

Are Schools Feeding or Fighting Obesity?

1. Summary

The U.S. Surgeon General stated in June 2004, "As we look to the future and where childhood obesity will be in 20 years ... it is every bit as threatening to us as the terrorist threat we face today. It is a threat from within."

So, why is this a threat? Obese children are at-risk of developing serious health problems, including hypertension, Type 2 diabetes, and heart disease; they can also develop emotional problems, including depression. As obese children grow into obese adults, they experience deteriorating health, which puts a strain on the healthcare system.

Federal and state laws have been enacted in the last three years that enable school districts to better address obesity.

The 2005-2006 Orange County Grand Jury found that:

- 1.1** Most school district food service directors do not have control over foods sold through vending machines, student stores, and fund raising events.
- 1.2** Responding Orange County food service directors indicated their school districts are either in compliance with or will be in compliance with recently enacted federal and state laws addressing child wellness and obesity.
- 1.3** There are examples of creative school nutrition programs that go beyond state and federal legislation to fight obesity.

2. Introduction and Purpose of Study

A 2004 study from the California Center for Public Health Advocacy reported on childhood obesity in the top 10 cities by population in the state; 32% of children in Anaheim and 35% of children in Santa Ana were overweight. A 2006 newspaper article reported that 22% of Orange County children are overweight or obese.

The purpose of this study was to determine the manner in which schools have chosen to address obesity, including their responses to and compliance with recent legislation. Food and beverages consumed by children are influenced by many factors, including parental controls, the fast food and soft drink industries, and schools. This Grand Jury focused only on the responsibility of schools.

3. Method of Study

During this study, the Grand Jury:

- Reviewed:
 - Federal Child Nutrition and WIC Reauthorization Act, § 204
 - California Senate Bill (SB) 567, Pupil Nutrition School Wellness Policy
 - SB 65, School District Governing Boards, Food and Beverage Contracts
 - SB 12, School Nutrition Standards Act
 - SB 19, Pupil Nutrition, Health, and Achievement Act
 - SB 965, Healthy Beverage Act
 - SB 677, California Childhood Obesity Prevention Act
 - Newspaper articles on obesity and Orange County school nutrition programs
- Conducted interviews/surveys of:
 - School district superintendents
 - School district food services directors

4. Background

4.1 Definitions of Obesity and Overweight

According to the California Department of Health Services,

“Over half of California adults are overweight or obese, and about one in three children and one in four teens is at risk or already overweight. ...Rates are highest among African Americans, Latinos, persons in poverty, and persons with the least education. ...National and state surveys indicate that overweight and obesity rates began rising in the late 1980s and accelerated in the 1990s.”

Overweight for adults is defined as a body mass index (BMI) of 25-29.9 and obesity is defined as a BMI of 30 or greater. Overweight for children and youth is defined as gender-specific and age-specific at or above the 95th percentile for those aged 2-20 years. Research by the Grand Jury indicated there is no definition of obesity for children. A BMI calculator for children is available at <http://apps.nccd.cdc.gov/dnpabmi/Calculator.aspx>.

Of the nation’s ten leading health indicators listed in the Food and Drug Administration publication “Healthy People 2010”, only overweight and obesity statistics are trending in the wrong direction. The Department of Health Services states in the publication “Policy Statement to Reduce Obesity and Overweight” that:

“The U.S. Surgeon General has called for national action to reverse the epidemic.

“Obesity and overweight are contributing to the rising rates of type 2 diabetes in adults and to a dangerous new phenomenon: type 2 diabetes in children. If left unchecked, type 2 diabetes may lead to complications such as kidney failure, blindness, heart attack, and amputations. It is feared that overweight and obesity may erase the last century’s victories over heart disease and stroke and that the rates of breast, prostate, and colon cancer also will increase. Overweight,

obesity, and physical inactivity were estimated to cost California over \$21 billion in health care costs and lost productivity in 2000.”

4.2 Key Factors for Obesity

The Department of Health Services “Policy Statement to Reduce Obesity and Overweight” publication also stated that:

“The pressure to eat too much has become increasingly pervasive. Large portions of high calorie foods with little nutritional value are mass produced, heavily advertised, and made widely available throughout the day, while the opposite is generally true for healthier foods like vegetables and fruit. Increased marketing of ... low nutrient foods to children; lack of access to healthier foods in ... schools ...; and food insecurity with or without hunger ... make it harder for individuals [children] to maintain a healthy diet....

“Pressure on the educational system has reduced the time and space available for active play as well as for physical education. ... Safety concerns, urban sprawl, and community design discourage walking, bicycling, and recreation in many neighborhoods.”

4.3 Department of Health Services Strategies

The Department of Health Services established a Physical Activity and Nutrition Coordinating Committee, comprised of organizations within Department of Health Services that manage nutrition and physical activity programs. It was formed to promote coordination, communication, and policy development across programs that address obesity, nutrition, and physical activity.

There is a growing consensus for “...a promising set of strategies for reducing obesity and overweight, their co-morbidities, and related health disparities. These [summarized] strategies are to:”

- Build health-friendly communities
- Reduce TV viewing
- Limit calorie intake
- Choose healthy foods
- Increase regular everyday activities
- Improve access to prevention, early intervention, and treatment strategies for overweight and obesity in the health care system

4.4 Recommended School Actions

The Institute of Medicine Committee on Prevention of Obesity in Children and Youth report “Preventing Childhood Obesity: Health in the Balance” recommends specific steps by schools to:

- “Improve the nutritional quality of foods and beverages served and sold in schools and as a part of school-related activities

- Expand opportunities for all students to engage in frequent, more intensive and engaging physical activity during and after school
- Develop, implement, and evaluate innovative pilot programs for both staffing and teaching about wellness, healthful eating, and physical activity”

“The committee also suggested that school health services measure each student’s weight, height and body mass index (BMI) annually and provide results to students and families. The committee believes this information would help families become aware of any weight concerns and track their children’s progress.”

4.5 Control in Districts Over Competitive Foods

Each Orange County school district has a person in charge of food service. Food service directors generally have control over food and beverages served in the school cafeterias; however, most do not have control over competitive foods and beverages. Competitive foods include food sold through vending machines, student stores, and group sales. While some districts have permitted more control over competitive foods than others, the federal Child Nutrition and WIC Reauthorization Act and SB 567 requiring school wellness policies are expected to result in more control by food service directors.

4.6 School Nutrition Legislation

As evidence mounts on the increase of childhood obesity and the inherent health hazards that accrue, state and federal legislation tries to keep up with the many challenges school districts face: vending machines, juvenile tastes, fast food advertising, processed food, non-nutritious foods and beverages, and fund raising programs.

The following is an overview of laws passed in the years since a 2003-2004 Orange County Grand Jury report on obesity:

2003 School District Governing Boards – Food and Beverage Contracts Act: Effective January 1, 2004, SB 65 requires schools to have open contracts and public review of soda and junk food contracts. This law defines non-nutritious foods and beverages.

California Childhood Obesity Prevention Act: Effective July 1, 2004, SB 677 sets nutrition standards for all beverages sold to students in grades K-8.

2004 Federal Child Nutrition and WIC Reauthorization Act, § 204: This law requires every school district that participates in the U. S. Department of Agriculture School Meal Program to establish local school wellness policies by the school year beginning July 1, 2006.

2005 Pupil Nutrition School Wellness Policy: SB 567 mirrors the 2004 federal legislation indicated above. In addition, it requires local school districts to be responsible for ensuring compliance with the wellness policy of each district school.

School Nutrition Standards Act: Effective July 1, 2007, SB 12 strengthens and implements the competitive food standards described in earlier legislation. These

standards address beverages, the calories from fat and saturated fat, and the amount of sugar in individually sold snacks and entrees.

Healthy Beverage Act: SB 965 restricts student access to beverages in high school. Starting July 1, 2007, half of the beverages sold to students from 30-minutes before the start of a school day until 30-minutes after the school day must satisfy certain requirements for good nutrition. On July 1, 2009, all beverages must satisfy these same requirements.

5. Observations and Discussion

5.1 Orange County School Nutrition Programs

Examples of creative nutrition programs in Orange County schools include:

- Pio Pico Elementary School, Santa Ana, teaches healthy cooking to parents after school.
- Newport Heights Elementary School, Newport Beach, developed “Project Empower,” which takes students to local grocery stores to learn how to read nutrition labels and understand how they can eat healthier.
- Ladera Ranch Middle School, Ladera Ranch, uses an automated lunch system, “Lunch Box,” which allows parents to monitor what their children buy for lunch, prepay online, and track balances. The Capistrano School District elementary schools have been using “Lunch Box” for about three years.
- Tesoro High School, Rancho Santa Margarita, has brought fruit carts into the cafeteria to compete with more standard school lunch fare.

5.2 Superintendent Survey

In March 2006, the Grand Jury surveyed all school district superintendents on a variety of subjects including nutrition. Twenty-six superintendents responded to the survey; Irvine and Los Alamitos did not respond to the survey and Santa Ana did not respond to the nutrition questions.

5.2.1 Survey Questions

The survey included the following questions:

- Are all food and beverage sales in your district under the direction of your nutrition director?
- Does your district comply with SB 65?
- Does your district comply with SB 567?

5.2.2 Survey Responses

Of the 28 Orange County school districts, 25 (89%) of the superintendents responded to the survey questions.

Table 1 shows the survey responses. Although all but four of the responding superintendents indicated their food service directors have control over *all* food and beverages sold on school campuses, the food service directors indicated the opposite (see Table 2: Food Service Director Survey). Apparently, the superintendents were not considering competitive foods which are generally not controlled by food service directors.

Only 13 responding superintendents were certain of the extent to which their districts meet the requirements of SB 65 to have public review of soda and junk food contracts.

All responding superintendents and food service directors confirmed their districts are or will be compliant with the school wellness policy requirement by July 1, 2006, as required in SB 567. Food service directors indicated this implementation of wellness policies will bring them at or closer to full control over competitive foods.

Table 1: Superintendent Survey

	District	Grades	Food Services Director	SB 65	SB 567
1	Anaheim City	K-8	Y	Y	Y
2	Buena Park		N	partly	Y
3	Centralia		Y	n/a	Y
4	Cypress		Y	Y	Y
5	Fountain Valley		Y	partly	Y
6	Fullerton		Y	no response	Y
7	Huntington Bch City		Y	not sure	Y
8	La Habra City		Y	Y	Y
9	Lowell		Y	partly	Y
10	Magnolia		Y	n/a	Y
11	Ocean View		Y	partly	Y
12	Savanna		N	no contract	Y
13	Westminster		Y	not sure	Y
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14	Anaheim Union	7-12	Y	not sure	Y
15	Fullerton Joint		Y	Y	Y
16	Huntington Bch Union		Y	Y	Y
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17	Brea-Olinda	K-12	Y	Y	Y
18	Capistrano		Y	Y	Y
19	Garden Grove		Y	partly	Y
20	Irvine		no response		
21	Laguna Beach		Y	Y	Y
22	Los Alamitos		no response		
23	Newport-Mesa		Y	Y	Y
24	Orange		N	Y	Y
25	Placentia-Yorba Linda		Y	Y	Y
26	Saddleback Valley		N	Y	Y

Table 1: Superintendent Survey (continued)

District		Grades	Food Services Director	SB 65	SB 567
27	Santa Ana	K-12	no response		
28	Tustin		Y	Y	Y
Yes			21	13	25
No			4	0	0
Other*			0	11	0
No response			3	4	3

* Other includes "n/a", "partly, and "no contract" and were provided exactly this way without explanation

5.3 Food Service Director Survey

In April 2006, the Grand Jury surveyed all school district food service directors regarding their districts’ compliance with state and federal nutrition laws and competitive food practices. One food services director works for two school districts and answered for both.

5.3.1 Survey Questions

The survey asked the following questions:

- Does your district comply with SB 65?
- Does your district comply with SB 677?
- Will your district comply with SB 12?
- Will your district comply with SB 965?
- Will your district comply with SB 567?
- Does your district have soft drink vendor contracts?
- Does your district permit sale of food from fast food restaurants?
- Does your district permit on-campus sale of candy/baked goods by individuals or student groups?

In addition to the survey, there was one follow-up phone question that asked: “Are all food and beverage sales in your district, including competitive foods, under your direction?”

5.3.2 Survey Responses

Of the 28 Orange County school districts, 21 (75%) of the food service directors responded to the written survey questions and/or the phoned follow-up question.

The responding food service directors indicated that their districts either now comply with applicable legislation or will comply by the required date.

While most districts do not have soda vending machine contracts – especially the K-8 districts – all three 7-12 districts and four K-12 districts have such agreements. Most districts with contracts receive a percentage of sales; few permit advertising on campuses.

About half of the school districts permit the sale of fast food restaurant meals. Few permit promotion through coupons, event sponsorship, and promotion in school

publications, but the use of fast food rewards is permitted by half. Most districts permit on-campus sales of candy and baked goods; however, eight of 21 districts do not. State law from the 1980s restricts bake sales to four per year. While student groups are uniformly permitted to sell snacks, fewer districts permit teachers, staffs, and parents to do so.

Table 2: Food Service Director Survey

District	Phone Survey	SB 12	SB 965	SB 65	SB 677	SB 567	Soft Drink Contracts	Fast Food Sales	On-campus Sales
1 Anaheim City	N	Y	Y	Y	Y	Y	Y	Y	Y
2 Buena Park	N	Y	Y	Y	Y	Y	N	N	N
3 Centralia	N	NO RESPONSE							
4 Cypress	Y	Y	Y	Y	Y	Y	N	N	Y
5 Fountain Valley	N	N*	Y	Y	Y	Y	N	Y	Y
6 Fullerton	NO RESPONSE								
7 Hunt Bch City	N	Y	Y	Y	Y	Y	N	N	Y
8 La Habra City	Y	Y	Y	Y	Y	Y	N	N	N
9 Lowell	NR	Y	Y	Y	Y	N*	N	N	Y
10 Magnolia	NO RESPONSE								
11 Ocean View	N	Y	Y	Y	Y	Y	N	N	N
12 Savanna	NO RESPONSE								
13 Westminster	N	Y	Y	Y	Y	Y	N	N	Y

Table 2: Food Service Director Survey (continued)

District	Phone Survey	SB 12	SB 965	SB 65	SB 677	SB 567	Soft Drink Contracts	Fast Food Sales	On-campus Sales
14 Anaheim Union	N	Y	Y	Y	n/a	Y	Y	Y	Y
15 Fullerton Joint	Y	Y	Y	Y	n/a	Y	Y	Y	Y
16 Hunt Bch Union	N	Y	Y	Y	n/a	Y	Y	Y	N
17 Brea-Olinda	N	N	Y	Y	Y	Y	Y	Y	N
18 Capistrano	NR	Y	Y	Y	Y	Y	N	N	Y
19 Garden Grove	N	NO RESPONSE							
20 Irvine	N	N*	Y	Y	Y	Y	N	Y	Y
21 Laguna Beach	N	Y	Y	Y	Y	Y	Y	NR	N
22 Los Alamitos	NR	Y	Y	Y	Y	Y	Y	Y	Y
23 Newport-Mesa	NR	Y	Y	Y	Y	Y	N	N	N
24 Orange	N	NO RESPONSE							
25 Placentia-YL	N	N*	Y	Y	Y	N*	Y	Y	Y
26 Saddleback Vly	NO RESPONSE								
27 Santa Ana	N	Y	Y	Y	Y	Y	N	n/a	N
28 Tustin	N	Y	Y	Y	Y	Y	N	Y	Y
Yes	3	17	21	21	18	19	8	10	13
No or No*	17	4	0	0	0	2	13	9	8
n/a	0	0	0	0	3	0	0	1	0
No response (NR)	8	7	7	7	7	7	7	8	7

(N* = not yet in compliance but will be so by the required date)

6. Findings

Under California Penal Code § 933 and § 933.05, responses are required to all findings. The responses are to be submitted to the Presiding Judge of the Superior Court. Based on the findings, the 2005-2006 Orange County Grand Jury has arrived at the following findings:

- 6.1** *Control over competitive foods:* Most school district food service directors do not have control over all food and beverages sold on school campuses. Most often excluded are competitive foods, *i.e.*, food and beverages sold through vending machines, student stores, and fund raising events.
- 6.2** *Compliance with federal and state laws:* Responding Orange County food service directors indicated their school districts are either in compliance with or will be in compliance with recently enacted federal and state laws addressing child wellness and obesity.
- 6.3** *School nutrition programs:* Some Orange County schools have developed creative nutrition programs that go beyond state and federal legislation to fight obesity.

Responses to Findings 6.1 through 6.3 are required from the Superintendent of Schools from all 28 Orange County School Districts.

7. Recommendations

In accordance with California Penal Code § 933 and § 933.05, each recommendation will be responded to by the government entity to which it is addressed. The responses are to be submitted to the Presiding Judge of the Superior Court. Based on the findings, the 2005-2006 Orange County Grand Jury makes the following recommendations:

- 7.1** *Control over competitive foods:* Orange County school districts should consider granting food service directors more control over sales of all food and beverages on district campuses. (See Finding 6.1)
- 7.2** *Compliance with federal and state laws:* School districts should ensure compliance with legislated actions and dates addressing child wellness and obesity. (See Finding 6.2)
- 7.3** *School nutrition programs:* To fight obesity, Orange County schools should consider researching and developing nutrition programs that go beyond state and federal legislation. (See Finding 6.3)

Responses to Recommendations 7.1 through 7.3 are required from the Superintendent of Schools from all 28 Orange County School Districts.

8. References

1. "Healthy People 2010," U.S. Food and Drug Administration and National Institutes of Health
2. "Policy Statement to Reduce Obesity and Overweight," California Department of Health Services, November 2004
3. "Preventing Childhood Obesity: Health in the Balance," Institute of Medicine of the National Academy, September 30, 2004
4. Federal Child Nutrition and WIC Reauthorization act, § 204, 2004
5. Senate Bill SB 19, Pupil Nutrition, Health, and Achievement Act, 2001
6. SB 677, California Childhood Obesity Prevention Act, 2003
7. SB 65, School District Governing Boards, Food and Beverage Contracts, 2003
8. SB 12, School Nutrition Standards Act, 2005
9. SB 965, Healthy Beverage Act, 2005
10. SB 567, Pupil Nutrition School Wellness Policy, 2005