Overweight Kids:
Why Should We Care?

Joel Cohen

Prepared at the Request of Senator Martha Escutia,
Former Chair, Senate Committee on
Health & Human Services and Senator Cathie Wright

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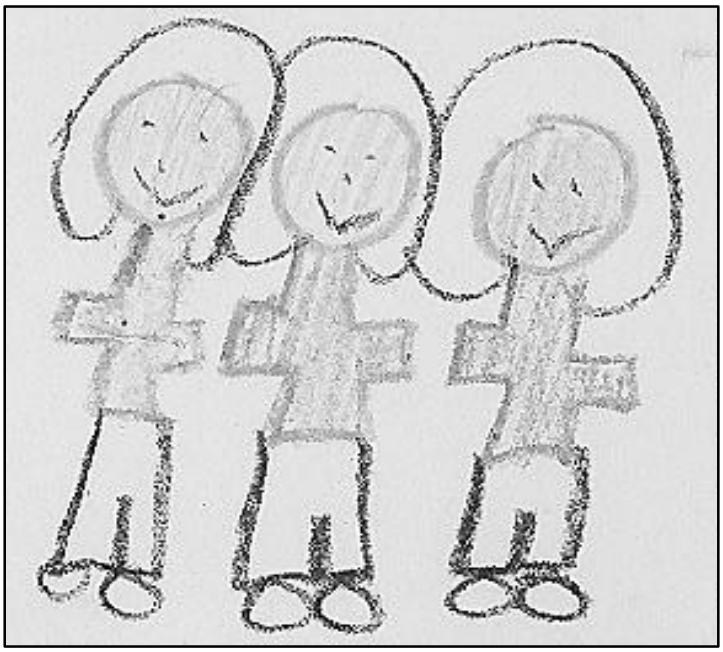

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EXECUTIVE SUMMARY

Childhood obesity in the United States has doubled in the last ten years.[1] There is much finger-pointing at the specific reasons as to why this has occurred. The most apparent reasons are that children are eating more calories and exercising less.[*]

- Compared to ten years ago, children are consuming an additional 100 calories and more a day. Additional calories generally come in the form of soda, juice, fast food, and candy.[†]
- Children are participating less in physical activity, in part because schools demand less from them and in part because fewer affordable and accessible opportunities exist.

This report describes the underlying factors that contribute to weight problems among children and adolescents, and examines the effects that being overweight and obese have on child and adolescent health, and on healthcare costs.[‡] The research was conducted at the request of Senators Martha Escutia and Cathie Wright. The report features the findings from 19 focus groups that were conducted by the California Research Bureau.[§] In the focus groups, we asked children and their parents in ethnically and geographically diverse communities throughout California what problems and barriers prevent children from living a healthy lifestyle.

The report identifies policy options, based on research and findings from the focus groups, that suggest actions that the Legislature might consider, and that schools, communities, and families might take to enhance healthy lifestyles for their children. Finally, the report presents an extensive bibliography for those desiring additional information.

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[*] The Dietary Guidelines for Americans (USHHS and USDA) recommend that a "healthy lifestyle" include: 1) daily physical activity and aiming for a healthy weight; 2) eating a healthy diet; and 3) choosing moderate amounts of fats, sugars, salt, and alcohol.

[†] For every additional 100 calories a day consumed, a person gains ten pounds per year if no additional physical activity takes place.

[‡] We do not examine serious health conditions that can lead to obesity.

[§] The focus groups were made possible by generous support from The California Endowment and the California Nutrition Network.

WHY ARE CHILDREN GETTING HEAVIER?

Most researchers are in general agreement that too much energy consumption in the form of calories, and too little physical activity to burn calories, lead to weight gain. However, it is difficult to construct and undertake a research design to verify this hypothesis. Researchers can not restrictively limit and monitor children's eating behaviors. Nonetheless, there are clear associations between weight gain and diet and physical activity habits. For instance, because fast food is high in calories and provides limited nutritional value, the assumption is that increases in fast food consumption are related to weight gain. Further, because restaurants increasingly serve larger "super size" portions, the additional food may also be related to weight gain. Sedentary behaviors including watching television, playing video games and using computers may also lead to weight gain when they displace physical activity.[2]

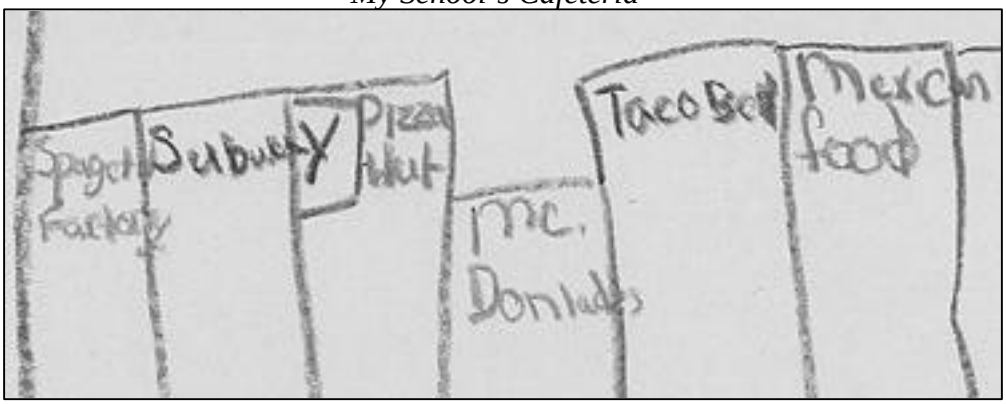
The recently published *California Teenagers Eating, Exercise, and Nutrition Survey* (CALTEENS), based on a telephone survey of 1,213 randomly selected 12- to 17-year-old California teens in February, March and April 1998, includes these findings:[3]

- Just two percent of the surveyed adolescents met all five dietary recommendations in the California Daily Food Guide (1990).
- Almost half of all teens reported eating no vegetables at all on a typical day. Only 23 percent of the boys and 38 percent of the girls reported eating the minimum recommended amount of fruits and vegetables – seven servings for boys and five servings for girls.
- Only 29 percent of adolescents reported getting the recommended minimum of one hour of vigorous physical activity per day, with girls exercising the least. In the junior and senior years of high school, only about half of adolescents took physical education classes.
- Twice as much time was spent by the youths watching television or playing video games as being physically active. They watched six times more television than the time they spent doing homework on a computer.
- Nearly one in three adolescents was at risk of being, or was already, overweight. This is twice the expected rate. Rates were highest among Latino and African American teens.
- Sixty-eight percent of the adolescents reported consuming two or more pastries, fried foods, chips, desserts, candy or soda on the day preceding the interview.[4]
- Twenty-seven percent of the adolescents reported eating one meal or snack from a fast food restaurant, and five percent reported eating two or more meals/snacks at a fast food restaurant on the day prior to the survey. The findings from CALTEENS agree with the *2000 California Fast Food High School Survey*.[5] The survey found that over half of the high schools surveyed offer Taco Bell, Subway, Domino's, Pizza Hut, or other branded fast food at lunch and for snacks. Other high schools carry non-branded and generic fast foods. Parents may have the

unfounded expectation that their children are eating nutritious foods for breakfast, snacks or lunch while in school.[6]

As part of this project, we conducted site visits to various schools throughout the state. There were vast differences regarding nutrition in the types of foods served in the cafeterias, ranging from farmers' market salad bars to fast foods. Surprisingly, fresh foods are more cost effective and are preferred by students over processed foods.[**]

"My School's Cafeteria"



The U. S. Department of Agriculture recommends calorie intake ranges from 1600 to 2800 calories per day.[††] The upper limits include the recommendation that no more than 30 percent of calories come from fat during the day.

Table 1
Calories & Fat Consumption – USDA Recommendations for Adults and Teens

Total Calories Per Day	Total Grams of Fat
1600	53
2000	65
2200	73
2500	80
2800	93

Source: USDA Dietary Guidelines for American. 2000.

Table 2 lists selections of fast food items along with their calories, fat grams, and percentage recommended of fat intake per day, based on a diet of 2500 calories per day.

[**] Rodney Taylor, Food Service Director of Santa Monica-Malibu Unified School District.
[††] Based on the USHHS and USDA Dietary Guidelines for Americans.

Table 2 Fast Food Calories and Fat Content				
Company and Item	Calories	Grams of Fat	Percentage of Calories from Fat	% of Daily Calorie Requirement*
Taco Bell				
Bean Burrito	380	12	28	15%
Veggie Fajita Wrap	420	19	41	17%
Chicken Quesadilla	410	19	42	16%
Subway				
6” Roast Beef	303	5	15	12%
6” Turkey	289	4	12	12%
BLT	327	10	28	13%
Pizza Hut				
Personal Pan : Whole Pepperoni	670	29	39	27%
Whole Supreme	710	31	39	28%
Per Slice: Thin/Crispy Cheese	210	9	39	8%
Meat Lovers	310	16	46	12%
Domino’s				
12” Hand Tossed Cheese Slice	174	5.5	28	7%
12” Hand Tossed Pepperoni Slice	205	8.5	37	8%
12” Deep Dish Pepperoni Slice	270	14	46	11%
12” Deep Dish X-Tra Cheese Slice	294	16	49	12%
Carl’s Jr.				
Western Bacon Cheeseburger	870	35	36	35%
Regular Fries	370	20	49	15%
Bbq Chicken Sandwich	310	6	17	12%
Jack-in-the-Box				
Bacon Ultimate Cheeseburger	1150	89	70	46%
Sourdough Jack	670	43	58	27%
Hamburger	280	12	39	11%
McDonald’s				
Big Mac	560	31	50	22%
Cheeseburger	320	13	37	13%
Small Fries	210	10	43	8%

*Based on a diet of 2500 calories per day.
Source: *Fast Food*. San Bernardino County Public Health Department Nutrition Program. San Bernardino, California. September 1998.

There are ways to reduce calories and fat in “fast” foods. Alternatives included altering ingredients,[##] increasing the use of low-fat dairy products, using low-fat meats and beans, and substituting reduced calorie mayonnaise and salad dressing for regular mayonnaise and dressing.

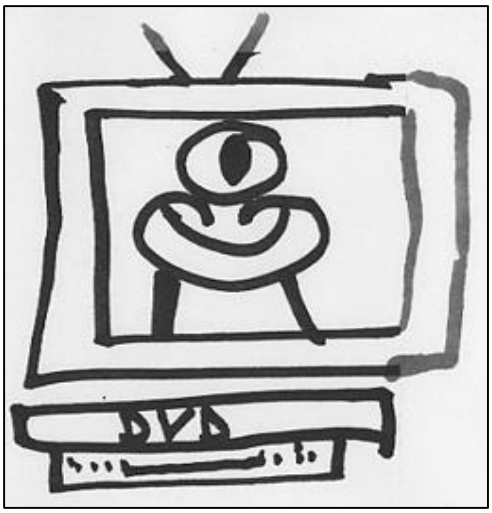
[##] The *California High School Fast Food Survey*, the *Dietary Guidelines for Americans*, and *Fast Food: Goals for Your Health*, all recommend alternative ingredients to make prepared foods healthier to eat.

Although soda drinks are not readily available in California elementary schools, vending machines selling soda are located in many middle and high schools. Some school districts have "pouring contract" agreements with soft drink companies which give the school districts a share in the profits from sales of particular brands. Between 1989 and 1994, average annual diet soda consumption rose from 10.7 gallons to 11.9 gallons nationally and regular soda consumption per student increased from 34.7 gallons to 40.3 gallons.[7] Some school districts prohibit soda but allow the sale of sports drinks, which are also high in sugar content. For example, a 20-ounce bottle of cola has 230 calories, while a 32 ounce bottle of sports drink has 200 calories. Neither provides a significant amount of nutrients (other than calories).

While consumption of soda and sport drinks has increased, milk consumption has decreased. According to the CALTEENS survey, roughly seventy percent of the California adolescent population surveyed is getting the recommended daily dairy requirements of three or more servings of milk products.[8] Conversely, approximately one-third of adolescents are not. Calcium is especially important for fast growing adolescents, as it creates a strong bone structure for adulthood. Diseases such as osteoporosis in adults are directly related to calcium consumption and retention during adolescent growth years.

Although it may be counter-intuitive, some children are drinking too much juice.[9] Moderate juice consumption for children is 12 ounces or less per day. In children's bodies the first six to eight ounces of juice contain enough vitamins for an entire day. After that amount, children's bodies are only absorbing the sugar, and the effect of the sugar consumption is similar to that of soda.[10] Side effects from too much juice consumption can include chronic diarrhea, abdominal pains and, in extreme cases, malnutrition.

TV VIEWING



The American Academy of Pediatrics has issued guidelines recommending that parents limit their children's TV viewing to no more than two hours of quality programming a day. One reason for this advice is that TV watching increases and encourages a sedentary lifestyle and discourages physical activity. Studies have shown that children who watch less of television gain less weight over time.[11] Television viewing also means additional exposure to targeted kids' advertisements for high calorie food products.

Television advertising during children's peak viewing times after school and Saturday morning are filled with fast food and candy advertising. Forty-four percent of the commercials shown on Saturday morning television are for foods with limited nutritional value in comparison to fat and calories. McDonalds, Burger King and Pizza Hut account for 11 percent of the advertisements.[12]

Commercial soda and fast food advertising on school billboards and stadiums, book covers, vending machines, and sports equipment also target children and adolescents. These practices, while controversial, are not examined in this report.

California requires students to undertake a minimum number of physical activity minutes every ten days:

- 1st through 6th graders – 200 minutes
- 7th and 8th graders – 400 minutes
- 9th through 12th graders – 400 minutes (however, high school students are only required to take two years of physical education.)

According to a Centers for Disease Control and Prevention national survey (*1997 Youth Risk Behavior Survey)*, one third of high school students did not participate regularly in vigorous physical activity, and more than half were not enrolled in physical education classes. Daily participation in physical education classes by high school students dropped from 42 percent in 1991 to 27 percent in 1997.[13] Students typically opt to take physical education during their first two years of high school. In some high schools, due to the limited supply of physical activity classes, there may not be room even if a junior or senior wanted to take additional physical activity classes.

The recent *California Teen Eating, Exercise and Nutrition Survey* confirmed these numbers for Californians.[14] Four in ten California adolescents reported being involved in physical activity less than five times a week. The U. S. Department of Health and Human Services has set an 85 percent goal for teenagers participating in physical activity five times a week in its *Healthy People 2010* report.

HEALTH PROBLEMS RELATED TO ADOLESCENT OBESITY AND A SEDENTARY LIFESTYLE

Children face serious health and social consequences from being overweight, both as children and as adults. Several diseases, most notably cardiovascular disease and Type 2 diabetes, are increasing in epidemic proportions in part due to high fat diets, excessive weight* and sedentary physical activity practices.

Type 2 diabetes, also known as "adult onset diabetes," is the result of the body's gradual resistance to insulin, often due to family history and chronic bad health habits such as a high fat diet and inactivity leading to obesity. Type 2 diabetes has tripled in American children in the last five years. Long term effects can include kidney disease, blindness, and amputation.[15]

Early signs of blocked coronary arteries among youth are increasing. This condition is caused in part by high cholesterol buildup,[16] resulting from the increased consumption of high fat foods.[17] In addition, overweight children may suffer from above normal glucose tolerance levels, high blood pressure, abnormal lipid profiles, hypertension, high trigliceride levels and low levels of high-density lipoprotein.[18] Other chronic diseases faced by overweight children include obstructive (sleep) apnea, cardiomyopathy (a disease affecting the heart muscle), orthopedic disorders, respiratory disorders[19] and acute gallbladder diseases.[20] Obese children may also face increased risk of orthopedic disorders that include tibial torsion (twisted shins) and bowed legs, slipped capital femoral epiphysis (bad hips) and symptoms of weight stress in the joints of the lower extremities.[21]

Overweight and obese children are also more likely to experience asthma and bronchial[22] hyperactivity.[23] This may be because there is a correlation between the lack of a healthy diet and asthma. A diet that lacks vegetables, milk and vitamin E is correlated with the high risk of developing asthma. In addition, high fat fast food has been identified separately as presenting a significant risk for wheezing (shortness of breath similar to asthma).[24]

Obese children are more prone to skin disorders than are non-obese children, especially if deep skin folds are present. These disorders include heat rashes and skin inflammations (including intertrigo, monilial dermatitis and acanthosis nigricans, a marker for Type 2 diabetes).[25]

Even with excessive calorie consumption, children and adults can still be deficient in many essential minerals and vitamins. This is possible by eating "empty calorie" foods that contain limited or no

*Obese is defined as a body mass index greater than 30.

nutritional value but are high in sugar, fats and/or cholesterol. A deficiency in vitamin A can lead to blindness in children, while a deficiency in iron is associated with attention deficit disorder, developmental delays,[26] and an increased capacity to absorb heavy metals such as lead.[27] In extreme cases, children lacking iron can die from anemia.[28]

After an obese child reaches six years of age, the probability that obesity will persist exceeds 50 percent. Between 70 to 80 percent of obese adolescents will remain obese as adults.[29] Adults who were overweight as children are at greater risk for coronary heart disease, cardiovascular disease, hypertension, type 2 diabetes, gallbladder disease, stroke, high blood pressure, osteoarthritis, and colon and breast cancers.[30] Sixty percent of overweight five- to ten-year-old children already have at least one risk factor for heart disease.

Overweight and obese children are at significant risk of developing psychological disorders (which may be the most common negative consequence of being overweight).[31] These disorders include depression, poor self-esteem and negative self-image, and withdrawal from peers.[32] Obesity is a serious social handicap for a child and even more for an adolescent. American society has a tendency to negatively stigmatize obese people as lazy, stupid, slow and self-indulgent.[33] Obese children are at risk for social discrimination.[34] Children as young as six years have been reported to rate children who are overweight as less likable than normal-weight children.[35] Non-obese children prefer to play with children who are bound to a wheelchair or disabled by a major physical disability rather than with obese children.[36] In adolescence, obese children may be excluded by peers from sports and dating activities.

The psychological effects for obese adults, as for children, are overwhelming. Obese adults are less likely to receive a higher education or marry, and are likely to earn less money.[37] They may be deprived of the social privileges enjoyed by individuals with a normal body weight.[38]

COSTS

Obesity, with its wide range of health consequences, represents a major component of the cost of illness in the U.S. There are both direct and indirect costs associated with being overweight and obese. Direct costs include health care costs and pharmaceuticals. Indirect costs include lost productivity and costs associated with workdays and lifetime earnings lost. The total 1995 annual cost in the United States associated with obesity (based on total population) was $99.2 billion ($51.64 billion in direct costs, $47.56 billion in indirect costs). The total annual direct cost associated with obesity in California in 1995 was $6.2 billion.[39]

Insufficient physical activity has a separate, measurable effect on health, adding approximately $24 billion, or two percent, to U.S. health care expenditures. Overall, the direct costs of inactivity and obesity account for 5.5 to 7.8 percent of the national health care expenditures in the U.S.[40]

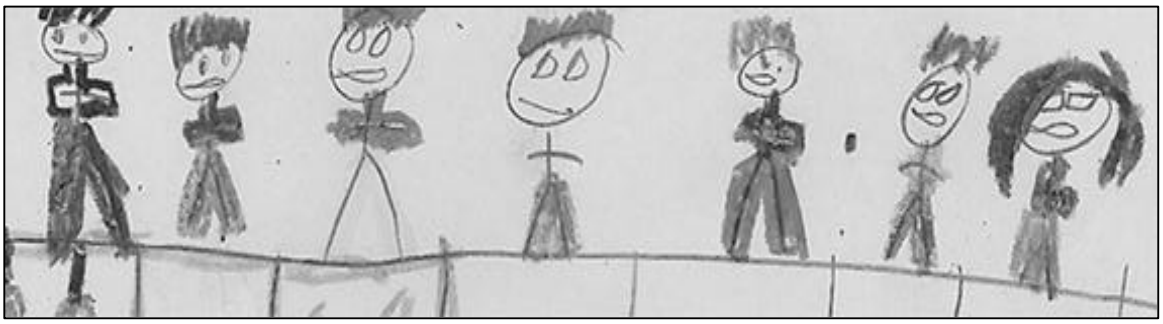
The cost of obesity to U.S. business in 1994 (most recent data) was an estimated $12.7 billion: $2.6 billion as a result of mild obesity and $10.1 billion due to moderate to severe obesity. Of this amount, $7.7 billion was expended on health insurance, $2.4 billion paid in sick leave, $1.8 billion spent on life insurance, and $800 million spent on disability insurance.[41]

THE FOCUS GROUPS

PARTICIPANTS

The California Research Bureau (CRB) Children's Healthy Lifestyle project conducted focus groups in geographically and ethnically diverse communities throughout California. The participating children and parents were recruited by the project's partners[§§] from neighborhoods in Fresno, Los Angeles, San Diego, and Oakland. Community leaders and nutrition consultants who work with ethnic communities conducted the recruitment and arranged the facilities. Recruiting priorities included a mix of ethnicity, income, and ages among the children. None of the children who participated in the focus groups were diagnosed with obesity due to medical conditions. Parent groups were similarly diverse. Ethnicity was not a contributing factor differentiating responses from either the children or the parents.

A total of 285 people (126 adults and 152 children) participated in one of 19 focus groups held in Boys & Girls Clubs, churches, and community centers. Participants in six of the focus groups were Latino; participants in five of the focus groups were African American; three of the focus groups were composed of Anglos; one focus group was Cambodian; two of the focus groups were Native American; and two of the focus groups were Hmong. We did not find significant differences between the focus group participants of these communities regarding issues pertaining to physical activity and nutrition for children.



[§§] CRB had four partners in organizing the focus groups and devising the focus group questions: Joanne Ikeda, University of California Cooperative Extension, Sue Foerster, California Department of Health Services, Peggy Agron, California Department of Health Services, and Harold Goldstein, Southern California Public Health Association.

FOCUS GROUP FINDINGS

PHYSICAL ACTIVITIES

COST IS THE MOST IMPORTANT LIMITING FACTOR

The most common reason for children not participating in physical activities is lack of money for equipment, transportation, and coaching. Parents cannot afford soccer shoes or other gear, nor take time from work to provide transportation, nor pay for lessons to increase proficiency and motivation. Schools and communities lack investments in parks, in safe transit access to facilities, and in organized physical activities during and after school.

> *"It all boils down to money, if you don't have money you can't do activities, whether it's the gym or the ice skating rink." Los Angeles Parent*

Parents and children participating in the focus groups agreed the number one reason that children do not participate in physical activities is lack of money at home, at schools, and for facilities in the community. There are a variety of other reasons that children do not participate in physical activities. Some do not have coaches available to train them, or facilities to practice on, or equipment to practice with. The older children get, the deeper their resentment and the greater their lack of self-esteem as they feel left out and excluded.

SCHOOLS

Many schools and school districts do not have adequate playing fields, swimming pools, or sports equipment. This is a more acute problem in urban areas and school districts with older schools. Some schools offer antiquated jungle gyms and monkey bars that are cemented into asphalt. Other schools offer no play equipment and only a small schoolyard of asphalt with no grass. At some schools, portable classrooms have occupied most of the playground space.

General education K-6 teachers are responsible for developing a curriculum and teaching physical activities for 200 minutes every ten school days. The amount increases to 400 minutes in 9th grade. However, not all teachers are equally capable of undertaking this requirement. One child in a focus group stated, "My teacher had us play dodgeball all year for gym. It was ok, but I wish we did other things, too." Dodgeball has recently come under criticism since its goal is to hit another child as a target.[42]

Some schools lack personnel who can coach and lead in physical fitness activities. Before- and after-school programs may consist of only non-supervised physical activities and a study hall. One child pointed out, "My friends sit around and talk."

A contributing factor is that some schools cannot afford to pay for expensive insurance liability coverage. These school districts do not offer pre- and after-school physical activities programs, and permit their facilities to be used only during school hours. As a result, school facilities that could provide a safe and constructive venue for children's physical activities are "locked down" after hours.

PARENTS

Parents say they lack the financial resources to send their children to seasonal after-school and community activities. Costs associated with these activities include liability insurance, coaching fees, uniforms, special sneakers (and cleats), and practice equipment. Families with several children who want to participate in physical activities are particularly disadvantaged. Parents in the focus groups discussed the costs associated with organized community and school physical activities. They estimated that football costs $500 per season (not including uniform and cleats), gymnastics costs $275 per month, and baseball costs $250 per season/per child. Municipalities and schools do not offer discounts based on parental income or scholarships.

"I can't play soccer without shin guards and cleats" San Diego Child

Since sports are seasonal, parents can expect to pay these costs four times a year per child for one sport per season. However, since children are not guaranteed that they will play in games, parents prefer that their children participate in multiple sports per season, conceivably costing thousands of dollars per year.

Some parents in the focus groups discussed the need to prioritize spending of their household budgets in order to ensure that their children are involved in physical activity programs. "It is a list of priorities; we need to reapportion the money we spend on soda and cigarettes, rearrange our budget. Sacrificing and cutting corners may help our kids." Parents who were not able to experience sports activities as children may not fully understand how important physical activity is to their children's health. "Before we need to save, we need the desire, and this takes an experience, in order to sacrifice the other costs, which means you have to try it once first."

"I want to play with my kids. But I can't. The street isn't safe, and the park doesn't encourage fathers and sons playing together." Los Angeles Parent

Parents and children stated that they would like to engage in physical activities as a family. However, a lack of nearby community parks, and limited facilities in the parks, makes it difficult for parents to find suitable activities to encourage family fun. Parents agreed that family physical activity fun needs to be a weekly routine, such as on Saturday afternoons. However, places to have fun are not readily available and require advance planning. Sometimes the planning goes by the wayside. Some parents stated that they do not exercise and realize that they are setting a poor example for children. One parent admitted that, "The most physical activity I get is putting gas in the car." She said that she knew this was setting a poor precedent for her children, but she said this was the best she could do.

COMPETITION

"Some children 'just want to have fun'." San Diego Child

Children and adults in the focus groups expressed their frustration with the high level of competition that surrounds kids' physical activities during and after school, and in community programs. Their frustration focused on the "egos" of coaches and other parents and on activities that do not fit the needs of children.

Children said that they do not participate in physical activities because they dread having people talk about how well they play the game. They expressed the hope that a less competitive environment might result in skills development and an emphasis on showing the less trained kids how to improve. Children and parents agreed that everyone has to start somewhere in any game, but said that there is not enough training to get most children past the first few hurdles. The children stated that they would "prefer sitting on the sidelines or at home than look like a fool on the field."

Coaches and parents are motivated to win. Winning also motivates the better players, whatever the sport -- football, gymnastics, swimming, baseball, or tennis.[***] While everyone usually gets to practice, most coaches only permit the best players to play the actual games.[†††] Children reported getting bored with this sort of environment, and stated it lowered the moral and self-esteem of most kids. Some coaches were reported to have told children who complained about not being able to play that they were doing "what

[***] The issue of inappropriate parental and coaching behavior, and inordinate competitive pressure, has arisen in both community and school-sponsored sports. Incidents of hazing and violence have received considerable publicity and concern.

[†††] Some children's sports organizations, such as the American Youth Soccer Organization, require that every child on a team be allowed to play in a game.

was best for the team." Eventually those children dropped out of the team. Parents who volunteer on the teams are often able to ensure that their children are chosen to play in the games. Parents who cannot volunteer nor attend practice or all the games expressed frustration over their children's lack of participation: "Why am I paying all this money for my son to sit on the sidelines?"

A parent participating in a focus group stated that she had been a fast runner in school and was always asked to participate in sports. She has two children, one an able runner, but the other one has become a non-participant. The non-participating child has been rejected so often from teams that she fears rejection and refuses to try out for any sports.

Parents also can contribute to the problem of pushing children to excel by playing and winning. "Some parents 'get off' bragging to anyone who will listen about the winning score their child made." Children also said that the level of competition encourages parents to be vocal during the games. While the children enjoy having their parents and other family members watch the games, they said that too much cheering leads to higher anxiety.

Many parents and children in the focus groups would prefer non-competitive supervised games and activities, in addition to competitive sports. These diverse groups of parents and children prefer activities such as skateboarding, biking, aerobics, jogging, dancing, calisthenics, swimming laps, and climbing rock walls and trees. In addition, children stated they would like to try non-competitive basketball, baseball, track, tetherball, Ping-Pong, and tennis. "If kids don't like to play sports they can play at home. Let them run around the yard, go outside and play hide and seek", suggested one child.

TRANSPORTATION

"Some parents don't have transportation to get children to play little league."
Fresno Parent

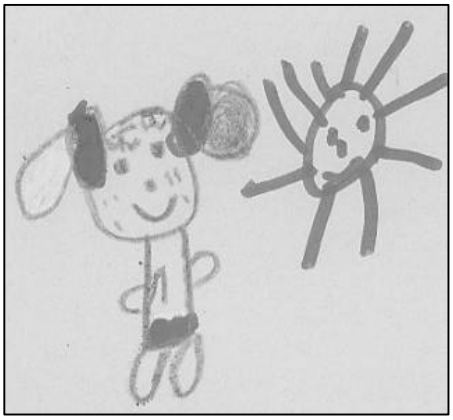
Children are not participating in community after-school activity programs because they lack transportation to get to the programs and back home. To keep costs down, community after-school programs usually place responsibility for transportation on the children's families. Many parents work. Some do not have cars. In addition, parents in the focus groups do not consider car-pools a viable option, because they do not have time to build trusting relationships with other parents.

When children do not have access to a car and an adult driver, transportation to practice and home games can require multiple bus rides even to go a short distance. Getting to away games, outside the community, can be difficult. This is not just an urban problem. In suburban and rural communities, transportation can be more difficult as public transportation is less convenient or non-existent, and play facilities may be too far apart for children to ride their bicycles.

VARIETY

"Isn't there anything else but football and basketball in the winter? How about volleyball or dance?" Los Angeles Child

Children in the focus groups complained that after school programs lack creativity and variety. They said that programs are geared to only a segment of the student body's interest, and that creates a lack of motivation and interest in a majority of the students. The children said that school personnel combine a lack of variety in physical activities with a lack of instruction. The children would prefer activities that are "tried and true" like running, soccer, kickball, swimming, handball, and dodgeball.



SAFETY

"I remember biking everywhere after school with my friends. I won't let my kids play in front of my house alone [now]. How things have changed." Los Angeles Parent

Parents in the focus groups described childhood memories that included aimlessly riding bikes, playing unsupervised pick-up games in local parks, and walking to and from friends' homes in time for dinner. These idyllic memories are of another time. Children in many communities now cannot safely hang around parks, ride bikes, or walk to school alone. In some communities, children are not even permitted to play in front of their homes without supervision. Parents are afraid of speeding cars, dangerous strangers and drive-by shootings. Parents have tried to encourage backyard and indoor activities, such as gardening and indoor aerobics, to compensate for not allowing children to play in the front of their homes. However, many low-income families lack access to safe backyard space.

Safety was not only a concern in urban areas. Native American adults in East San Diego County pointed out in a focus group that there are no athletic facilities in their rural area. Surprisingly, perhaps, they do not regard their rural area as a safe environment for children to play outside. One of the adults related that a child in their rural community was kidnapped by an illegal immigrant a number of years ago and was never recovered. Groups of illegal immigrants pass though their properties, so they require their children to stay in view of an adult. Kids can not even wait alone at a school bus stop. Children see the trees and the endless miles of countryside and yet cannot run beyond their own gravel driveways.

Children need proper equipment and training to safely play a sport or even to play on equipment. Some parents want their children to be coached before playing in sports. This was especially true in contact sports, where parents feared that their children might be permanently harmed.

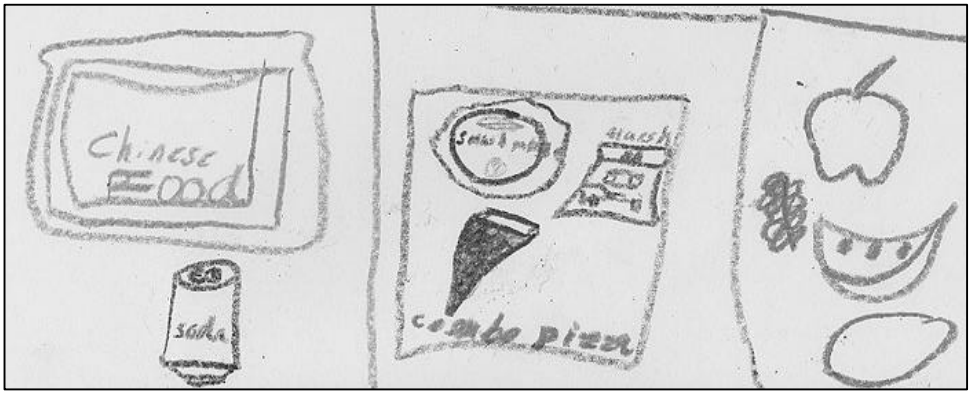
Children in the focus groups reiterated their parents' concerns regarding safety. They said they do not play contact sports because of fears about accidents and injuries that they and their friends have experienced. Some children become caught up in their parents' fears of the unknown and their own lack of experience. For example, some children in the focus groups avoid certain play areas. Children in the Los Angeles focus groups do not swim. Lack of access to a neighborhood public pool was one reason, but the larger issue involved their parents. Their parents could not swim and they feared that their children would drown. These children avoid swimming and its entire social context, such as going to the beach with friends, or playing with friends and relatives in pools, even wading pools.

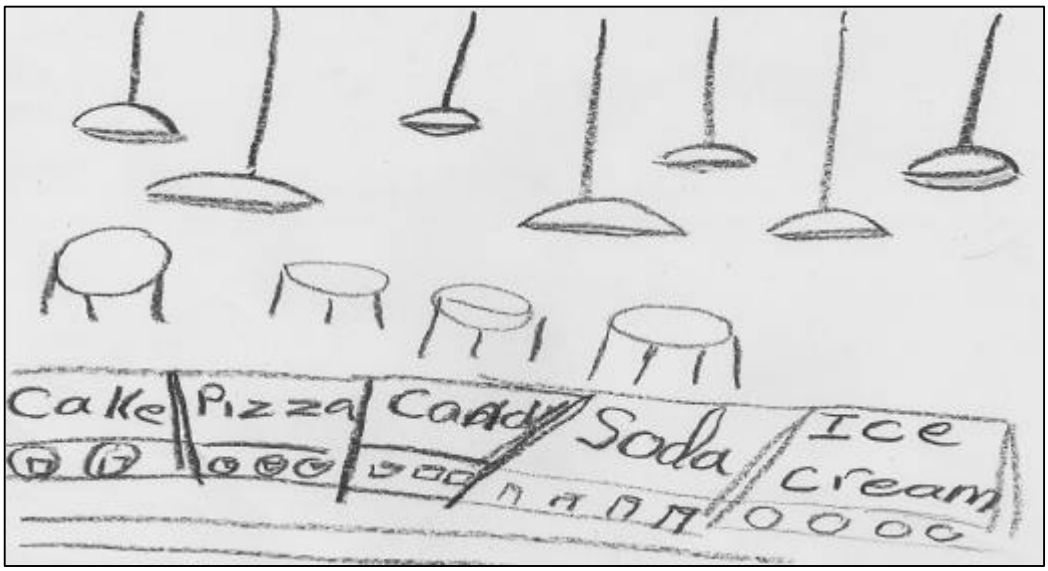
NUTRITION

The children and parents in the focus groups agree somewhat on the impediments to good nutrition. Parents said that their children do not eat fruits and vegetables because:

- the produce is too expensive to keep in the house at all times
- seasonal produce are not readily available
- children refuse to eat certain fruits and vegetables
- produce is not packaged to be convenient to eat

Parents said that they would not be surprised if their children refused to eat vegetables and fruit at school, no matter what the reasons.





Children said that they do not eat fruit and vegetables because:

- they are not convenient to eat
- they can be messy

PARENTS' VIEWS ON NUTRITION

PRODUCE

> *"When you don't have a lot of money to buy a lot of foods, it is hard to make nutritious meals out of the foods we can afford to buy." Los Angeles Parent*

Parents in the focus groups said that fresh fruit and vegetables are often too expensive to keep in the house all the time. There are three general reasons: the price of produce; the time it takes to prepare fresh foods; and wasted foods. Parents overwhelmingly agreed that prepared foods, and especially fast food, are much cheaper and easier to purchase, (for example, from drive-thru windows), simpler to prepare and serve, and more likely to be eaten.

TIME

Parents contended that they are simply too busy to cook. Working outside the home, doing housework, helping children with homework, and commuting leaves little time to prepare healthy meals. One parent stated, "I feel like a chauffeur, babysitter, counselor, teacher, and coach. There is little time to be the chef."

Parents rely on all the help they can get at an affordable price. For example, statewide on Wednesdays, a family can purchase twelve cheeseburgers at a McDonald's restaurant for about five dollars. While this is not a nutritious alternative, it is filling.

"The kids go straight for the food they can immediately eat. They go straight for the soda and chips; they want food they can eat NOW." San Diego Parent

McDonald's has over 28,000 outlets worldwide. In Los Angeles, the golden arches can be seen every quarter square mile, grouped with the other fast food chains like KFC, Carl's Jr., Jack-in-the-Box, Domino's, Taco Bell, Subway, and Del Taco. Some of these outlets are open 24 hours a day, seven days a week, while others open early for breakfast and close about midnight. Supermarkets and stores specializing in produce are scarcer in urban areas, and have more restrictive hours.

While access is important, so is ease. Parents with small children can get food from fast-food outlets without leaving their car. Except for home delivery of groceries and take-out foods, nothing is simpler or more available than drive-thru windows in fast food outlets.

WASTE

Cooking with fresh ingredients takes preparation time and knowledge of cooking techniques. With good intentions, parents sometimes purchase fruit and vegetables, only to have them rot. This can become expensive. One parent said, "Things look so good in the store, so firm and green, but I never know what to do when I get home. I think that I'll ask someone or look it up in a book or both, but I never do." This comment received much agreement from the other parents, followed by handwringing.

Part of the waste issue is the lack of refrigerator space. Spoilage is an especially acute problem in the summer without proper storage.

"Why can't it be ready to eat?" Los Angeles Parent

Fruits and vegetables were declared "Not User Friendly." Parents say they have little time in the morning to peel and prepare fruit for breakfast and snacks, and even less time when they get home from work. In fact, when parents were asked how to get children to eat more fruit as a snack, their response was to make fruit and vegetables more ready-to-eat. For the parents, this meant easy access to peeled and cut-up bite-size pieces. The second largest response was to have a Pokemon character market fruits and vegetables on TV Saturday morning and after school. This response acknowledges the power of television advertising in shaping children's food choices.

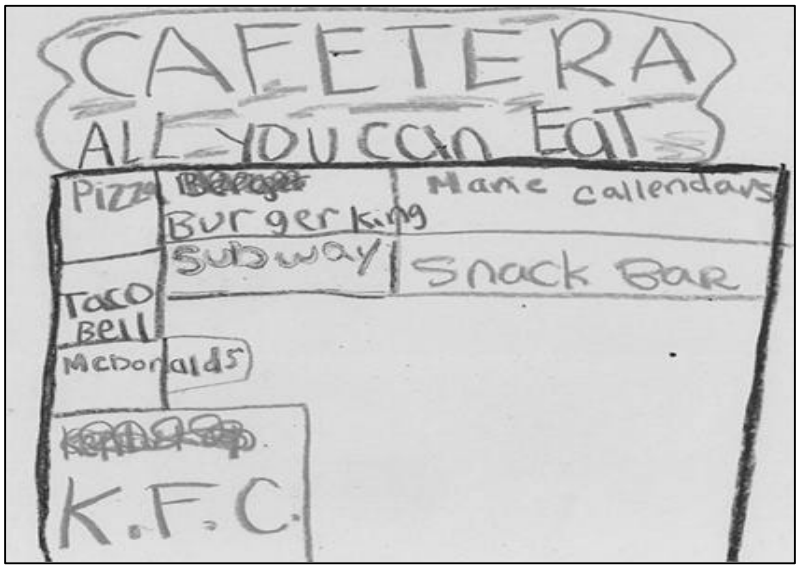
CHILDREN'S TASTES

"If there is ever a question with what my kids want to eat, they say 'Yo quiero Taco Bell.'" Oakland Parent

The parents in the focus groups commiserated with each other about their children's eating habits. Many said that they are tired of "Forcing their kids to eat healthy foods." Mealtimes can become a battleground. One parent sized up the situation: "With fighting to commute to work, and the idiocy of my job, I lack the strength to fight with my kids to eat." Another stated, "All gloves are off at the dinner table, anything goes!"

Parents acknowledged that their awkward schedules and lack of routine in preparing home-cooked meals create a wide latitude in decision-making for meals. Children recommend fast food establishments as a compromise to the daily conundrum of "What's for Dinner?" In addition, children enjoy the flavor of fast food. One parent declared, "Where would I be without Taco Bell, God only knows."

Parents said they understand why their children enjoy eating in fast food places. One parent stated, "They [fast food restaurants] make kids feel special." Another talked about how his children enjoyed the toys when they were younger but now they go strictly for the "comforting flavors."



CHILDREN'S VIEWS

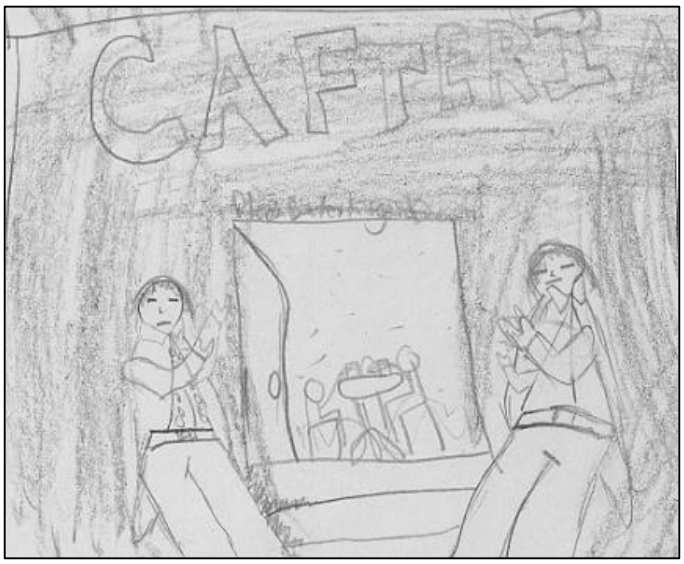
CONVENIENT

"I hate soggy stuff." San Diego Child

Children in the focus groups agreed with their parents about the inconvenience of eating produce. They voiced dissatisfaction with fruit. One child questioned, "Why does fruit have to turn brown? I hate that!" These children are being raised in a society where food is advertised as perfect in appearance, portable, and convenient to eat. The benefit of fast food is that it is finger food. The children said that they do not eat produce because it takes too long to prepare, requires washing, has a short shelf life, and discolors quickly.

"I won't even bother with anything that is sticky, even sweet and sour chicken."
Oakland Child

Children said that juicy fruit is messy, and they do not like messy. Unless they have a wet napkin or sink nearby, they find fruit too much of a "pain" to bother with. Some children suggested toothpicks, but then worried they could create a bigger nuisance.



"I want my cafeteria to serve all the foods I like to eat, and it should be big enough so I sit with my friends." Los Angeles Child

The children were asked to describe what their "ideal cafeteria" would include. They vividly described what they wanted it to include and drew pictures. Some wanted waiter service with tablecloth-draped tables. Other children wanted a "food court" assortment of fast food venues, like that available in a shopping mall. Some of the common themes included ice cream and soda machines, ample seating, windows looking out over gardens, and at least one fast food restaurant.

FOCUS GROUP MEASURES

We developed questions and probes appropriate for ages 9 –11 years after consultation with researchers who have expertise in qualitative research methodology in this issue area. All the questions were open-ended and worded in neutral terms to minimize the extent to which the focus group facilitator might bias participant responses. A facilitator and a cultural interpreter were present at each focus group. These skilled interpreters provided a bridge between the facilitator and the participants and enabled the project to sample insights from diverse ethnic groups around the state:

- Hispanic
- Anglo
- African American
- Native American
- Vietnamese
- Cambodian
- Hmong

The focus group questions touched on a number of issues related to childhood obstacles to physical activity and good nutrition, including favorite activities, favorite foods, safety and physical activities, transportation and location of physical activities, and difficulties eating healthy foods. Parents (mostly mothers) were asked similar questions regarding their own and their children's behaviors.

PROCEDURES

We informed the focus groups that discussions would be audiotaped. Only the facilitator has access to the tapes, which are stored in a safe prior to being destroyed. All the parents provided consent forms to participate and children supplied parental permission forms. Where appropriate, the permission forms were translated into foreign languages.

Each of the focus groups lasted between an hour and an hour and a half. All of the children received a token gift worth about five dollars and parents received a gift or cash valued at ten dollars.

POLICY OPTIONS

While not necessarily recommendations of the author or the California Research Bureau, the following are potential options for action.

PHYSICAL ACTIVITY

ACCESSIBLE AND AFFORDABLE PHYSICAL ACTIVITY SPACE AND EQUIPMENT

Some schools and communities lack basic facilities for children and families to be physically active. These communities could undertake an integrated property asset management review. This review would identify public and private properties, including vacant properties that could be used for public physical activities at various times of the week (weekends, during the school day, after school) and obstacles to their use. For example, community schools may have resources of space that could be used after the school day ends. However, they may lack funds for personnel, equipment, and liability insurance coverage. Some communities may offer unsafe and/or run-down public spaces, while others may not have any public facilities for physical activities. Additionally, community members could be surveyed to identify potential activities of interest.

- The Legislature could create a comprehensive state grant program to fund neighborhood-based reviews of public facilities for indoor and outdoor physical activities. The local review could develop a catalogue of sites that are available for physical activities by children, seniors, and families. The catalogue could be published in the local newspaper and distributed, with appropriate language translations, to neighborhood residents (through schools, clinics, and supermarkets). It could be included on a community website. Since many areas experience considerable turnover in residents, distribution could be an annual undertaking.
- The property asset management review could be the basis for local, or statewide, bonds to finance purchase of needed land and facilities.

In some communities, lack of sports equipment is a major impediment for children and adults to participate in physical activities.

- The Legislature could encourage local governments to develop sports equipment lending programs, perhaps as part of a state grants program. When children have outgrown or no longer use certain sports equipment, families could donate it to a central lending closet. Perhaps a small fee could help cover the cost of services.
- Alternatively, the state could create a tax reimbursement program, similar to the program providing used computers to schools, to encourage business and individual donations of athletic and recreational equipment to schools and community sports organizations.

- If liability insurance is an impediment, the State could consider enacting a "good Samaritan" statute that would cover volunteers and private facilities, while engaged in public physical activities. Alternatively, the State could offset insurance costs for schools and communities.

PHYSICAL ACTIVITY INSTRUCTION

Children do not participate in certain sports because they do not know how to play. Rather than "act like a fool," they sit on the sidelines or stay at home. Instructors and coaches, paid and volunteer, are needed to encourage children to participate in sports. Further, children in the focus groups expressed a desire for lower-pressure, non-competitive physical activities.

- School districts could develop a physical activity mentoring program that would link high school and college athletes with elementary school children. Emphasis could be placed on a broad range of competitive sports as well as noncompetitive physical activities. This mentoring program could be a component of ongoing state efforts to encourage and support mentoring.

In many school districts, parents pay for coaches' salaries and the children's equipment. Some sports activities are organized as clubs and completely underwritten by parents. Low-income communities, in which parents lack the funds and time to contribute, may offer fewer physical activities to children.

- The Legislature could request the Department of Education to undertake a thorough review of local funding for sports and physical activities in K-12 schools. This review might establish the need for a targeted grants program.
- School districts and children's community sports team programs (for example, Pop Warner, Little League, soccer leagues) could develop "B" team rosters for those children that coaches have determined will not play on the "A" teams. This would offer all children the opportunity to play. The increased playing schedule would have an impact on facilities, equipment and coaching needs, and could be considered in a broader review of community and school facilities and mentoring needs.

SHARING PROGRAMS THAT WORK

Various communities and schools around the state have developed effective and efficient physical activity and nutrition programs. Regional coalitions built around existing programs (such as Project LEAN for youth and Power Play! for children) could benefit from increased networking, and could share their models with other communities

- The Department of Parks and Recreation and the Department of Education could organize forums for the organizers of these programs to share their

successes with other schools and communities. Professional associations are another venue to develop this conversation, perhaps with encouragement from their state government counterparts.

- Alternatively, foundations that focus on health outcomes could fund initial discussions in conferences around the state.
- Networking opportunities, perhaps through a dedicated Internet site, could be shared among health and school-related associations, and state and county health departments. The Legislature could provide funding for a prototype website.

FOOD AND NUTRITION

AFFORDABLE FRUITS AND VEGETABLES AND LEARNING TO COOK THEM

Participants in the focus groups agreed that the costs associated with purchasing fresh fruits and vegetables are a deterrent to low-income families.

- The Legislature could charge the Department of Agriculture with developing and marketing a fresh food coupon model to supermarkets. Cost-saving food coupons could be applied towards the purchase of fresh fruit and vegetables. Each week the targeted stores could provide price off per pound, or "buy one, get one free" coupons for fruits and vegetables. The benefits from the increased purchasing of produce would assist consumers, stores and growers.

Focus group parents admitted that they do not know how to cook fresh fruits and vegetables in ways that are appetizing and enticing for their children.

- The Legislature could create and fund a "Family Cooking" public education grants program that would teach how to shop for and prepare fresh fruits and vegetables. The program would focus on teaching skills to adults to share with their children, much like family literacy programs. The grants could fund public television cooking shows and classes in adult education and community parks and recreation facilities.
- The Legislature could charge the Department of Education with conducting a review of middle and high school home education curricula to ensure that they teach nutrition, including how to shop for and cook fresh fruits and vegetables. These are often optional elective classes.

COMPREHENSIVE CHILDHOOD OBESITY PREVENTION CAMPAIGN

A cost-effective preventive health campaign could be developed to better educate Californians about the risks of eating fatty foods and not exercising.

- The State of California could create an effective public education program that would make a difference in classrooms and communities throughout the state. Initial

funding might come from a seed grant from the federal Centers for Disease Control and Prevention. The goal would be a Comprehensive Childhood Obesity Prevention Campaign, administered by the Departments of Health Services, Education, and Agriculture. A reasonable first year appropriation might be about $15-20 million dollars (some of which might be matched by The United States Department of Agriculture).

The comprehensive childhood obesity prevention campaign initiative could parallel the anti-tobacco campaign and might include:

- Development of a state plan and public/private partnerships
- Creation of a multi-cultural, multi-lingual media campaign aimed at children and their caretakers
- Creation of targeted leadership training and policy projects (including health care, schools, and city planning)
- Monitoring and evaluation
- Fostering ethnically sensitive campaigns in minority communities
- Creation of a child- and family-friendly, regularly updated, multi-lingual web-site containing healthy recipes, leisure fitness activities, health and nutrition information, and curricula suggestions for grades K-12. Information about the website could be distributed through schools and public libraries, health clinics, gyms, and community centers.

SCHOOL FOOD

Food service directors and staff are links between the food children eat in school and better nutrition. An enhanced partnership between teaching and food service professionals could enhance nutrition and food preparation. For example, instructional professionals and food service staff could jointly develop child-friendly cooking demonstrations and nutrition classes, perhaps based in the “real life” cafeteria.

- The Legislature could require schools to promote and encourage the purchase and consumption of healthy foods (as defined by the California daily food guide). This could include a prohibition on advertising unhealthy foods and drinks.

- The Department of Education operates and funds a school gardens program. The program provides technical support and funds to schools to build vegetable gardens. This program could be expanded to assist more schools, and to include food service professionals.

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