



## 2005-2006 SANTA CLARA COUNTY CIVIL GRAND JURY REPORT

# WHAT IS SANTA CLARA COUNTY DOING ABOUT CHILDHOOD OBESITY?

## Summary

The 2005-2006 Santa Clara County Civil Grand Jury (Grand Jury) recognizes that childhood obesity and the lack of physical fitness are of concern to the nation, to California, and to Santa Clara County (County). Within the County, schools and libraries are moving in the direction of making healthier food available to children and offering Physical Education (PE) programs that encourage physical activity, but more progress is needed. The Grand Jury makes five findings and six recommendations:

1. Unhealthy food choices are available at public schools and at libraries. All foods offered on school grounds and in public libraries should be of the healthy variety.
2. Currently only 200 minutes of PE every ten days are required in elementary school and middle school districts grades 1-8, except for medical exemptions or special circumstances. Districts should determine how to increase the amount of time devoted to PE by at least 50%, even if this might mean rearranging and/or increasing the length of the school day. In grades 7-8, where the requirement is only 200 minutes every ten days, this should be increased by 50% as well.
3. Currently only 400 minutes of PE every ten days are required in grades 9-12, except for students with medical or other special considerations. This requirement applies for only two of the four years. The PE requirement for grades 9-12 should apply to all four years.
4. Very little time is devoted in schools to educating students about nutritional values of foods.
  - 4a. Specific age-appropriate curricula should be developed to educate students about the relationship of food, weight, physical activity, and health.
  - 4b. The concept of Body Mass Index (BMI) and percentile values should be considered for introduction in classes at age-appropriate levels.

5. School districts should adopt programs that have proven effective in decreasing “screen time” (time spent in front of a computer, television, or video game screen), selecting healthier foods, and increasing physical activities.

## **Background**

### **THE NATIONAL PICTURE**

Nationally, an estimated 9 million children (about 16%) are considered to be overweight or obese. Over the past 20 years, the adult obesity rate in the US has increased 100%. This alarming statistic has been called an epidemic. Increasing attention is being paid to the problem of childhood obesity. During the past thirty years the incidence has doubled for children aged 2 to 5 years and for adolescents aged 12 to 19 years. For children aged 6 to 11 years, the incidence has tripled.

Obesity results in alarming life-long health implications from childhood through adulthood. In one sample, approximately 60% of obese children ages 5 to 10 years had at least one cardiovascular risk factor (such as elevated total cholesterol, triglycerides, or blood pressure.) Two or more risk factors were found in 25% of the sample group. Furthermore, an estimated 75% of obese children grow up to become obese adults, with the resultant societal consequences of increased morbidity and mortality and vastly increased health care and other costs. In 2000, it is estimated that the direct and indirect health care costs attributed to obesity nationwide were \$117 billion (see Appendix A). According to the National Institutes of Health,

“Unlike type 1 diabetes, which results when the body does not produce insulin, the hormone necessary to turn sugar into fuel, type 2 diabetes occurs when the body loses its ability to use the insulin it produces ... The number of people with type 2 diabetes worldwide has tripled since 1985. The percentage of children with this form of diabetes has risen even more dramatically, from less than 5 percent of child diabetics before 1994, to 30 percent to 50 percent in subsequent years ... Obesity and a sedentary, fast-food-driven lifestyle are major factors ...”

During 1976-1980, an estimated 46% of U.S. adults were overweight. By 1999-2000, this figure had increased to 64.5% (including the 30.5% who were obese). Generally, children and adults who are between the 85<sup>th</sup> and 94<sup>th</sup> percentiles on the growth chart are considered to be overweight. Those in the 95<sup>th</sup> percentile or higher are considered to be obese. Because of the stigma associated with the term “obese,” health advocates prefer to use the term “overweight” to refer to children and teens at, or above, the 95<sup>th</sup> percentile, and “at risk for being overweight” for those between the 85<sup>th</sup> and 94<sup>th</sup> percentiles.

It may appear contradictory to have so many (overweight) people at the 85<sup>th</sup> percentile or above – the 50<sup>th</sup> percentile normally refers to mid-range. The Centers for Disease Control and Prevention (CDC) thresholds for overweight and obesity are idealized criteria from data collected before Americans started to get really fat. The most current CDC growth chart (2000), showing Body Mass Index (BMI) versus age for children, is based on a mix of data spanning many decades, and generally reflects the way children's heights and weights were distributed in the 1970s. Thus, relative to these historical standards, a significantly larger percentage of today's children and adults surpass the criteria for being overweight and obese.

For adults, a BMI (weight in kilograms divided by the square of the height in meters) greater than 25 is considered overweight and a value above 30 is considered obese. While these are arbitrary cut-off points, they correspond to roughly the 85th and 95th percentiles, respectively, when the weight charts were first created. These cut-off values do not work well for children because the calculated BMI varies significantly while the child matures and undergoes variable periods of growth. For these reasons, the definitions of overweight and obesity for children continue to be judged in terms of age and gender-adjusted growth tables.

Concerns exist that the trend of increasing life span in the United States may soon reverse. According to a report published by the International Journal of Pediatric Obesity, nearly half of the children in North and South America will be overweight by 2010. These concerns have resulted in actions at federal, state and local levels.

Federal Public Law (PL 108.265 Section 204) states that after June 30, 2006, each district participating in the United States Department of Agriculture (USDA) School Meal Program must have developed and implemented local wellness policies that address nutrition and physical activity. In 2006, a bipartisan group in Congress is planning to introduce legislation which would amend the National School Lunch Act by requiring high nutritional standards for all food sold on school premises. This would encompass food sold in vending machines, snack bars, school stores, and even at fund-raising events.

In December 2005, the Institute of Medicine (IOM), under the National Academies of Science, issued a report stating that television ads entice children to eat junk foods and to eat more of them than they should.

## **THE CALIFORNIA PICTURE**

According to a 2003 Field Research Corporation study (Survey of Californians About the Problems of Childhood Obesity), 92% of Californians believe that childhood obesity is a serious problem and has worsened in recent years, more than other childhood health threats. Nearly two-thirds of Californians believed that a community approach was necessary, rather than leaving it to children and their families. Suggestions included improved school health environments and nutritional labeling by fast food restaurants.

The California Daily Food Guide (1990) recommendations include seven servings daily for boys and five servings for girls of fruits and vegetables. In 1998, on a typical day, almost half of all California teens reported having no vegetables. Only 23% of boys and 38% of girls reported eating the recommended minimum daily amount.

On September 15, 2005, the Governor of California signed two landmark legislation acts establishing the most rigorous nutritional standards in the country for food and beverages sold on K-12 campuses.

- SB 12 establishes limits on fat and sugar content and portion size for any food served on campus. These standards go into effect on July 1, 2007
- SB 965 defines school beverage standards for high schools and eliminates the sale of soda and sweetened beverages. Standards for middle and elementary schools were previously established through SB 677

California Senate Joint Resolution 29 (2004) calls upon the Federal Trade Commission to develop and implement nutrition standards for foods and beverages advertised to children. Additionally, television programs targeted to youth are required to encourage fruit and vegetable consumption and physical activity. It also asks the California food industry and food marketers to adhere to voluntary guidelines, developed by experts, for responsible food and beverage advertising directed to children.

California Education Code § 51210, § 51222, and § 51225.3 (a)(1)(F) specify physical education required minutes as follows:

- Elementary grades 1-6, minimum of 200 minutes each ten days
- Secondary grades 7-12, minimum of 400 minutes each ten days
- Elementary school districts grades 1-8, minimum of 200 minutes each ten days

However, only two years of high school PE are required. This requirement is most commonly satisfied during grades nine and ten.

Academic Performance Index scores created by the California Department of Education (CDE) have shown a clear relationship between a healthy lifestyle (physical activity and nutritious intake) and improved academic performance. The CDE states in its Getting Results Fact Sheet 2005, "In sum, the strongest causal relationships are between physical activity and academic success and between nutrient supplementation (including school breakfasts) and cognitive performance."

The 2003-2004 San Mateo County Civil Grand Jury, in a report titled *Nutrition in San Mateo County Schools*, concluded: "San Mateo County schools should be doing more to exercise the authority they have to control available food and

beverages that foster more nutritious student diets. ... It is clear that modifying the range of options can be a factor in improving nutrition.”

The California Department of Health Services claims that inactivity, obesity, and overweight cause California an estimated outlay of \$13 billion per year in medical costs, and \$28 billion in total costs, including medical care, workers’ compensation, and lost productivity.

## **INSTITUTE OF MEDICINE**

The IOM studied childhood obesity for three years, and in 2005 published its findings and recommendations in a book titled *Preventing Childhood Obesity – Health in the Balance*. It recommended that the federal government, industry, media, health-care professionals, and individual families take immediate action to mitigate the negative effects of childhood obesity. The issue of childhood obesity is a complex societal problem and needs attention from all perspectives. Some of the recommendations concern agencies at a local level, including government, the education community, and non-profit sectors:

- Expand and promote opportunities for physical activity in the community through changes to ordinances, capital improvement programs, and other planning activities
- Support partnerships and networks that expand the availability of and access to healthful foods
- Provide opportunities for healthful eating and physical activity in existing and new community programs, particularly for high-risk populations
- Improve the nutritional quality of foods and beverages available in schools
- Increase opportunities for frequent, more intensive and engaging physical activity during and after school
- Develop, implement, and evaluate innovative pilot programs for both staffing and teaching wellness, healthful eating, and physical activity
- Conduct annual assessments of each student’s BMI percentile and make this available to parents
- Implement school-based interventions to reduce children’s screen time

## **CHILDHOOD OBESITY IN SANTA CLARA COUNTY**

The following statistics highlight childhood obesity in the County:

- Between 22% and 31% of children are overweight (27% statewide)
- Between 30% and 41% are physically unfit (40% statewide)

- 46% report that they are trying to lose weight – 37% of males and 55% of females (Hispanic boys and girls, and African-American girls are the groups most affected)

A survey completed in April 2006 by the Lucile Packard Foundation shows that 67% of Santa Clara County parents are “extremely concerned” about the well-being of children. From a list of 23 children's issues, the three that respondents cited most frequently as "big problems" were obesity and unhealthy eating habits, the influence of media and the Internet, and the quality of education.

In the 2002 California Healthy Kids Survey (CHKS), 50% of County students reported consuming soda or fries at least once in the prior twenty-four hours. In the 2004 CHKS, 33% of County students reported at least three hours of screen time on a typical school day. Hispanic and African-American students report over three hours of screen time, more than any other group. Furthermore, on average children aged 5-19 are more overweight than those in the 0-4 age group (see Appendix B).

The Healthy People 2010 Objective, under the U.S. Department of Health and Human Services, calls for 85% of children to engage in strenuous physical activity more than three days a week. Sixty percent of County students reported that they met this standard (CHKS 2004), but 9% reported no physical activity. Interestingly, 11<sup>th</sup> graders reported less activity than 7<sup>th</sup> or 9<sup>th</sup> graders – probably related to the lack of a PE requirement for most 11<sup>th</sup> and 12<sup>th</sup> grade students. Studies have shown that increased physical activity during school time has positive effects for children. Many schools are under intense pressure to raise scores on standardized academic tests. As a result, time devoted to PE is often compromised in favor of greater emphasis on academic test scores.

The County Office of Education has introduced a special program in the 2005-2006 school year called Fit for Learning. This is a multi-faceted initiative that aims to increase physical activity and encourage healthy nutrition among elementary school students. The program initially focused only on 5<sup>th</sup> graders, but is scheduled to expand to K-6 the following year. One aspect of the initiative is to establish and support an on-site school Champions Program that will train individuals to promote the development of healthy school environments. The County has recruited more than 100 people – mostly 5<sup>th</sup> grade teachers and administrators – to be Fit for Learning Champions.

## **Discussion**

The Grand Jury inquired into childhood obesity issues in the County by interviewing local experts at Stanford University and San Jose State University, conducting a survey of policies and practices in County school districts and San Jose public libraries, and inspecting practices in schools and public libraries. Schools and libraries are areas where children spend significant periods of time when away from home and can ingest food and drink.

The Grand Jury recognizes that obesity is a systemic problem involving not only schools, libraries, movie theatres, and other facilities children frequent, but also parents, families, and role models. Friends, media figures, entertainment figures, sports figures, teachers, and religious leaders all play significant roles in setting examples for children. The scope of this inquiry focuses on public schools and libraries, under the jurisdiction of the Grand Jury.

Issues of concern to the Grand Jury were:

- Are public schools within the County abiding by national and state mandates?
- What efforts are being made to encourage weight control and physical activity, and what is the status of these efforts?
- What else might be done locally to improve effectiveness of these efforts?

### **STANFORD PROGRAM FOR RESEARCH AND INTERVENTION**

The Grand Jury met with representatives of the Stanford Prevention Research Center (SPRC) in the Stanford University School of Medicine. One of the interviewees had been a member of the IOM obesity study group, and all are very involved in matters of public health policy, nutrition, and obesity. A key outcome of SPRC research has been noting a correlation between time watching television, inactivity, weight gain, and aggressive behaviors. SPRC researchers have produced the Student Media Awareness to Reduce Television (S.M.A.R.T.) program, with initial testing done in cooperation with the Santa Clara Unified School District. This program has 16 lessons with objectives and detailed curriculum materials designed to help students decrease screen time. Randomized controlled trials have shown that the curriculum reduces children's screen time an average of about 33%, reduces aggression in the classroom and on the playground, reduces obesity and weight gain, and reduces meals eaten while watching television. One study has shown that a significant proportion of African-American girls' daily food intake is consumed while watching television. Another study, also of African-American girls, "confirmed the feasibility, acceptability, and potential efficacy of using dance classes and a family-based intervention to reduce television viewing, thereby reducing weight gain."

### **SCHOOLS – FOOD AND DRINK QUESTIONNAIRE**

A Survey on Food Offerings and Physical Education in Schools (see Appendix C) was sent to the 32 school districts within the County. All questionnaires were completed and returned. All of the districts offer lunch programs and most of them offer breakfast. None of the elementary schools and only a very few middle schools have vending machines, but most of the high schools do. There are no franchisers at any school, except where the districts have contracts for the vending machines – 11 districts have vending machines and 21 either do not have vending machines or offer only healthy foods (including those districts that have only elementary or middle

schools). The contractual agreements for vending machines are complicated and result in funds being paid to the district. There appear to be no requirements regarding food or drink selections.

The majority of districts offer high-calorie or calorie-dense items, such as fried potatoes, hamburgers, whole milk, cookies, potato chips, candy bars and ice cream. Since only three districts have fully or partially open campuses, during the school day, schools are the only source of food in the majority of the districts, other than what the student brings to school. In addition to serving food in the cafeteria, many campuses offer food and drink from vending carts, student stores, vending machines, and at sporting and fund-raising events.

Most districts responded that they are changing breakfast and lunch menus to provide more nutritious meals. They believe that these changes are being well-received by the students. All districts must comply with the federal school lunch program guidelines. However, these guidelines concern the entire meal. Individual items may be very calorie dense, high in saturated fat, or lacking in significant nutritional value, and still the entire meal meets the guidelines. The Grand Jury's impression is that school districts are cognizant of the move toward promoting healthier food and drinks, and are making changes toward that goal. However, more changes need to be made.

## **SCHOOL VISITS – FOOD CHOICES**

The Grand Jury visited five schools so it could directly observe the food and drink choices available to students and how they deal with these choices. During each school visit, the Grand Jury Visit Survey (see Appendix D) was completed. The schools visited were active, energetic, and vital sites, especially during the time when the students were changing classrooms and during the relatively brief lunch period – usually thirty minutes. The vending machines at some of the schools had a few healthy items, such as bottles of water, low-sugar fruit drinks, and fruits. However, the majority of items were sodas, both 12 and 20 oz. containers, an ample selection of candy and candy bars, and many varieties of fried chips. At one school, the Grand Jury was told that they had approximately eight vending machines. During the visit, a total of 14 machines were seen that were available to students. (Additional vending machines were available only to teachers and staff.) Where meals or snacks were available for students, the Grand Jury saw a variety of doughnuts and burritos in wrappers. The wrapper on one burrito indicated that it would supply 30% of the recommended daily saturated fat requirement and 400 calories. (A comparable low-fat burrito would supply less than half those amounts.) Whole milk was available at most sites, as were ice cream, hamburgers, hot dogs, cookies, pizza, corn dogs, and other calorie-dense items.

Student meals, whether purchased or supplied by the National School Lunch Program and the School Breakfast Program, are required to be nutritionally balanced. However, many students do not select meals, but choose a few preferred items. Usually, these selections are of the less healthy choices. Some schools reported

offering healthier selections, such as only low-fat chocolate milk and either skim milk or 2% fat milk, sandwiches made with a slice of white bread and a slice of whole wheat bread, or complete meals which cost only a few cents more than the a la carte items. Some charged 25 cents for an apple or other fruit compared to \$1 for a large cookie, thereby encouraging the students to purchase the healthier item. Some students elect to bring their own food and drink.

The National School Lunch Program and Breakfast Program menus tend to be high in saturated fat and cholesterol and low in healthy fruits, vegetables, whole grains, and legumes. The USDA buys millions of pounds of surplus beef, pork and other high-fat meat and dairy products to distribute to schools. It does not subsidize meat and dairy alternatives. School food service staff have to choose between relatively inexpensive subsidized less healthy foods and more expensive healthier foods.

School boards determine the variety of food available within their district. Dietitians, principals, and school food handlers have to follow the guidelines of the board. Some jurisdictions, for example, the City of Los Angeles and the State of Texas, have been proactive in this area and have established policies beyond the minimum requirements of federal and state governments.

## **SCHOOL VISITS – PHYSICAL EDUCATION**

During school visits, the Grand Jury also inquired about PE programs. All schools reported that they meet the minimum requirements as set forth by the State, but none exceeds them. Most high school juniors and seniors had fulfilled the requirement of only two years of PE and therefore did not take any further PE classes.

There was much variability in many aspects of the programs. For example, schools differed in the reasons students could be excused from the required PE class, in addition to medical reasons. Designated athletes, such as swimmers, gymnasts, tennis players, or varsity team members, were excused at some schools but not others. One school required a weekly timed mile run and grades were dependent on the improvement achieved. Another school partnered with a local YMCA that offered reduced cost memberships for students and a one-month free trial for faculty. An innovative PE teacher told how a fistful of raisins was held out in one hand and a comparable fistful of M&Ms in the other. Students were asked to estimate the caloric value of each fistful and then to “run it off.”

There was variability in the amount of class time reportedly spent doing significant pulse-raising, hard-breathing aerobic exercise. One high school boasted that in 2003-2004, 46.0% of the 10<sup>th</sup> grade students met all six of the standards on the school’s annual “Fitnessgram,” the results of which were mailed home. That score improved to 54.0% for 2004-2005. Also, during the Career Speaker Day program, the PE staff provided sessions in the fields of personal training, yoga instruction, and swing dance instruction. The yoga and swing dance portions gave the students hands-on participation.

Opportunities exist for innovation to increase enthusiasm and participation. However, the Grand Jury also observed some students during PE classes who were minimally and unenthusiastically involved in a required and unappreciated activity.

## **NUTRITION EDUCATION AND BODY MASS INDEX**

Specific units of education concerning the relationships of food, nutritional values, caloric intake, overweight and obesity, and health consequences are uncommon. Only passing references to food nutrition are made in PE or science classes. Studies have shown that children, even as young as preschoolers, absorb information about healthy foods and are capable of modifying their eating habits based on what they have learned. Some schools in the County are offering more food education.

The concept of Body Mass Index is not yet common in school curricula, though it is widely used in medical discussions, research, and the press. Only basic arithmetic (multiplication and division) is required for the calculation of this index. This skill should be within the ability of sixth to eighth graders. A simple, mechanical, BMI calculator is available. The BMI can also be calculated using many computer websites. For example, the CDC offers a website which calculates the age- and sex-specific BMI for children. A related site offers an excellent discussion and explanation of the BMI for children and teens.

Introducing the concept of BMI and percentile values would inform each student of where he/she scores on this important indicator, allow for practice of arithmetic or computer skills, or afford an opportunity to use a simple hand calculator. Sending the results home would further inform parents about this dimension of their child's growth.

## **LIBRARIES**

The Grand Jury met with the Assistant Library Director, San Jose Public Library. There are 17 libraries in the San Jose Public Library system with an annual budget of about \$26 million. Since 2001, food and drink are allowed in the libraries, partially to "meet the competition," e.g., bookstores and cafes. Earning a profit from the sale of food and drink is a secondary factor and any profit from the on-site vending machines or cafes (at least three sites) goes to support programs for children in the libraries. The experience with the policy has been positive and there have been no significant problems with damage to library materials. Food and drink are also allowed in County and City of Santa Clara libraries.

On the day prior to the Grand Jury visit, the San Jose City Council voted unanimously to require library vending machine operators to provide healthier choices. As of July 1, 2006, the official start date of the new contract, healthier drinks and snacks/food will be required in conformance with recommendations from the National Consensus Panel of School Food Nutrition of the California Center for Public Health Advocacy.

## **Conclusions**

The Grand Jury concludes that childhood obesity is a significant concern for the County. While there is increasing awareness within the County about childhood obesity and its many ramifications, data show that the problems are not being solved. The schools and libraries are moving in the direction of making healthier food available to children and offering PE programs that encourage increased physical activity, but more progress is needed.

The Grand Jury makes the following five findings and six recommendations:

### **Finding 1:**

All school districts appear to abide by federal nutritional guidelines for breakfasts and lunches. Not all students partake in a full meal program and instead may choose less healthy items. Nutritionally poor items may be included as part of a complete meal, even though overall the meal technically may meet the standards. Unhealthy items are available in many schools and libraries.

### **Recommendation 1:**

All foods offered on school grounds and in public libraries should be of the healthy variety. Vending machine contracts should be modified to specify only healthy food choices.

### **Finding 2:**

Currently only 200 minutes of PE every ten days are required in elementary school and middle school districts grades 1-8, except for medical exemptions or special circumstances.

### **Recommendation 2:**

Districts should determine how to increase the amount of time devoted to PE by at least 50%, even if this might mean rearranging and/or increasing the length of the school day. In grades 7-8, where the requirement is only 200 minutes every ten days, this should be increased by 50% as well.

### **Finding 3:**

Currently only 400 minutes of PE every ten days are required in grades 9-12, except for students with medical or other special considerations. This requirement applies for only two of the four years.

### **Recommendation 3:**

The PE requirement for grades 9-12 should apply to all four years.

### **Finding 4:**

Very little time is devoted in schools educating students about nutritional values of foods and the effects of calories ingested and the relation of weight to health. Some passing references may be made in PE or a science class, but no educational materials are mandated concerning food, calories, exercise, fitness, weight, and health.

### **Recommendation 4a:**

Specific age-appropriate curricula should be developed to educate children and teens about the relationship of food, weight, physical activity, and health. This should then be included on a regular basis at all grade levels.

### **Recommendation 4b:**

The concept of BMI and percentile values should be considered for introduction in classes at age-appropriate levels.

### **Finding 5:**

Proven methods exist which help children decrease screen time, select healthier foods, and increase physical activity. Other programs, involving dance and after school activities, are effective. Very few of these methods have been adopted.

### **Recommendation 5:**

Districts should adopt programs that have proven effective in decreasing screen time, encouraging healthy diet, and increasing physical activities.

PASSED and ADOPTED by the Santa Clara County Civil Grand Jury on this 25<sup>th</sup> day of May, 2006.

---

Thomas C. Rindfleisch  
Foreperson

## References

### Documents

1. 2004 Community Health Assessment: A Framework for Action for Santa Clara County,  
[http://www.hcncc.org/upload/2004\\_Community\\_Health\\_Assessment\\_Report\\_Santa\\_Clara\\_County.pdf](http://www.hcncc.org/upload/2004_Community_Health_Assessment_Report_Santa_Clara_County.pdf) (last visited May 8, 2006).
2. Child obesity expected to rise, Danica Kirka, *San Jose Mercury News*, March 6, 2006.
3. Childhood obesity fueled by marketing tactics, Ted Lempert, *San Francisco Chronicle*, April 27, 2005.
4. Selling Junk Food to Toddlers, Editorial, *The New York Times*, February 23, 2006.
5. Survey: San Mateo County cares more about kids than Santa Clara, *Palo Alto Daily News*, April 29, 2006.
6. Nutrition in San Mateo County Schools, 2003-2004 Civil Grand Jury Report,  
<http://www.sanmateocourt.org/grandjury/2003/reports/Nutrition%20in%20SMC%20Schools.pdf> (last visited May 8, 2006).
7. Preventing Childhood Obesity: Health in the Balance, Institute of Medicine, National Academies of Science, The National Academies Press, 2005.
8. Lucile Packard Foundation for Children's Health, Survey: Schools, Well Being of Children Are Top Bay Area Concerns,  
<http://www.lpfch.org/newsroom/releases/opinionpoll-april06.html> (last visited May 23, 2006).
9. FITNESS: Study suggests adding an hour of PE time may fight child obesity, Rick Callahan, *Associated Press*, September 6, 2004,  
[http://www.polarusa.com/news/shownews\\_heal.asp?ArticleID=197](http://www.polarusa.com/news/shownews_heal.asp?ArticleID=197) (last visited May 8, 2006).
10. Boxing coach took charge of P.E. and an entire school changed, Simone Sebastian, *San Francisco Chronicle*, January 25, 2006,  
<http://www.sfgate.com/cgi-bin/article.cgi?file=/c/a/2006/01/25/MNGUNGSNCH1.DTL> (last visited May 7, 2006).
11. Kids' physical fitness shows slim progress, Dana Hull, *San Jose Mercury News*, November 22, 2005.

## Documents - Continued

12. African-American Girls' Dietary Intake while Watching Television, Donna Matheson et al., *Obesity Research*, September 2004.
13. Dance and Reducing Television Viewing to Prevent Weight Gain in African-American Girls: The Stanford GEMS Pilot Study, Thomas Robinson et al., *Ethnicity & Disease*, Volume 13, Winter 2003.
14. Kids' health depends on tough reforms, Dulcie Ward, *San Jose Mercury News*, May 7, 2006.
15. City of Los Angeles Child Nutrition Policy, [http://www.preventioninstitute.org/sa/pdf/city\\_of\\_los\\_angeles\\_child\\_nutrition\\_policy.pdf](http://www.preventioninstitute.org/sa/pdf/city_of_los_angeles_child_nutrition_policy.pdf) (last visited May 8, 2006).
16. Texas Public School Nutrition Policy, [http://www.agr.state.tx.us/foodnutrition/policy/food\\_nutrition\\_policy.pdf](http://www.agr.state.tx.us/foodnutrition/policy/food_nutrition_policy.pdf) (last visited April 29, 2006).
17. School Teaches Preschoolers Healthy Eating, Linda A. Johnson, *San Francisco Chronicle*, May 18, 2005, <http://sfgate.com/cgi-bin/article.cgi?file=/n/a/2005/05/17/national/a102537D83.DTL> (last visited May 8, 2006).
18. Eating for Credit, Alice Waters, *The New York Times*, February 24, 2006. <http://www.nytimes.com/2006/02/24/opinion/24waters.html?ex=1298437200&en=0ad56cc0ff6f456c&ei=5088&partner=rssnyt&emc=rss> (last visited May 1, 2006).
19. Nutrition more than elementary for MV-Whisman schools, Katie Vaughn, *Mountain View Voice*, July 29, 2005, [http://www.mv-voice.com/morgue/2005/2005\\_07\\_29.nutrition.shtml](http://www.mv-voice.com/morgue/2005/2005_07_29.nutrition.shtml) (last visited May 1, 2006).
20. Department of Health and Human Services, Centers for Disease Control and Prevention, BMI - Body Mass Index: Calculator for Child and Teen: English Calculator, <http://apps.nccd.cdc.gov/dnpabmi/Calculator.aspx>, (last visited May 18, 2006).
21. Department of Health and Human Services, Centers for Disease Control and Prevention, BMI - Body Mass Index: About BMI for Children and Teens, [http://www.cdc.gov/nccdphp/dnpa/bmi/childrens\\_BMI/about\\_childrens\\_BMI.htm](http://www.cdc.gov/nccdphp/dnpa/bmi/childrens_BMI/about_childrens_BMI.htm), (last visited May 18, 2006).

## **Documents - Continued**

22. Department of Health and Human Services, Centers for Disease Control and Prevention, CDC Growth Charts: United States, Body mass index-for-age percentiles: Boys, 2 to 20 Years, <http://www.cdc.gov/nchs/data/nhanes/growthcharts/set1/chart15.pdf>, (last visited May 18, 2006).
23. Department of Health and Human Services, Centers for Disease Control and Prevention, CDC Growth Charts: United States, Body mass index-for-age percentiles: Girls, 2 to 20 Years, <http://www.cdc.gov/nchs/data/nhanes/growthcharts/set2/chart%2016.pdf>, (last visited May 18, 2006).
24. Childhood Obesity: An epidemic is gripping California and the nation, University of California at San Francisco, Kaiser Permanente, and University of California at Los Angeles Healthcare, [http://members.kaiserpermanente.org/kpweb/pdf/feature/enewsletter/na\\_childhood\\_obesity.pdf](http://members.kaiserpermanente.org/kpweb/pdf/feature/enewsletter/na_childhood_obesity.pdf), (last visited May 18, 2006).

## **Interviews**

1. September 1, 2005, Superintendent, Santa Clara County Office of Education.
2. November 18, 2005, Project Principal Investigator and Staff, The Health Promotion Resource Center, Stanford Prevention Research Center, Stanford University School of Medicine.
3. February 3, 2006, Principal, Jordan Middle School, Palo Alto.
4. February 6, 2006, Principal, Willow Glen High School, San Jose.
5. February 13, 2006, Principal, Palo Alto High School, Palo Alto.
6. February 24, 2006, Assistant Professor, Department of Nutrition & Food Science, San Jose State University.
7. March 3, 2006, Principal, Overfelt High School, San Jose.
8. March 10, 2006, Principal, Mt. Pleasant High School, San Jose.

## **Appendix A Economics of Obesity (2006)**

<b>\$117 billion</b>	Nationwide direct and indirect health care costs attributed to obesity in 2000.
<b>40 percent</b>	The additional amount of health care resources used by people who are overweight.
<b>49 percent</b>	The additional number of inpatient hospital days that obese people experience, which results in 36 percent higher costs to their health plans.
<b>\$500</b>	The average additional amount people who gain 20 pounds or more will increase their medical bills per year.
<b>\$75 billion</b>	Nationwide direct medical care costs of obesity in 2003. Medicare, the federal healthcare program for people 65 and older, and Medicaid, the federal/state program for the needy, accounted for more than 50 percent of those costs.
<b>\$21.7 billion</b>	Amount spent by California In 2000 in direct and indirect medical care, workers' compensation, and lost productivity.
<b>\$7.7 billion</b>	Amount California spent in 2003 on direct health care costs attributed to obesity alone.
<b>\$22.3 billion</b>	Costs attributed to physical inactivity, obesity, and overweight in California in 2000.

Sources: National Institutes of Health; UCLA Center for Health Policy Research; North American Association for the Study of Obesity; RTI International; Centers for Disease Control and Prevention

## **Appendix B**

### **Overweight Children in Santa Clara County (2003)**

Source: 2005 Santa Clara County Children's Report: Key Indicators of Well-being

	<b>Ages 0-4</b>	<b>Ages 5-19</b>
African-American	17.7%	15.9%
Asian/Pacific Islander	12.0%	11.8%
Caucasian	11.1%	24.0%
Hispanic	13.9%	26.4%
All Other Ethnic Groups	13.6%	23.1%
Average over all children	13.6%	21.9%

Note: Native American/Native Alaskan percents are based on numbers too low to be statistically stable.

Note: The Healthy People 2010 Objective is 5% for children and youth age 6-19 years.

## Appendix C

### Survey on Food Offerings and Physical Education in Schools

1. How many schools are there in your district? \_\_\_\_\_

2. How many of these are:

Elementary schools? \_\_\_\_\_

Middle schools? \_\_\_\_\_

High schools? \_\_\_\_\_

3. Do you have vending machines or food counters available that offer soda, candy bars, potato chips, etc. for the students?

Elementary schools                      yes                      no

Middle schools                              yes                      no

High schools                                      yes                      no

4. Do you offer meals for the students?

	<u>Breakfast</u>		<u>Lunch</u>	
Elementary schools	yes	no	yes	no
Middle schools	yes	no	yes	no
High schools	yes	no	yes	no

(If no, skip to question 8)

Approximately how many breakfasts do you serve daily? \_\_\_\_\_

Approximately how many lunches do you serve daily? \_\_\_\_\_

5. Do you prepare the food on campus?                                      yes    no

Do you bring food in from a central kitchen?                              yes    no

Do you use food obtained from any other sources?    yes    no



**Appendix D**  
**2005-2006 Santa Clara County Civil Grand Jury Visit Survey**

Name of School \_\_\_\_\_

Location \_\_\_\_\_

Date of Visit \_\_\_\_\_

Grand Jurors visiting \_\_\_\_\_

1. How many students are there in your school? \_\_\_\_\_

How many classes do you have? \_\_\_\_\_

2. What grade levels do you cover? \_\_\_\_\_

3. Do you have vending machines or food counters available that offer soda, candy bars, potato chips, etc. for the students?

yes          no

If yes, how many? \_\_\_\_\_ What types? \_\_\_\_\_

4. Do you offer meals for the students?

Breakfast

Lunch

yes    no

yes    no

(If no, skip to question 8)

Approximately how many breakfasts do you serve daily? \_\_\_\_\_

Approximately how many lunches do you serve daily? \_\_\_\_\_

5. Do you prepare the food on campus?          yes    no

Do you bring food in from a central kitchen?    yes    no

Do you use food obtained from any other sources?    yes    no

6. Are there franchisers on any campus?          yes    no

7. Do you have an open campus (students can leave the campus to purchase items off campus during school hours)?

yes          no

8. Do the meals offered either by your school or the franchiser include high caloric or calorie dense items, such as fried potatoes, hamburgers, whole milk, cookies, potato chips, candy bars or ice cream?

yes                      no

Do you offer a salad bar?

yes                      no

9. Have you changed your food offerings in the past five years?

yes                      no

If yes, what was the change and how was it received?

10. How many minutes per week of physical education are mandatory? (If there are different requirements for different grades, please list grades separately.)

\_\_\_\_\_

11. Of the required minutes per week, what is your estimate of the number of minutes actually spent doing significant pulse-raising hard-breathing (aerobic) exercise?

\_\_\_\_\_

12. Except for medical reasons, are there any other means for children to be excused from physical education?                      yes      no

If yes, please list the reasons. \_\_\_\_\_

13. Do you offer any education on healthy eating or proper nutrition?

14. Do you have any ideas as to what your school might do for your students to help lessen obesity and increase physical fitness?