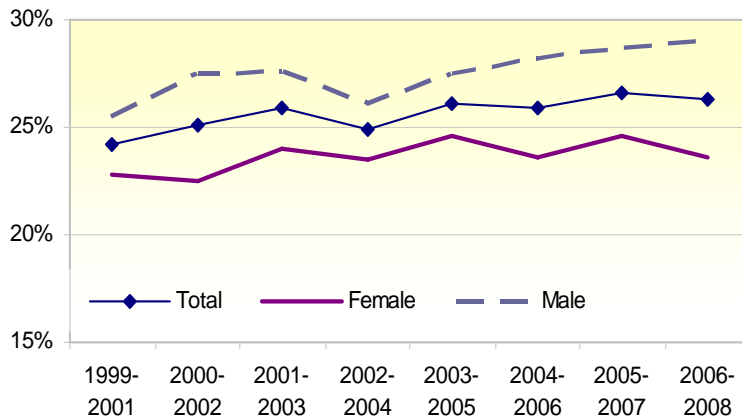
**Table 3**  
Trends in BMI for Santa Rosa City School 5<sup>th</sup> graders by gender and race/ethnicity, 1999-2001 to 2006-2008

↑ Increasing   ↓ Decreasing   ↔ No change

	Overweight (≥85%<95%)	Obese (≥ 95%)	Overweight + Obese (≥85%)
Total	↔	↑	↔
<i>Male</i>	↓	↑	↔
<i>Female</i>	↔	↔	↑
White, non-Hispanic total	↓	↓	↓
<i>WNH male</i>	↓	↔	↓
<i>WNH female</i>	↔	↓	↓
Hispanic total	↔	↔	↔
<i>HISP male</i>	↔	↔	↔
<i>HISP female</i>	↔	↔	↔

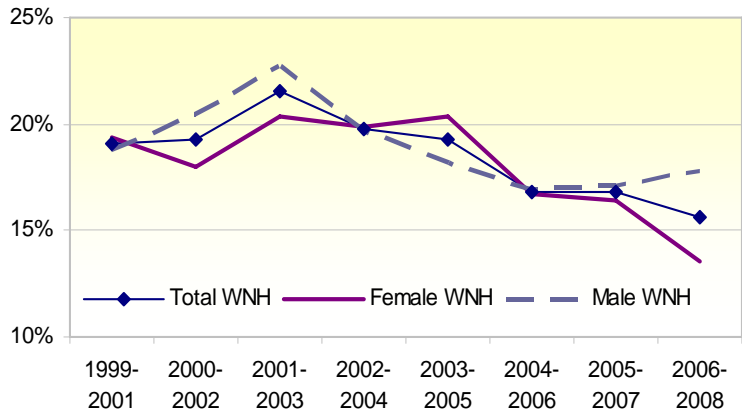
*Trends*

**Percent of 5<sup>th</sup> graders obese by gender, three year moving average  
Santa Rosa City Schools 1999-2008**



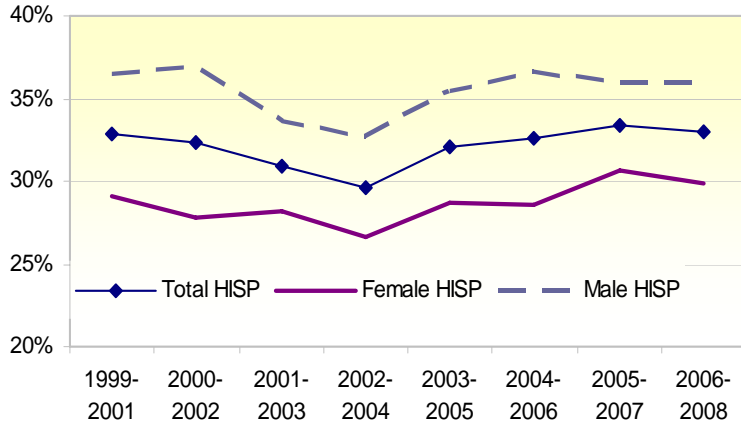
Increase in percent of total and male 5<sup>th</sup> graders who were obese from 1999-2001 to 2006-2008

**Percent of White, non-Hispanic 5<sup>th</sup> graders obese by gender, three year moving average, Santa Rosa City Schools 1999-2008**



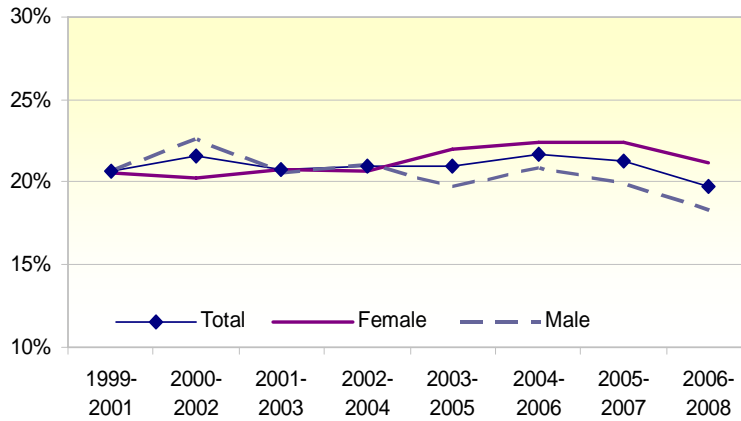
Decrease in percent total and female WNH 5<sup>th</sup> graders who were obese from 1999-2008.

**Percent of Hispanic 5<sup>th</sup> graders obese by gender, three year moving average, Santa Rosa City Schools 1999-2008**



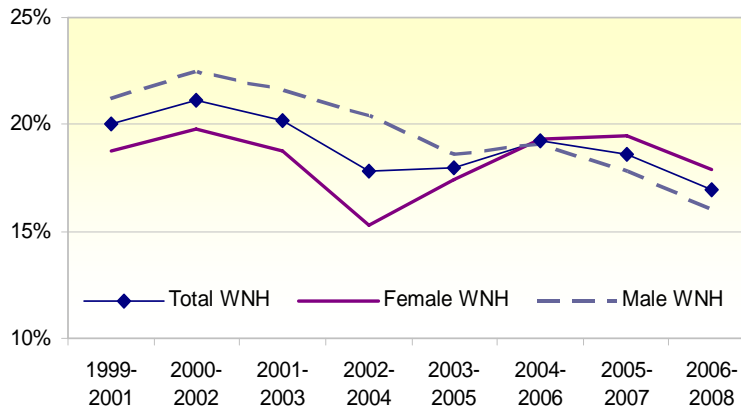
No change over time for percent HISP 5<sup>th</sup> graders who were obese for total, male or female.

**Percent of 5<sup>th</sup> graders overweight by gender, three year moving average, Santa Rosa City Schools 1999-2008**



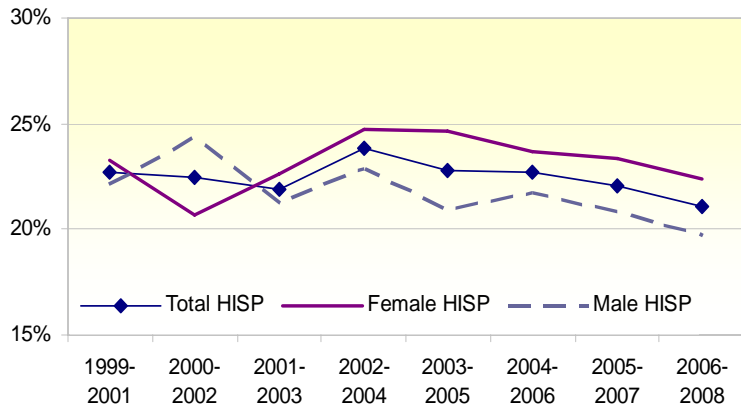
Decrease in percent of male 5<sup>th</sup> graders overweight from 1999-2001 to 2006-2008.

**Percent of White, non-Hispanic 5<sup>th</sup> graders overweight by gender, three year moving average, Santa Rosa City Schools 1999-2008**



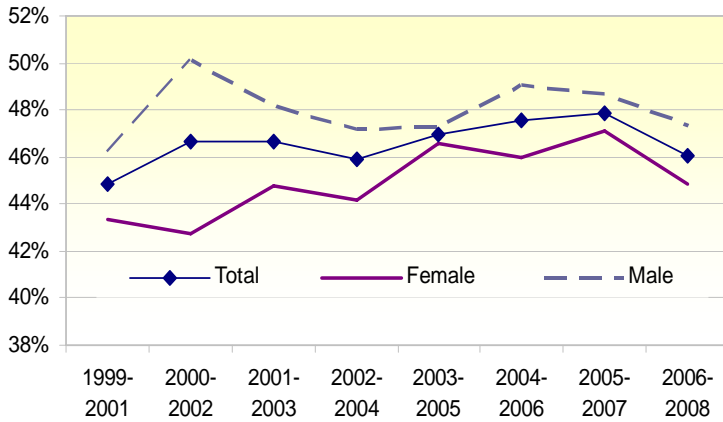
Decrease in percent of total and male WNH 5<sup>th</sup> graders overweight from 1999-2001 to 2006-2008.

Percent of Hispanic 5<sup>th</sup> graders overweight by gender, three year moving average, Santa Rosa City Schools 1999-2008



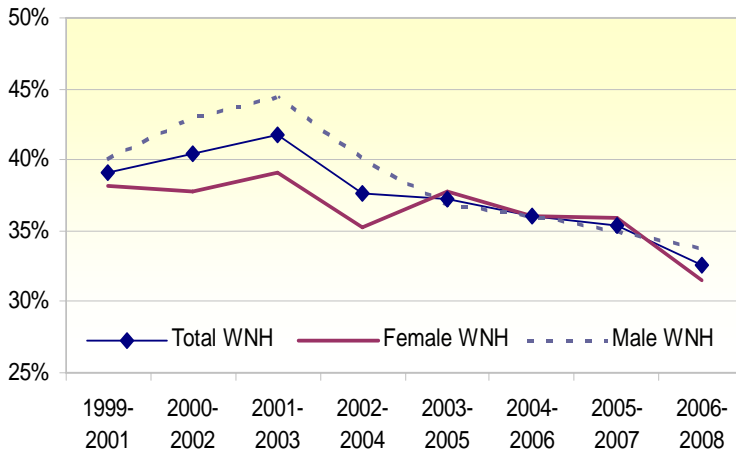
No change over time for percent HISP 5<sup>th</sup> graders who were overweight for total, male or female.

**Percent of 5<sup>th</sup> graders overweight or obese by gender, three year moving average, Santa Rosa City Schools 1999-2008**



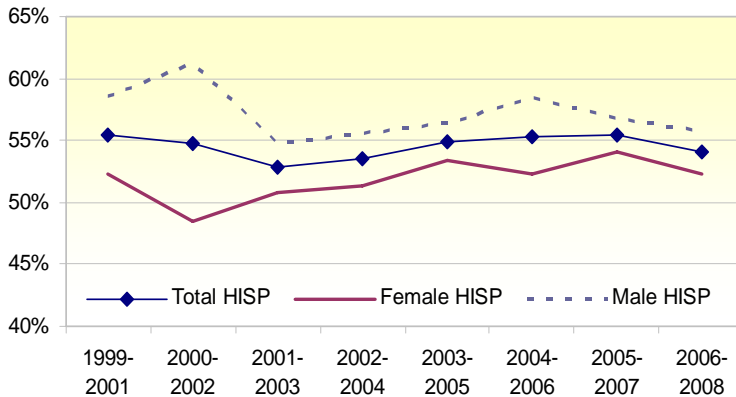
Increase in percent of female 5<sup>th</sup> graders overweight or obese from 1999-2001 to 2006-2008.

**Percent of White, non-Hispanic 5<sup>th</sup> graders overweight or obese by gender, three year moving average, Santa Rosa City Schools 1999-2008**



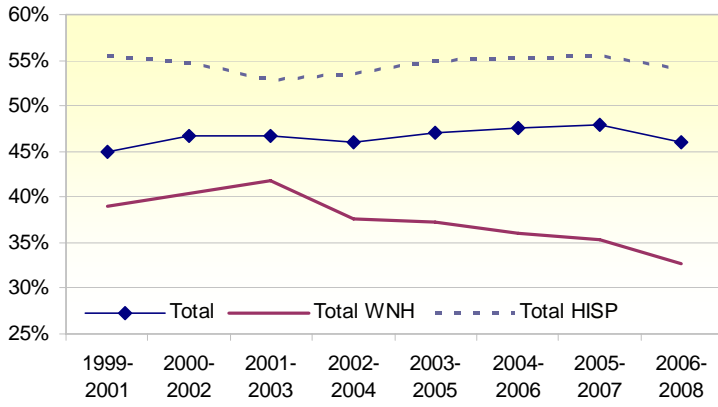
Decrease in percent of total, male and female WNH 5<sup>th</sup> graders who were at risk for overweight from 1999-2001 to 2006-2008.

**Percent of Hispanic 5<sup>th</sup> graders overweight or obese by gender, three year moving average, Santa Rosa City Schools 1999-2008**



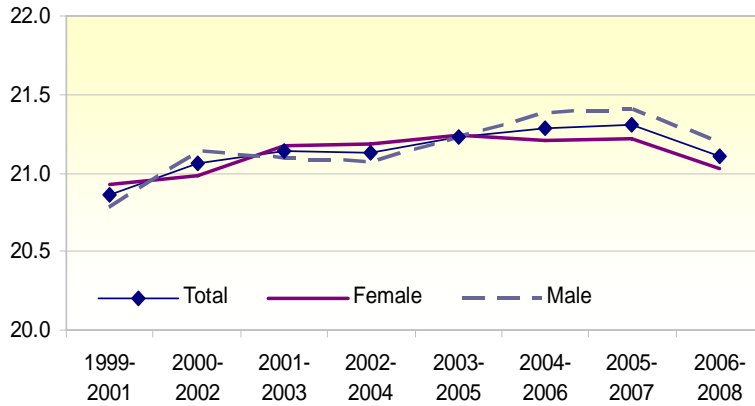
No change over time for percent HISP 5<sup>th</sup> graders who were overweight or obese for total, male or female.

**Percent of 5<sup>th</sup> graders overweight or obese by ethnicity, three year moving average, Santa Rosa City Schools 1999-2008**



Percent of WNH 5<sup>th</sup> graders who were overweight or obese continues to be lower than HISP 5<sup>th</sup> graders.

**Mean BMI by gender, 5<sup>th</sup> graders, three year moving average Santa Rosa City Schools 1999-2008**



Mean BMI increased for male 5<sup>th</sup> graders from 1999-2001 to 2006-2008. No change for total or female mean BMI.