

# PAVING THE WAY FOR PHYSICALLY FIT AND HEALTHY CHILDREN

# FINDINGS AND RECOMMENDATIONS

# A REPORT BY

THE LOS ANGELES COUNTY TASK FORCE ON CHILDREN AND YOUTH PHYSICAL FITNESS

AUGUST 2002

# LOS ANGELES COUNTY TASK FORCE ON CHILDREN AND YOUTH PHYSICAL FITNESS

# **First Supervisorial District**

Christiane Wert, M.P.H., R.D.

# Second Supervisorial District

Gail N. Jackson, M.D.

Third Supervisorial District Francine R. Kaufman, M.D., Chair – Children and Youth Physical Fitness

<u>Fifth Supervisorial District</u> Barbara Boone, Chair - Los Angeles County Nutrition Task Force

> Department of Children and Family Services Donna Fernandez, M.S.W., L.C.S.W.

> > **Department of Health Services** Jonathan E. Fielding, M.D., M.P.H.

Department of Parks and Recreation Roy Williams

Los Angeles County Office of Education Betty Hennessy, Ph.D.

### Los Angeles Unified School District Maria Reza

### **Department of Health Services Staff**

Cynthia Harding, M.P.H. Gayle Haberman, M.P.H Wendy Schiffer, M.P.H. Valerie Ruelas, M.S.W., L.C.S.W.

# TABLE OF CONTENTS

# Page

	EXECUTIVE SUMMARY	i
SECTION I:	INTRODUCTION	1
	A Note on Defining Overweight in Children	2
SECTION II	HISTORY AND PURPOSE OF TASK FORCE	3
	Workgroups	3
	Community Forum	4
	Development of Recommendations	4
SECTION III	OVERVIEW OF CHILDREN'S FITNESS	5
	Prevalence of Overweight in the United States	5
	Prevalence of Overweight in Los Angeles County	6
	Overview of Physical Fitness in Los Angeles County	7
	Overview of Nutrition	8
	Risk Behaviors Related to Diet and Physical Activity	9
	Health Effects of Overweight Among Children	10
	Financial Implications of Children's Poor Physical Fitness	10
SECTION IV	CONTRIBUTING FACTORS TO OVERWEIGHT IN CHILDREN-	11
	Individuals and Families	11
	Communities	12
	Schools	13
	Health Care	14
	Food Industry	15
SECTION V	RATIONALE FOR RECOMMENDATIONS	16
	Policy	16
	Programs and Initiatives	17
	Research and Evaluation	22
	Public Awareness Campaigns	23
SECTION VI	RECOMMENDATIONS	25
	Policy	25
	Programs and Initiatives	27
	Research and Evaluations	29
	Public Awareness Campaigns	30

# TABLE OF CONTENTS CONTINUED

### Page

SECTION VII APPENDICES	A-1
A-1 - Individuals and Families Workgroup: Summary of Discussion	A-1
A-2 - Communities Workgroup: Summary of Discussion	A-4
A-3 - Schools Workgroup: Summary of Discussion	A-7
A-4 - Health Care Workgroup: Summary of Discussion	A-10
A-5 - Existing Resources as Identified by Ad Hoc Workgroups	A-13
B - Community Forum Information Gallery Participants	A-15
C - National and State Recommendations	A-18
D - Health People 2010 Goals Summary of Objectives	A-24
E - Healthier US Initiative	
SECTION VIII END NOTES	A-1

# **EXECUTIVE SUMMARY**

According to the Centers for Disease Control and the United States Department of Health and Human Services, there has been a dramatic increase nationwide in overweight and obesity among children and adults in the last twenty years, to the point that overweight and obesity has reached epidemic proportions. Approximately 45 million adults are considered obese and eight million children are categorized as overweight contributing to approximately 300,000 deaths each year with the numbers of preventable deaths rivaling those related to cigarette smoking<sup>1</sup>. Along with rising rates of overweight in children are corresponding rises in obesity-related illnesses, some of which were rarely, if ever, seen in children 20 or 30 years ago. The costs of obesity are high. The total 2000 annual cost in the United States associated with obesity was \$117 billion (\$61 billion in direct costs, including healthcare; \$56 billion in indirect costs, including lost productivity and earnings lost)<sup>2</sup>.

These trends have not gone unrecognized by the Los Angeles County Board of Supervisors. In response to this situation, the Board of Supervisors unanimously established the Los Angeles County Task Force on Children and Youth Physical Fitness. The purpose of the Task Force was to develop recommendations aimed at reversing the decline in physical activity and healthy eating and reducing the rising rates of overweight in Los Angeles County children and youth. The Task Force benefited from the public's expertise, via participation in workgroups and a community forum, in developing the recommendations in this report. In addition, the Los Angeles County Department of Health Services' staff supported the work of the Task Force.

The recommendations involve diverse approaches and institutions given that the factors contributing to overweight in children are themselves diverse. Since many different community entities impact children's exercise and eating habits, efforts to improve children's physical fitness will necessitate collaboration among community-based organizations, schools, health care organizations, governmental institutions, families, and individuals. It is also important to note that with much focus on the obesity epidemic, it would be easy to emphasize the need for weight loss and being "thin". However, the Los Angeles County Task Force on Children and Youth Physical Fitness is addressing the epidemic with a focus of being physically "fit" not "thin".

The Task Force's recommendations are not intended to be an exhaustive list of action steps to reduce the rates of overweight in children and youth in Los Angeles County. Rather, they represent the actions that are achievable and will have the greatest impact on improving children's fitness. Some of the recommendations go beyond the Board of Supervisors' purview, however, the Task Force hopes that the Board will endorse these recommendations and provide the leadership necessary to promote their implementation. While many of these recommended actions will require funding to implement, many others can be accomplished within a constrained budgetary environment.

The Task Force developed four overarching strategies, listed below, to promote physical activity and healthy eating. Within these strategies, the Task Force is recommending actions steps that can be implemented in four settings: 1) Communities, 2) Schools, 3) Healthcare, and 4) Worksites. A full listing of these recommended actions are included in the Recommendations section (Section VI) of the report. Implementation of these recommended actions would go far

toward improving children's physical fitness. However, the Task Force has prioritized six key recommended actions, included below, within the purview of the Board of Supervisors, which can achieve the most significant impact in light of budgetary limitations.

# **OVERARCHING STRATEGIES:**

- <u>POLICY:</u> Establish and promote federal, state and local level policies that support physical activity and healthy eating among Los Angeles County children and youth through: 1) economic incentives/disincentives, 2) regulations, and 3) voluntary policies.
- PROGRAMS AND INITIATIVES: Increase the supply of effective interventions that promote physical activity and healthy eating in community, school, healthcare and workplace settings.
- RESEARCH AND EVALUATION: Conduct surveillance to determine and monitor the prevalence of overweight based on Body Mass Index (BMI) and chronic diseases associated with overweight in children, and promote research to determine the effectiveness of programs targeted at improving nutrition and increasing physical activity in Los Angeles County.
- <u>PUBLIC AWARENESS CAMPAIGNS:</u> Develop a public awareness campaign with specific focus on changing social norms to promote good nutrition and physical activity, and to educate the public and professionals about the risks of overweight and ways to prevent and treat overweight in children and youth.

# **KEY ACTIONS FOR THE BOARD OF SUPERVISORS:**

Within the context of these overarching strategies, the Task Force has identified six key actions for which the Board of Supervisors should take the lead; these actions can be carried out within a constrained budget environment and still have a significant impact on improving children's fitness:

Secure funding through grants, donations, taxation, and/or utilization of County general funds to support policies, programs, research, and public awareness campaigns to create an environment in Los Angeles County that encourages physical activity and healthy eating, and reduces the prevalence of overweight in children and youth. (Recommendation A-1, page 25)

- Promote joint/shared use of facilities among schools, parks, libraries, health care clinics and community-based organizations to increase opportunities for physical activity and healthy eating in community settings. (Recommendation A-2, page 25)
- Support development and passage of local, state, and federal legislation and policy that: 1) increases amount and quality of physical education and nutrition education mandated for school aged children, 2) increases the number of credentialed physical education and nutrition education teachers, 3) increases space allocated for physical education activities, 4) increases funding for adequate physical education equipment in schools, and 5) decreases physical education class size. (Recommendation A-10, page 26)
- Encourage all school districts to adopt the following SB 19 nutritional standards at all grade levels for foods sold outside of the federal meal program:
  - Food may have no more than 35% of its calories from fat and 10% of its calories from saturated fat.
  - **Food may have no more than 35% sugar by weight**
  - The only beverages that may be sold to students are milk, water, or juice that is at least 50% fruit juice with no added sweeteners. (Recommendation A-11, page 26)
- Implement a model comprehensive worksite wellness program for County of Los Angeles employees and promote comprehensive worksite wellness among other employers in Los Angeles County. A comprehensive program should educate, motivate, and empower adults, who are role models for children, to adopt healthy life style choices that improve their overall quality of life and consist of the following components: 1) policies and environments that support healthy eating, physical activity participation and breastfeeding promotion; 2) health promotion education; 3) targeted prevention and health screening services; and 4) comprehensive health insurance coverage. (Recommendation B-19, page 29)

Appoint accountable County department personnel to work in collaboration with community-based committees and agencies to develop an implementation plan of the recommendations and to monitor the plan's progress. (Recommendation C-1, page 29)

# **SECTION I: INTRODUCTION**

According to the Centers for Disease Control and Prevention (CDC) and the United States Department of Health and Human Services, there has been a dramatic increase nationwide in overweight and obesity among children and adults in the last twenty years, to the point that obesity has reached epidemic proportions. Approximately 45 million adults are considered obese and 8 million children are categorized as overweight contributing to approximately 300,000 deaths each year with the numbers of preventable deaths rivaling those related to cigarette smoking<sup>3</sup>. Along with rising rates of overweight in children are corresponding rises in adult obesity and obesity-related pediatric illnesses, some of which were rarely, if ever, seen in children 20 or 30 years ago including heart disease, hypertension, and Type II Diabetes. Nationwide, health conditions related to overweight and obesity are estimated to cost society over \$117 billion each year in medical expenses and lost productivity<sup>4</sup>.

Many factors contribute to overweight and obesity including genetics, metabolism, behavior, environment, and socioeconomic conditions. Some of these factors are beyond the control of individuals and families. For example, some children and their parents may not have access to, affordable produce or to safe, accessible places to exercise. Additionally, the food industry has played a role by increasing portion sizes at restaurants and targeting children in its advertising of non-nutritious food.

In terms of physical activity, several studies have shown an association between inactivity and poor health outcomes<sup>5,6,7</sup>. The reverse has also been demonstrated--weight and blood pressure can be lowered in children when physical activity is an integral part of the treatment regimen<sup>8</sup>. Despite the proven benefits of physical activity, more than 60% of American adults do not get enough physical activity to provide health benefits and approximately 25% are not active at all in their leisure time<sup>9</sup>. Although children and adolescents are more active than adults, 27% of young people in grades 9–12 do not regularly engage in moderate-intensity physical activity<sup>10</sup> and youth in general spend twice as much time watching television or playing video games as being physically active<sup>11</sup>.

As far as eating habits are concerned, most children in the United States do not meet national dietary recommendations. Only one in five children consume five or more servings of fruits and vegetables per day with french fries constituting nearly 25% of all vegetables consumed.<sup>12</sup> Sixteen percent of children and adolescents do not get the recommended food group servings and only 1% of children get all the recommended servings<sup>13,14</sup>. Not only does poor diet contribute to prevalence of chronic disease, it has been found to adversely influence the ability of children to learn and decrease motivation and attentiveness<sup>15</sup>.

As lifelong eating and physical activity patterns are established in early childhood, promoting a healthy lifestyle early in a child's development is essential. The nutrients physically present in a child during the early, growing years help determine how well and efficiently cells will function in the future, and because organ and tissue function determine essential body processes, alteration in normal development can have far reaching effects<sup>16</sup>. With this in mind, the Los Angeles County Task Force on Children and Youth Physical Fitness (Task Force) is focusing on

"fitness," rather than emphasizing weight loss or being thin. Optimal nutrition and regular physical activity contribute to fitness and can prevent immediate health problems such as: iron-deficiency, anemia, obesity, under-nutrition, eating disorders, and dental caries. Over the long term, optimal nutrition and regular physical activity can help lower the risk of chronic diseases including certain cancers, heart disease, stroke, diabetes and obesity.

### A Note on Defining Overweight and Obesity

The Body Mass Index or BMI is a commonly accepted screening tool used to identify children and adults who are, at risk of becoming overweight, overweight, or obese <sup>17</sup>. Children with BMI values at or above the 85<sup>th</sup> percentile and 95<sup>th</sup> percentile of the sex-specific BMI growth charts are typically categorized as at risk for overweight and overweight respectively. However, some researchers refer to the 95<sup>th</sup> percentile as overweight and others refer to it as obese. The terms "obesity and obese" are typically reserved for adults with a BMI at or above 30, which usually corresponds to the 95<sup>th</sup> percentile or greater BMI in children. A BMI of 30 in adults is equivalent to a 5'4" person who is 30 pounds overweight. The CDC avoids using the words "obese and obesity" when referring to children and identifies every child and adolescent above the 85<sup>th</sup> percentile as "overweight." The Task Force has adopted the CDC's definition of overweight as equal to or greater than the 85<sup>th</sup> percentile of the sex-specific BMI growth charts and does not use the terms "obese or obesity" when referring to children.

# SECTION II: HISTORY AND PURPOSE OF TASK FORCE

On January 29, 2002, the Board of Supervisors established the Los Angeles County Task Force on Children and Youth Physical Fitness, to include representatives from each Supervisorial district, the Los Angeles Unified School District, the Los Angeles County Office of Education and the Departments of Health Services, Children and Family Services, and Parks and Recreation. The Task Force's charge was to hold hearings and research the subject of physical fitness in children and to report back to the Board with recommendations to improve children's fitness.

To explore the problems and potential solutions related to physical fitness, the Task Force established four workgroups: 1) Individual and Families, 2) Communities, 3) Schools, and 4) Health Care. In addition, the Task Force held a community forum to obtain additional public input for this report and to call greater attention to the physical fitness status of the County's children. Further, Department of Health Services (DHS) staff conducted extensive research of published documents including, but not limited to, The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity (2001), and Healthy People 2010 goals. (See Appendix D for the Health People 2010 Goals: Summary of Objectives). The workgroups, community forum, and independent research provided the Task Force with critical information needed to develop these recommendations.

### WORKGROUPS

Many factors contribute to a child's risk of becoming overweight and there are multiple arenas in which to enact solutions. Based on this premise, the following four workgroups were created to define the major nutrition and physical activity issues; discuss existing resources and resource gaps; and develop recommendations for their respective settings:

Individuals and Families - Children's dietary and exercise habits are greatly influenced by their family's practices and cultural traditions. Therefore, families must be supported to maintain healthy eating and physical activity.

Communities - Children spend a significant amount of time in community settings that offer opportunities for healthy eating and physical activity. Community leaders can promote healthy lifestyles for children.

Schools – Most children spend the vast majority of their time in school. The availability of unhealthy food choices and insufficient opportunity for nutrition and physical education contribute to children's poor fitness and development of negative lifestyle habits.

Health Care - Health care providers are in a key position to identify children at risk for becoming overweight and recognize the associated health problems. Recommendations by health care providers can be influential in patients' dietary choices and physical activity patterns.

Los Angeles County Task Force on Children and Youth Physical Fitness Report to the Board of Supervisors History and Purpose of Task Force

The workgroups were comprised of Task Force members, members of the public, and DHS staff and provided an opportunity for members of the public to contribute their expertise to the Task Force recommendations. (See Appendix A-1 through A-5 for the workgroup discussion summaries.)

# **COMMUNITY FORUM**

The Task Force and the Third Supervisorial District sponsored a free community forum regarding children and youth physical fitness. The conference, held on April 29, 2002, provided an overview of the status of the nutritional health and physical fitness among children and youth and was attended by almost 400 people, including physicians, nurses, dietitians, health educators, teachers, social workers, representatives from community-based organizations, and parents. Breakout sessions corresponding to the Task Force workgroups provided the public an opportunity to engage in in-depth discussions with Task Force members, review and provide input on preliminary recommendations developed by the workgroups, and offer other recommendations for the report. A summary of public input obtained during the community forum as well as in the workgroups is included as an appendix to this report. (See Appendix A-1 through A-5.)

The conference also featured an information gallery displaying education material on 25 nutrition and physical fitness programs for children in Los Angeles County. This gallery was open to all nutrition and physical fitness related programs that chose to participate. (See Appendix B for a list of information gallery participants.)

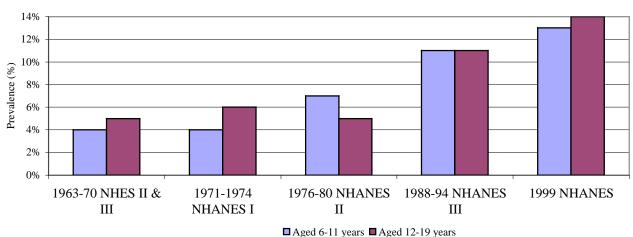
# **DEVELOPMENT OF RECOMMENDATIONS**

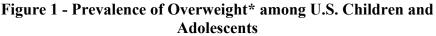
Drawing from community input, Task Force members' knowledge, and DHS staff research of national and state recommendations (see Appendix C - National and State Recommendations and Appendix E - Healthier US Initiative), the Task Force developed the recommendations proposed in this report. The recommendations are directed to the Board of Supervisors and appropriate County agencies as well as community institutions that address children's fitness. The Task Force recommendations are not intended to be an exhaustive list of action steps to decrease overweight in Los Angeles County children and youth. Rather, they represent the actions that are achievable and will have the greatest impact on improving children's fitness. Some of the recommendations go beyond the Board of Supervisors' purview, however, the Task Force hopes that the Board will endorse these recommendations and provide the leadership necessary to promote their implementation. While many of these recommended actions will require funding to implement, many others can be accomplished within a constrained budgetary environment. Implementation of these recommended actions would go far toward improving children's physical fitness. However, the Task Force has prioritized six key recommended actions (See Section VI Recommendations) within the purview of the Board of Supervisors, which can achieve the most significant impact in light of budgetary limitations.

# SECTION III: OVERVIEW OF CHILDREN'S FITNESS

### Prevalence of Overweight in the United States

According to the CDC and the United States Department of Health and Human Services, there has been a dramatic increase nationwide in overweight and obesity among children and adults in the last twenty years, to the point that overweight and obesity has reached epidemic proportions. Approximately 45 million adults are considered obese and 8 million children are categorized as overweight contributing to approximately 300,000 deaths each year with the numbers of preventable deaths rivaling those related to cigarette smoking<sup>18</sup>. Data from 1999 estimate that, in the United States, 13% of children aged 6 to 11 years and 14% of adolescents aged 12 to 19 are overweight (BMI >95<sup>th</sup> percentile). Figure 1 illustrates the dramatic increase of overweight among children and adolescents in the United States over the last three decades. During the past two decades the percentage of children who are overweight has nearly doubled, from 7% to 13%, and the percentage of adolescents who are overweight has almost tripled, from 5 % to  $14\%^{19}$ . Additionally, disparities in the prevalence of overweight exist, with minority groups and people with lower family incomes exhibiting the highest rates. For example: The highest prevalence of overweight in girls is found among non-Hispanic African Americans, with rates of 17%-31% for girls 6–11 and 15%-30% in 12–17 year-olds; For boys, the highest prevalence of overweight is found in Mexican Americans with 18%-33% of 6-11 year-olds and 13%-27% of 12-17 year-olds being overweight<sup>20</sup>.





\*Gender- and age-specific BMI >= the 95th percentile

Source: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), National Health Examination Survey (NHES), National Health and Nutrition Examination Survey (NHANES)

# Prevalence of Overweight in Los Angeles County

It is difficult to determine the prevalence of overweight among children in Los Angeles due to insufficient data. However, information does exist from which some conclusions can be drawn, though these conclusions must be qualified. According to the 1999 Pediatric Nutrition Surveillance Statewide Summary Report, the estimated prevalence of overweight among low-income children ages 0-17 in Los Angeles County was 16%, as illustrated in Table 1. This rate is higher than the national rates of 13% for children aged 6 to 11 years and 14% for adolescents aged 12 to 19, as Figure 1 indicates. The caveat for interpreting this data is that the data was obtained from the total number of Children's Health and Disability Prevention (CHDP) clinic visits, rather than the total number of patients. Therefore, if overweight children are over-represented in these clinic visits, the data could <u>over</u>estimate the percentage of overweight children. Similarly, if underweight children or children with adequate weights are over-represented in these clinic visits, the data could <u>under</u>estimate the percentage of overweight children.

# Table 1: Estimated Prevalence of Overweight of Children #171999 Pediatric Nutrition Surveillance, Los Angeles County Summary Data

Area	Total*	Overweight** (%)
L.A. South	133,391	16.9
L.A. West	45,626	16.4
L.A. East	153,968	16.1
L.A. North	100,626	14.8
Other	100,027	15.8
Pasadena	6,209	12.9
Long Beach	21,637	15.7
Total	561,484	16.0

\* Total number records received in 1999

\*\* Defined as Weight-for-Height >95 percentile of NCHS/CDC Growth Reference Population.

The 2001 Youth Risk Behavior Surveillance<sup>21</sup> study asked youth in grades 9-12 their heights and weights in order to calculate BMI to determine the percent of students that are overweight (BMI > 95 percentile) and at risk for becoming overweight (BMI = 85 percentile). Based on these data, 12.4% of students were classified as overweight and 16.5% of students were classified at risk for becoming overweight in Los Angeles County, compared to at 10.5% and 13.6% respectively in the United States. These percentages may not accurately represent the prevalence of overweight because they are based on students' self report of their height and weight. However, the data provide useful information on how the percentage of overweight students is greater in Los Angeles than in the United States.

A study of overweight in low-income Los Angeles elementary school children conducted by the University of California, Los Angeles<sup>22</sup> found that 37.6% of the children in grades 2-5 had a BMI at or above the 85<sup>th</sup> percentile. Table 2 illustrates a breakdown of the risk for overweight and overweight by sex, race/ethnicity, and grade/age.

Los Angeles County Task Force on Children and Youth Physical Fitness Report to the Board of Supervisors Overview of Children's Fitness

Group		At risk for overweight (85-94 percentile)	Overweight (≥95 percentile)	Total at risk for overweight and overweight (≥85 percentile)
Sex	Male	13.1	29.4	42.5
Sex				
	Female	13.8	20.0	33.8
	Total	13.5	24.1	37.6
Race/Ethnicity	Hispanic	13.8	28.7	42.5
	African American	14.2	20.1	34.3
	Asian	9.0	12.8	21.8
Grade/Age	2 <sup>nd</sup> (7-8 yrs)	11.3	25.7	37.0
	3 <sup>rd</sup> (8-9 yrs)	9.8	24.5	34.3
	4 <sup>th</sup> (9-10 yrs)	14.7	21.1	35.8
	5 <sup>th</sup> (10-11 yrs)	17.7	24.9	42.6

# Table 2: Prevalence of Overweight by Body Mass Index (n=919)

# Overview of Physical Fitness in Los Angeles County

In the State of California, all students in grades 5, 7, and 9 are required to take the California Physical Fitness test in order to assess children's physical fitness in six health fitness areas: aerobic capacity, body composition, abdominal strength, trunk extension strength, upper body strength and flexibility<sup>23</sup>. Students must meet all six standards in order to be considered fit. Table 3 highlights various test results for Los Angeles County, with some comparisons to children statewide, and a breakdown of the data by gender and race/ethnic group.

According to the data in Table 3, a little over half of the 5<sup>th</sup> and 7<sup>th</sup> grade students and less than half of the 9<sup>th</sup> graders (41.9%) in Los Angeles County achieved the minimum fitness standard for aerobic capacity, perhaps the most important single indicator of physical fitness. Overall, children in Los Angeles County fared worse than students statewide in terms of aerobic capacity and the percentage of students who passed the six fitness standards. Table 3 also indicates that there are no major differences in physical fitness between boys and girls in 5<sup>th</sup> and 7<sup>th</sup> grade. However, in 9<sup>th</sup> grade girls' scores fall dramatically. When the data are broken down by race/ethnic group, African Americans and Latinos have consistently lower rates of physical fitness in 9<sup>th</sup> grade.

	Grade 5	Grade 7	Grade 9
Overall:	(132,730 tested)	(114,514 tested)	(95,665 tested)
Percentage of students who passed Aerobic Capacity fitness standard			
Los Angeles County	53.7%	52.9%	41.9%
California	55.7%	58.0%	48.9%
Percentage of students who passed 6 of 6 fitness standards			
Los Angeles County	18.9%	20.5%	18.4%
California	21.3%	24.9%	22.6%
By Gender (L.A. County):			
Percentage of students who passed Aerobic Capacity fitness standard			
Female	53.0 %	52.9%	33.9%
Male	53.4%	52.0%	46.5%
Percentage of students who passed 6 of 6 fitness standards	10.2%	20.7%	14.50
Female	19.2%	20.7%	14.5%
Male	18.3%	20.0%	20.6%
By Race/Ethnicity (L.A. County):			
Percentage of students who passed Aerobic Capacity fitness standard			
Latino	52.6%	50.3%	38.9%
African American	48.7%	45.5%	37.3%
Asian/Asian American	56.1%	61.4%	50.7%
Caucasian	60.5%	61.4%	48.1%
Percentage of students who passed 6 of 6 fitness standards			
Latino	15.8%	16.5%	15.1%
African American	17.3%	17.4%	16.0%
Asian/Asian American	25.7%	32.0%	27.9%
Caucasian	27.5%	29.5%	24.1%

 Table 3: California Physical Fitness County Report: Los Angeles County (2001)

# Overview of Nutrition

In addition to physical activity, healthy eating is essential for preventing health problems and optimizing childhood growth and development. A poor diet contributes to a greater prevalence of chronic disease, and it has been found to adversely influence the ability of children to learn as well as decrease motivation and attentiveness<sup>24</sup>. Unfortunately, high calorie low nutrient density foods are widely available and often viewed as more affordable than healthy food choices.

Los Angeles County Task Force on Children and Youth Physical Fitness Report to the Board of Supervisors Overview of Children's Fitness

Children consume high amounts of fast food in Los Angeles County. As reported by their parents, 18% of children ages 2-5 and 24% of children ages 3-17 countywide whose families are above 300% of the poverty level had eaten fast food in the past 24 hours<sup>25</sup>. Many families in Los Angeles County may not consume as many healthy foods as they need because they lack access to supermarkets or farmers' markets in their neighborhoods and therefore must pay more in smaller markets, where the produce is often more expensive and not as fresh<sup>26</sup>. Additionally, focus groups conducted in Los Angeles County revealed that inadequate intake of fruits and vegetables is further compounded because people often do not buy frozen, canned or dried products as they are viewed as less nutritious than fresh produce. When asked if canned or frozen fruits and vegetables were an option for them, most Latino women stated that they were not<sup>27</sup>.

# Risk Behaviors Related to Diet and Physical Activity

The Youth Risk Behavior Surveillance System (YRBSS) monitors health-risk behaviors among youth and young adults, including unhealthy dietary behaviors and physical inactivity. Table 4 highlights key risk behaviors of students in grades 9 - 12 in the areas of diet and physical fitness, comparing Los Angeles with the rest of the United States.

	Los Angeles 2001	United States 2001
Percentage of students who describe themselves as slightly or very overweight	31.4%	29.2%
Percentage of students who were trying to lose weight	49.7%	46.0%
Percentage of students who ate five or more servings of fruits and vegetables per day during the past seven days	21.6%	21.4%
Percentage of students who did not participate in at least 20 minutes of vigorous physical activity on three or more of the past seven days and did not do at least 30 minutes of moderate physical activity on five or more of the past seven days	34.5%	31.2%
Percentage of students who attended physical education class daily	55.1%	32.2%
Percentage of students who watched three or more hours of TV per day on an average school day	44.6%	38.3%

# TABLE 4 - YRBSS DATA FOR LOS ANGELES AND UNITED STATES 2001<sup>28</sup>

Los Angeles County Task Force on Children and Youth Physical Fitness Report to the Board of Supervisors Overview of Children's Fitness

# Health Effects of Overweight Among Children

Along with rising rates of overweight in children are corresponding rises in obesity-related illnesses, some of which were rarely, if ever, seen in children 20 or 30 years ago. Diabetes, hypertension and other obesity-related chronic diseases that are prevalent among obese adults have now become more common in children and adolescents who are overweight<sup>29,30,31</sup>. In addition, studies indicate that excess weight in childhood and adolescence has been found to predict overweight in adults.<sup>32,33,34,35,36</sup>. Eighty percent of overweight children become obese adults<sup>37</sup>. Moreover, individuals who are overweight during childhood and particularly adolescence have increased rates of obesity and morbidity and mortality later in life<sup>38</sup>. Thus, not only are overweight children becoming afflicted with obesity-related diseases they rarely faced a couple decades ago, but their chances of battling obesity-related diseases as adults are greater if they are overweight as children. Overweight and obesity contribute to approximately 300,000 deaths each year in this country, a number that rivals deaths related to cigarette smoking<sup>39</sup>. In addition to physical problems, overweight children have an increased likelihood of emotional and social problems. There are a number of negative psychosocial factors experienced by children and adolescents who are overweight, i.e., lack of friends and support networks, feelings of depression or inadequacy, an overall poor sense of well-being, and a lack of resources to help with a weight problem or becoming overweight in the first place. It has been reported that as early as six years old, overweight children have been described as lazy, stupid, ugly, and dishonest<sup>40</sup>.

### Financial Implications of Children's Poor Physical Fitness

The costs of obesity are high. The total 2000 annual cost in the United States associated with obesity was \$117 billion (\$61 billion in direct costs, including healthcare; \$56 billion in indirect costs, including lost productivity and earnings lost)<sup>41</sup>. In addition to concern for children's wellbeing, there are clear economic implications to the rise in overweight children. As lifelong eating and physical activity patterns are established in early childhood, promoting a healthy lifestyle early in a child's development is essential.

# SECTION IV: CONTRIBUTING FACTORS TO OVERWEIGHT IN CHILDREN

For most people, overweight and obesity are the result of excess calorie consumption and/or inadequate physical activity. However, there are multiple factors contributing to a nationwide increase in the consumption of high-caloric, non-nutritious food and a decline in physical activity. Some of these factors are beyond the control of individuals and families. For example, some children and their parents may not have access to affordable produce or to safe, accessible places to exercise. The epidemic is further perpetuated by a complex set of social and environment factors including: 1) lack of funding to promote healthy eating and physical activity, 2) schools that provide insufficient health and physical education and sell vast amounts of soda and junk food, 3) corporations that have an economic incentive to promote the sale of large proportions of high-fat and high-sugar foods, and 4) lack of political leadership addressing the epidemic<sup>42</sup>.

Regular physical activity and healthy eating substantially reduces the risk for developing many chronic diseases, including: heart disease, stroke, osteoporosis, diabetes, and certain types of cancer. However, despite the proven benefits, Americans are not regularly physically active nor are they consuming a healthy diet. Contributing factors to overweight in children include both barriers that individuals and families experience to healthy eating and physical activity and factors involving the communities where families live, work, and go to school. Some of these contributing factors are described below:

# **INDIVIDUALS AND FAMILIES:**

<u>Parental Role Models</u>: According to Moore, et al.,<sup>43</sup> children 4-7 years old are much more likely to be physically active if their parents are active. The authors felt this could possibly be due to a genetic predisposition to activity, but is more likely due to parents being role models and having the children share in family activities. Another study by Klesges et al.<sup>44</sup> showed that parents' actual participation in children's activities, rather than just "commanding" them to be active, was more related to the actual activity levels of the pre-school child. Similarly, parents who regularly play with their children and provide transportation to activities have more active children<sup>45</sup>. Thus, lack of family involvement appears to be a barrier to children engaging in physical activity.

<u>Sedentary Activities</u>: Despite the proven benefits of physical activity, more than 60% of American adults do not get enough physical activity to provide health benefits and approximately 25% are not active at all in their leisure time<sup>46</sup>. Although children and adolescents are more active than adults, 27% of young people in grades 9–12 do not regularly engage in moderate-intensity physical activity<sup>47</sup>. Activities such as playing video and computer games, and watching television have replaced traditional recreational pursuits that involve more physical activity. One study found that one-quarter of children in the United States spend 4 hours or more watching television daily<sup>48</sup>.

Los Angeles County Task Force on Children and Youth Physical Fitness Report to the Board of Supervisors Contributing Factors to Overweight in Children

<u>Time</u>: Families working full time, sometimes with multiple jobs, report having little time for exercising regularly and preparing and eating meals. The abundance of fast food provides a convenient substitute to cooking and is often perceived as a low cost alternative.

<u>Availability of Healthy Food:</u> Some families, even if they wanted to cook with fruits and vegetables, do not have access to neighborhood supermarkets or farmers markets and must shop in small stores where there is less turnover and the produce is often not as fresh. Fast food restaurants are more prevalent in some neighborhoods than supermarkets with healthier alternatives.

<u>Family and Cultural Preferences</u>: Food is closely tied to family preference and cultural practices: Families accustomed to buying and preparing low nutrient foods high in unhealthy fat, sugar, and salt are likely to pass those preferences on to their children. Parental eating habits influence children's food preferences<sup>49</sup>.

Eating Habits: Most children in the United States do not meet national dietary recommendations. Only one in five children consume five or more servings of fruits and vegetables per day with french fries constituting nearly 25% of all vegetables consumed<sup>50</sup>. Sixteen percent of children and adolescents do not consume the recommended servings from any food group and only 1% of children meet all the recommendations<sup>51,52</sup>. Not only does poor diet contribute to prevalence of chronic disease, it has been found to adversely influence the ability of children to learn and decrease motivation and attentiveness<sup>53</sup>.

Lack of Knowledge: Parents and children are not always aware of the following: heath risks and benefits associated with nutrition and physical activity; what is meant by "regular physical activity and what types of activities qualify as either moderate or vigorous intensity; what is meant by a "balanced diet" or how to prepare nutritious foods; that premature introduction of solid foods and lack of breastfeeding is associated with being overweight in childhood; and how to overcome perceived barriers and incorporate physical activity and healthy eating into daily routines.

<u>Readiness to Change:</u> Teaching people about nutrition and physical activity and providing access to healthy food choices and opportunities to participate in physical activity does not automatically lead to a change in behavior. Individuals are not always ready to make change or they perceive change as not possible for them. Helping parents and children feel that they have the power to make a change involves giving them the knowledge they lack and allowing them to create their own plan. Usually a plan that takes little money, time, or effort is easiest to implement.

# **COMMUNITIES:**

<u>Support:</u> The ability to initiate and maintain behavior change is dependant upon a social support network. Unfortunately such networks often do not exist when people are attempting to adopt healthy behavior changes. For example, lack of support by the general public and in the workplace directly affects the length of time women breastfeed, which is one of the few evidenced-based interventions to help prevent overweight in children.

Los Angeles County Task Force on Children and Youth Physical Fitness Report to the Board of Supervisors Contributing Factors to Overweight in Children

<u>Safety:</u> Environmental barriers, including neighborhood safety, accessibility, opportunities, and aesthetic attributes are associated with physical inactivity among adolescents and adults<sup>54</sup>. Some communities may offer unsafe and/or run down public spaces, while others may not have any public facilities for physical activities. In Los Angeles County, 25% of parents with children under the age of five report that they do not have easy access to a safe park or playground and 33% of parents living at the federal poverty level reported living out of range of a safe play area for their children<sup>55</sup>.

# **SCHOOLS:**

<u>Nutrition Education</u>: Health education for students is not provided in all grades, and nutrition education is a small component of the health education curriculum, overshadowed by other subjects such as education on drugs, alcohol, tobacco, and HIV/AIDS that have funding associated with them.

<u>Physical Education</u>: The reduction in physical education in schools has resulted in decreased time for children to be physically active each day and as previously discussed, results from the California Physical Fitness test indicate very poor fitness levels. In the mid-20<sup>th</sup> century, California was the nation's leader in physical education programs<sup>56</sup>, but such programs have been cut as a result of Proposition 13 and a heavy emphasis on literacy. Some issues related to physical education include:

Current physical education requirements do not mandate daily activity and have sometimes been interpreted in ways that provide periods of time with no physical activity at all. Students have been allowed an exemption from physical education for any two years during grades ten through twelve since 1978 (Education Code Section 51241). Physical education class sizes are almost always much larger than other classes, and often exceed 50 or more students per class. With classes this large, there can be much "down time," when students are standing around waiting for their turn to participate. There are not enough credentialed physical education teachers, and classroom teachers are not sufficiently prepared on how to incorporate physical activity into the school day. There is not enough space for physical education, especially indoor space. Many schools are overcrowded, have outdated facilities, and have converted all indoor space to classrooms.

<u>Food Served at Schools</u>: Several factors contribute to children and youth not eating healthy foods during school hours.

Reimbursement rates for school lunches are low, contributing to less than optimal food quality and choices.

There is insufficient and outdated space for cafeteria services in many schools, thus food can only be reheated rather than cooked. In addition, there is often no room for salad bars since salad bars must be indoors and most indoor space has been converted to classrooms.

Secondary school students are embarrassed to use school lunch/breakfast program tickets, which results in skipping meals or purchasing unhealthy foods from vending machines and student stores.

Los Angeles County Task Force on Children and Youth Physical Fitness Report to the Board of Supervisors Contributing Factors to Overweight in Children

Because lunch times must be staggered, some students eat early in the day. In addition, cafeteria lines are long, so students have little time to eat. They often skip meals or as an alternative purchase items from vending machines or student stores where most of the selections available are high in calories, unhealthy fat, and sugar and low in vital nutrients.

<u>Junk Food in Schools</u>: With budget cuts for non-academic programs and extracurricular activities, schools raise revenue from sales of competitive foods – foods sold a la carte, in vending machines, in school stores, or as part of fundraisers<sup>57</sup>. These foods are not regulated for nutritional content and are typically considered "junk food" that is high in calories, unhealthy fat, and sugar. Carbonated beverages are widely available in schools, and are the leading source of added sugar in children's diets. School water fountains are often inoperable and when bottled water is offered in vending machines, it is more expensive than soda. Many secondary level schools contract with fast food vendors, both to raise revenue for school programs and to keep students from leaving campus during lunch.

# **HEALTHCARE:**

<u>Insurance Reimbursement</u>: Children who are at risk for becoming overweight should receive a nutrition and physical fitness assessment during well child exams and other medical encounters. However, there are no prevention assessment or treatment standards and insurance reimbursements do not cover health care costs associated with preventing overweight. Developing a standard to assess children's eating and physical activity patterns before a child is categorized as overweight provides an opportunity for health care providers to work with families to reverse negative behaviors.

<u>Medical Training</u>: One of the difficulties in implementing assessment and treatment standards is related to the lack of training received by physicians. In 1990, the US Congress passed the National Nutrition Monitoring and Related Research Act, which mandated "that students enrolled in United States medical schools and physicians practicing in the United States have access to adequate training in the field of nutrition and its relationship to human health"<sup>58</sup>. However, only less than 25% of medical schools in the United States require instruction in nutrition, and although approximately 50% of schools offer it as an elective, as few as 6% of students enroll in the nutrition electives<sup>59</sup>. Many schools integrate nutrition concepts into basic science courses such as biochemistry and physiology, but studies have indicated that, when taught in this manner, students often do not recognize the concepts as nutrition and the role of diet in disease prevention is not adequately highlighted<sup>60</sup>. There is even less instructional time in the clinical years of most medical schools<sup>61</sup>, and, predictably, student interest in nutrition tends to wane as clinical training progresses<sup>62</sup>. It is clear that providing access to nutrition education is not sufficient.

Physical activity education in medical schools is given even less time than nutrition education. In addition, medical students are not educated on how to effectively counsel or treat overweight and obesity in their patients. Thus, once in medical practice, most physicians feel uncomfortable raising the issue of overweight and obesity for lack of knowledge as to appropriate treatment and follow-up<sup>63,64</sup>. At best, physicians refer patients to nutritionists, but have no specific resources

Los Angeles County Task Force on Children and Youth Physical Fitness Report to the Board of Supervisors Contributing Factors to Overweight in Children

for physical activity referrals for their patients. Until such training is mandatory in schools, institutions can fill this gap by making nutrition and physical activity training mandatory as a condition of employment. Developing and providing a local area resource guide to health care professionals that includes referral information such as nutritionists, physical activity opportunities, and weight management programs can increase the likelihood that health care providers will address a patient's weight. This is especially important because patients who receive weight management programs than those who do not<sup>65</sup>.

# **FOOD INDUSTRY:**

Increased Availability of High Calorie Foods and Bigger Portion Sizes: Many restaurants and other food service providers have increased portion sizes to improve the perceived 'price-value ratio,' which in turn may influence consumers' perceptions of what a portion or serving are<sup>66</sup>. Although the choice of food alone may not necessarily be unhealthy, the portion size is. Further, a study published in the Journal of the American Dietetic Association found that children above the age of five were encouraged to eat more than necessary when they were offered larger than recommended portions<sup>67</sup>.

<u>Advertising Targeted to Children</u>: According to the California Centers for Public Health Advocacy, the food industry spends approximately \$25 billion a year on advertising and promotions to influence eating habits: Of that, only 2% of food advertising expenditures are for fruits and vegetables; four out of five food ads aimed at children are for sugary cereals, unhealthy snack foods, candy, soft drinks, and fast food. Additionally, promoting food sales through toy distribution is a highly effective strategy targeting children under age three<sup>68</sup>. Children are extremely susceptible to advertising and their demands for particular foods influence buying patterns of parents<sup>69</sup>.

# SECTION V: RATIONALE FOR RECOMMENDATIONS

### **POLICY:**

One of the most effective ways to promote fitness and prevent children from becoming overweight is to change social norms about nutrition and physical activity, just as social norms have been changed about smoking. At one time, cigarettes were easily accessible and relatively inexpensive, smoking was common in workplaces and other public places, and advertising was widespread. Through policy changes, legislative actions, and litigation much of this has changed. Most importantly, the way the public thinks about smoking has changed, particularly in California – it would now seem strange to light up a cigarette at work or at a restaurant. Similar policy and legislative actions should be developed around physical fitness and nutrition, to promote a similar social norm change over time.

The federal government has recognized the importance of overweight in childhood through the recent Surgeon General's report and the President and Director of Health and Human Services calling attention to the issue of physical fitness. However, funding must be allocated to support policies and promote programs that encourage children and adolescents to develop healthy lifelong eating and physical activity habits. In 2001 the National Institutes of Health spent \$222.6 million for obesity research, compared to \$1,723.1 billion for research on cardiovascular disease and \$688.1 million for diabetes of which obesity is a major risk factor<sup>70</sup>. In that same year, the CDC spent approximately \$16 million on nutrition, physical activity and obesity. In comparison, the CDC spent \$100 million on tobacco control<sup>71</sup>, even though the rate of preventable deaths due to obesity-related illness rivals that of smoking-related illness.

Proposition 99 and later Proposition 10 are successful tobacco tax initiatives that provide a financial barrier to smoking as well as raise revenue for health and developmental programs. Other states have applied this successful strategy. Currently Arkansas, Missouri, Rhode Island, Tennessee, Virginia, Washington, West Virginia and Chicago have applied specific taxes to carbonated beverages<sup>72</sup>. Arkansas' tax generates over \$40 million per year to support its Medicaid program<sup>73,74</sup>. If California could pass similar legislation, an estimated \$512 million to promote healthy eating and physical activity could be generated<sup>75</sup>. While several state legislators are attempting to introduce laws to tax soda and snack foods and/or limit the sales of the products on elementary or high school campuses, it has been an uphill battle. California voters passed Proposition 163 in 1992 forbidding taxation of candy, gum, and other snack foods. California State Senator Deborah Ortiz's Senate Bill 1520 to impose a \$0.02 soda surcharge recently failed to pass the Senate Education Subcommittee.

The proposed state school bond, AB 16, provides another opportunity for securing funding to promote nutrition and physical activity in schools. Los Angeles County stands to qualify for approximately \$4 billion in AB 16 school construction funds and approved park and library bond measures<sup>76</sup>. According to the New Schools - Better Neighborhoods organization, these funds will be dedicated to creating incentives for urban school districts and municipalities to jointly build mixed-use projects that co-locate schools with parks, libraries, health facilities and other public infrastructure. Building schools that serve as safe centers for their communities is

a concept endorsed by the U.S. Department of Education. The concept calls for accommodating both school and community needs such as having gymnasiums and play fields double as community parks and recreation centers and auditoriums to serve as community theaters. By utilizing school property beyond regular class hours and incorporating centralized libraries, health clinics and other community services, community access and engagement is increased. Strategic and collaborative planning and building efforts serve to reduce urban sprawl, increase green space, and promote prosperous, livable and healthy communities.

### **PROGRAMS AND INITIATIVES:**

Improving physical fitness requires behavioral change at the individual level; however, this change is greatly facilitated by having a supportive environment. Programs are needed to address individual needs, and should be offered in a wide range of settings to create the environment conducive to behavioral change.

### Community Programs and Initiatives:

Broad community-wide programs are needed for several reasons<sup>77</sup>:

- Children and adolescents spend considerable amounts of time in community settings that are conducive to physical activity, and they eat in multiple settings throughout the community.
- Community-based programs have the capacity to involve parents and other adult role models (e.g. relatives, religious leaders, sports coaches) from the community who can strongly influence the dietary and physical activity behavior among children.
- Community activities, in contrast with school programs, often involve children in informal activities that are not affected by the pressures of grades and competition. Thus, children may feel more comfortable learning in a community-based environment.

The California Healthy Cities and Communities project of The Center for Civic Partnerships<sup>78</sup> has assisted communities to promote healthy eating and physical activity by encouraging broad community participation and enacting systems change. To share what they have learned from these experiences, they have documented critical lessons that can assist Los Angeles County in its own efforts to promote healthy lifestyles for children and families:

- <u>Build Capacity</u>: Effective programs emerge from priorities and concerns of residents and community-based organizations. Establish a steering committee of diverse stakeholders and promote leadership development and ongoing training opportunities for staff and volunteers to learn about effective community-based nutrition and physical activity strategies.
- <u>Form Partnerships</u>: Identifying and building relationships with diverse partners is particularly important. The most successful programs engage residents from the beginning.
- <u>Build on Existing Successful Programs:</u> Build alliances with groups that have a similar mission. Cities have been successful in expanding existing programs with community resource centers, schools, and neighborhood associations.

- <u>Develop and Implement Policies</u>: Policies are inexpensive ways to achieve long-term goals. Examples of policies include: providing free or low-cost water to community and school gardens and offering healthy and appealing food choices, including fresh produce from local farms and farmers' markets, at various sites and limiting the marketing and availability of less healthy choices at sites where children are present (teen center, after school programs, etc.).
- <u>Work with Youth to Engage Adults:</u> Youth can provide an effective "entry point" to busy adults with little free time to participate in physical activity and nutrition programs. Since children and adolescents rely on adults to purchase food items and to provide them with transportation to activities where they will engage in healthy eating and physical activity, including parents in programs is a good strategy to educate them on the importance of healthy lifestyles. An example is an intergenerational cooking class.
- <u>Assure Sustainability:</u> Programs, policies and plans to promote healthy eating and physical activity are long-term investments and require ongoing review and re-evaluation. Support needs to be cultivated among a wide array of stakeholders.
- <u>Working with Diverse Community Members:</u> When diverse community members are involved in the process of assessment and program design, programs will be communitycentered, that is, tailored to the particular needs of community members, such as literacy levels, language and cultural preferences and access to needed resources. Any number of program ideas can emerge from this inclusive process.

In addition to the need for communities to offer programs that encourage healthy eating and physical activity, it is important for local leaders to work together in networks and coalitions. Such joint efforts enable collaboration among programs for greater effectiveness and bring people together as a collective voice to address pressing issues related to preventing children from becoming overweight.

### Environmental Programs and Initiatives:

Environmental programs and initiatives contribute to behavior change by advocating for and implementing measures that will make it easier for people to engage in physical activity and healthy eating habits, whether they are aware of it or not. Examples of environmental programs and initiatives may include: creating safe health-friendly community and transportation infrastructures, including parks, bike trails, and walkways; maximizing space by co-locating schools with parks, libraries, health facilities and other public infrastructure; developing parks, playgrounds or community produce gardens in vacant lots, accessible rooftops or surplus public lands; linking local farms to city sponsored and community based programs<sup>79</sup>; and encouraging affordable high quality grocery stores, farmers markets, and community gardens to be established in low-income neighborhoods. Environmental barriers, including neighborhood safety, accessibility, opportunities, and aesthetic attributes are associated with physical inactivity among adolescents and adults<sup>80</sup>. Some communities may offer unsafe and/or run down public spaces, while others may not have any public facilities for physical activities. The Los Angeles

Health Survey found that 25% of parents with children under the age of five do not have easy access to a safe park or playground and 33% of parents living at the federal poverty level reported living out of range of a safe play area for their children<sup>81</sup>.

In order to create a supportive environment, material, human and political resources need to be in place. Communities require different levels of support depending on the characteristics of the target population and surroundings. According to the U. S. Department of Health Services and CDC <sup>82</sup>, in order for community members to achieve and maintain a healthy lifestyle, the following must be provided:

- A social network in which people are supportive of one another's efforts to be physically active and maintain healthy eating patterns;
- A variety of favorable, safe and culturally appropriate conditions and opportunities;
- A political infrastructure where policies and legal incentives exist to support a person's desire to achieve and maintain a physically active and nutritionally healthy lifestyle, while removing or altering real or perceived social, physical and political barriers to being active.

With political support and collaborations of key stakeholders, activities can be implemented to create environments supportive of physical activity and good nutrition.

### Schools Programs and Initiatives:

Promoting healthy behaviors among students is an important part of the fundamental mission of schools: to provide young people with the knowledge and skills they need to become healthy and productive adults. Improving student health can:

- o increase students' capacity to learn,
- o reduce absenteeism,
- improve physical fitness and mental alertness
- o reduce medical costs, and
- decrease the incidence of chronic disease.

School efforts to promote physical activity and healthy eating should be part of a coordinated, comprehensive school health program. A Coordinated School Health Program (CSHP) includes an integrated set of planned, sequential and school affiliated strategies, activities, and services designed to promote the optimal physical, emotional, social, and educational development of students. Based on an eight component model developed by the CDC, a CSHP includes; 1) Health Education, 2) Physical Education, 3) Health Services, 4) Nutrition Services, 5) Health Promotion for Staff, 6) Counseling and Psychological Services, 7) Healthy School Environment, and 8) Parent/Community Involvement. (See Appendix A-3 for actions to be taken in each component.)

The School Health Index is a self-assessment and planning guide developed by the CDC that will enable school personnel to:

- identify the strengths and weaknesses of each school's health promotion policies and programs,
- o develop an action plan for improving student health, and
- o involve teachers, parents, students, and the community in improving school services.

Healthy eating and regular physical activity help young people stay in shape, feel good, do their best at school, and avoid developing risk factors that can eventually lead to heart disease and cancer. Unfortunately, most young people don't meet physical activity and nutrition recommendations, and more children and adolescents are overweight than ever before.

### Food Industry:

According to the results of the American Dietetic Association's latest nationwide public opinion survey, Nutrition and You: Trends 2002, Americans tend to overestimate the recommended serving sizes for many foods. Also, many restaurants and other foodservice providers have increased portion sizes to improve the perceived 'price-value ratio,' which in turn may influence consumers' perceptions of what a portion or serving is<sup>83</sup>. Further, a study published in the Journal of the American Dietetic Association found that children above the age of five were encouraged to eat more than necessary when they were offered larger than recommended portions<sup>84</sup>. Therefore, restaurants and other foodservice providers, i.e., private weight loss companies, food banks, supermarkets, etc. should be encouraged to offer portion appropriate meals to children while also making them nutritious, according to USDA guidelines. In addition, nutrition education should be visibly displayed by foodservice providers through the use of point of decision marketing, i.e., a healthful logo depicted next to healthy alternatives on a menu or poster size education material posted in supermarkets that represent healthy portions and serving sizes, etc. To encourage participation, an incentive system could be developed to recognize and reward foodservice providers that provide healthy sensible alternatives to their existing items.

Beyond the aforementioned findings that support modification of food portions, quality assurance targeted toward children, and increased nutrition education to prevent the risk of becoming overweight; different marketing strategies by the food and fitness industry also need to be considered. Food manufacturers spent \$7 billion on advertising in 1997 and the greatest expenditures tend to be for the most highly processed and highly packaged foods<sup>85</sup>. Further, food advertising influences adult buying patterns, as well as children's demands for particular foods<sup>86</sup>. Therefore, more needs to be done by the county and its community members to advocate on behalf of advertisements that promote healthy eating through supporting: healthy vending machine options and marketing of health alternatives in schools to counter current fast food and soda companies; equal broadcasting time for messages promoting healthy eating and physical activity; and encouraging programs that provide food to children such as food banks, childcare programs, schools, etc. to work with farmers markets in order to provide fresh fruits and vegetables to low income families. Collectively, effort also needs to be put toward targeting and securing financial support for schools through healthy alternative industries, i.e., health, fitness, and sports clothing industry. Lastly, cities need to be encouraged to allow community input through the zoning or city planning process when decisions are made concerning the location of new fast food restaurants.

# Worksite:

Parents and caregivers can be positive role models for children and youth by participating in physical activity, eating healthy and communicating consistent and positive messages that physical activity and eating healthy foods is enjoyable and important. The attitudes and behaviors of parents and caretakers directly influence the choice of foods among children and adolescents<sup>87</sup>. Parents control most of the food choices available at home, thus changing the eating behaviors of parents may be one effective way to change eating behaviors in their children. Additionally, children and youth who are physically active usually have parents or other family members who encourage them to participate in physical activity with them, watch them play or compete, and are physically active themselves<sup>88</sup>.

Employers can help their employees to become effective family role models as well as positively affect the health of their employees by establishing policies and environments that support healthy eating, physical activity participation and breastfeeding. A review of corporate wellness programs conducted by Goetzel et al. reported that health education, early disease detection and appropriate interventions, and health programs are needed in order to maximize returns from investments in wellness programs<sup>89</sup>. Wellness programs have the potential to decrease absenteeism, reduce medical claims costs, and improve employee productivity, recruitment, and retention.

Programs that have shown the greatest return on investment have included these major components and programs<sup>90,91,92,93</sup>:

- Assessment activities to determine employee health. Results are used to identify health risks and provide insight to employers as to what the most pressing issues are in their organization.
- Health screenings for early detection and treatment of health problems.
- Communication materials such as newsletters, paycheck stuffers, posters and bulletin board notices must be distributed on an ongoing consistent basis to provide accurate wellness updates. This is especially important for multi-employer organizations who may find it difficult to reach employees working at different work-sites.
- Readily available self-help materials.
- Self-Care programs geared towards teaching employees to become wiser consumers of their health care benefits. Some examples of self-care programs include; self-care workshops, nurse advice lines, self-care software, educational and promotional materials. "Studies show that about 75% of people who receive a self-care guide will use it at least one time within six months." Of all the items included in implementing a wellness program, the inclusion of self-care appears to provide the most consistent return on investment.
- Incentives to reward people for healthy behavior have been shown to be tremendously effective. Motivation is the key to success.
- $\circ~$  Involve the employee's family. "Employees account for only about 30% of health care cost, while dependents account for the remaining 70%  $^{94}$ ."
- It is important to identify hazardous working conditions and make changes before a program is implemented.
- Ongoing evaluation is critical to the long-term success of a wellness program.

Promoting wellness programs can have a substantial impact on profitability by reducing health care costs, increasing productivity, decreasing absenteeism and by providing a positive, healthy work environment. Worksite wellness programs not only contribute to the effort to reduce preventable deaths, diseases, and disabilities but also can assist in promoting healthy lifestyles for the whole family. In addition, wellness programs may be one of the few employee benefits that pays money back to the organization.

A key component of worksite wellness programs is the inclusion of lactation support as breastfeeding is one of the most important contributors to infant health and reduces employee absenteeism. Breastfeeding provides a range of benefits for the infant's growth, immunity, and development <sup>95</sup>as well as prevention against development of obesity and chronic disease. In addition, breastfeeding improves maternal health and contributes economic benefits to the family, health care system, and workplace <sup>96</sup>. Breastfed infants are sick less often; therefore, maternal and paternal absenteeism from work is significantly lower in companies with established lactation programs <sup>97,98</sup>. Women who formula feed their infants experience twice as much absenteeism due to infant illness than do breastfeeding mothers in the first year of the infant's life<sup>99</sup>. In addition, employer medical costs are lower and employee productivity is higher. If an infant is exclusively breastfed for at least 3 months, a conservative estimate of \$331 to \$475 per infant will be saved because of reduced illness and fewer healthcare expenses in the first year of life<sup>100</sup>. The workplace environment should enable mothers to continue breastfeeding as long as the mother and baby desire.

# **Research and Evaluation:**

Many interventions are offered to increase physical fitness and to promote weight loss. These programs are perceived as being valuable and worthy of additional funding, however, little research and evaluation has been conducted to provide evidence of these programs' long-term effectiveness. Many weight loss programs that demonstrate initial success are less successful in clients' ability to sustain weight loss over time. Given limited resources for such programs, funding should be directed to evidence-based programs, with documented effectiveness, in order to achieve the greatest impact for the funds expended. Research and evaluation of a broad array of models must be conducted in order to increase the number of programs that can demonstrate the effectiveness of their interventions. This is particularly important when making the claim that insurance policies should cover interventions such as weight management programs.

Evidence-based interventions are those, in which experts have commonly agreed upon the criteria for rating the interventions and have come to a consensus that the evaluation research findings are credible and can be substantiated<sup>101,102</sup>. From this process, a set of effective principles, strategies, and model programs can be derived to guide prevention and treatment efforts. Once interventions are determined to be effective, they can be matched to the local needs and capabilities of communities.

Very few programs to improve fitness are evidence-based. The Task Force on Community Preventive Services<sup>103</sup> conducted a systematic review of community interventions to increase physical activity (See Appendix C for a summary of national and state recommendations).

Although the Community Preventive Services Task Force was able to develop six recommendations for decision makers to consider when trying to increase physical activity in communities, many other interventions could not be recommended due to insufficient evidence. This did not mean that those interventions were ineffective or should not be used, but there were areas of uncertainty regarding an intervention's effectiveness and/or there were specific continuing research needs.

Another important research need is surveillance to determine the prevalence of overweight in children and related health conditions. There is currently no local prevalence data for overweight that is representative of all Los Angeles County children. Valuable pieces of the overall picture exist, such as data from CHDP and YRBSS. However, CHDP data has several caveats such as being visit-based, as discussed earlier, and the YRBSS is based on self-report for Los Angeles Unified School District students grades 9-12. The 2001 California Physical Fitness Test results of 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> grade students throughout Los Angeles County includes height and weight, which can be used to calculate BMI. These data will be used to assess the prevalence of overweight among 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> grade students. The strengths of using this data set is that all schools are required to administer the California Physical Fitness Test annually, and data will be able to be analyzed by race/ethnicity, gender, and geographical location.

### **PUBLIC AWARENESS CAMPAIGNS:**

Public awareness campaigns are essential components in the effort to change individual behavior and social norms and have demonstrated effectiveness to reduce risk behaviors such as smoking and drunk driving. For example, the efforts to curb smoking utilized various campaign techniques to educate the public about the dangers of tobacco use. These techniques were successful in changing individual behavior and social norms, which are now being reflected in changes in policies, laws, and decreased use of tobacco products.

Social marketing campaigns may utilize one strategy or a combination of strategies to encourage changes in individuals and institutions. Such strategies may include: 1) mass media (public service announcements, radio advertisements, billboards and posters, promotional items such as stickers and t-shirts); 2) worksite-based education and promotion (publications, changing cafeteria and vending machine offerings and labeling the nutritional content of food); 3) school-based interventions (classroom education and cafeteria interventions aimed at increasing consumption of fruits and vegetables); 4) community-based interventions (point-of-purchase nutrition education via posters or changes to food labels in supermarkets and restaurants)<sup>104</sup>.

While there has been limited documented success of social marketing campaigns aimed at improving dietary and exercise habits, successful campaigns have been implemented to which we can look for lessons learned. In two different community-wide interventions to promote low-fat (1%) and nonfat milk consumption, the results showed a significant increase in the number of child care centers and schools that served low-fat milk and a substantial increase of milk sales at local markets, respectively<sup>105</sup>. In addition, an Australian mass media campaign to increase physical activity among adults found that people who remembered the message (roughly three

out of every five who received it) were more than two times as likely to have increased their activity by at least an hour per week, up to six months after the media campaign<sup>106</sup>. Further, the CATCH program (Child and Adolescent Trial for Cardiovascular Health) demonstrated positive results in altering the behavior of children and adolescents<sup>107</sup>. In addition, social marketing campaigns to promote breastfeeding have been successful in increasing initiation and duration of breastfeeding<sup>108</sup>. Other campaigns, which may have had positive effects, have not documented an impact, in part because of the difficulty in measuring the impact of population-wide efforts on individual behavior change.

Past social marketing campaigns provide valuable lessons about how to wage an effective campaign. University of California, Davis researchers offer a number of recommendations to improve the results of future campaigns, based on their analysis of 50 social marketing campaigns to promote good nutrition and physical activity, including:

- Social marketing campaigns should include a plan to evaluate the campaign's success, including the identification of measurable campaign objectives
- Segmentation of target audience needs to be made more explicitly. In particular cultural influences on relevant behaviors, assessment of preferred communication channels and lifestyle profiling need to be included in the planning process of campaigns
- The basic marketing concepts of product, price, place, promotion and positioning should be more central in social marketing campaigns.
- Campaign effects need to be tracked as a matter of routine and modifications to campaign strategy need to be made based on the feedback received.
- The direct promotion of nutrition and physical activity through social marketing is likely to be most effective when targeted to children and adolescents<sup>109</sup>.

In addition, community members/members of the target audience should be involved in the planning, implementation and evaluation of the campaign to ensure that campaign's relevance and the sustainability of the results.

# SECTION VI: RECOMMENDATIONS

Reversing the trends of physical inactivity and unhealthy eating requires a comprehensive approach in order to change social norms, eliminate negative environmental factors, and assist individuals and families with the behavior changes that ultimately must occur. A comprehensive approach must involve a collaboration of local, state and national governments and officials, public and private industry, community and religious leaders, schools, and health care professionals. With this in mind, the Task Force developed four overarching strategies to promote physical activity and healthy eating, including 1) Policy, 2) Programs and Initiatives, 3) Research and Evaluation, and 4) Public Awareness Campaigns. Within each of the four strategies, actions are detailed that can be implemented in four specific settings including: 1) Communities, 2) Schools, 3) Healthcare, and 4) Worksites.

The Task Force's recommendations are not intended to be an exhaustive list of action steps to reduce the rates of overweight in children and youth in Los Angeles County. Rather, they represent the actions that are achievable and will have the greatest impact on improving children's fitness. Some of the recommendations go beyond the Board of Supervisors' purview, however, the Task Force hopes that the Board will endorse these recommendations and provide the leadership necessary to promote their implementation. While many of these recommended actions will require funding to implement, many others can be accomplished within a constrained budgetary environment. Implementation of these recommended actions would go far toward improving children's physical fitness. However, the Task Force has prioritized six key

recommended actions (denoted with a key  $\vartheta$  ) within the purview of the Board of Supervisors, which can achieve the most significant impact in light of budgetary limitations.

A. <u>POLICY:</u> Establish and promote federal, state and local level policies that support physical activity and healthy eating among Los Angeles County children and youth through: 1) economic incentives/disincentives, 2) regulations, and 3) voluntary policies.

# **COMMUNITY SETTING**

- Secure funding through grants, donations, taxation, and/or utilization of County general funds to support policies, programs, research, and public awareness campaigns to create an environment in Los Angeles County that encourages physical activity and healthy eating, and reduces the prevalence of overweight in children and youth.
- Promote joint/shared use of facilities among schools, parks, libraries, health care clinics and community-based organizations to increase opportunities for physical activity and healthy eating in community settings.

- **3.** Establish planning entities in cities/neighborhoods comprised of representatives from various sectors of the community including children and families to develop a vision, a plan, and policies for fulfilling unmet needs, avoiding duplication of services and promoting healthy eating and physical activity within cities, neighborhoods and schools.
- **4.** Incorporate spaces for gardens and physical activity in planning for new housing developments.
- 5. Educate urban planners and city legislatures to discourage the proliferation of fast food restaurants and encourage community input through the zoning or city planning process.
- 6. Enhance the ability of community residents to advocate for grocery stores to provide quality and affordable fresh produce, and to increase farmers markets in their neighborhoods.
- 7. Encourage restaurants to offer nutritious, attractive options for children's menus, including offering smaller children's portions of adult meals as an alternative to children's menus, which often feature unhealthy foods such as hot dogs, french fries, and fried chicken nuggets.
- 8. Educate policy makers and community leaders regarding the risks associated with physical inactivity, unhealthy eating and overweight in childhood and provide simple action steps that they can take to alleviate the problem in their communities.

# SCHOOL SETTING

- 9. Support development and passage of local, state, and federal legislation and policy that: 1) increases amount and quality of physical education and nutrition education mandated for school aged children, 2) increases the number of credentialed physical education and nutrition education teachers, 3) increases space allocated for physical education activities, 4) increases funding for adequate physical education equipment in schools, and 5) decreases physical education class size.
- 8 10. Encourage all school districts to adopt the following SB 19 nutritional standards at all grade levels for foods sold outside of the federal meal program:
  - Food may have no more than 35% of its calories from fat and 10% of its calories from saturated fat.
  - > Food may have no more than 35% sugar by weight
  - The only beverages that may be sold to students are milk, water, or juice that is at least 50% fruit juice with no added sweeteners.
  - **11.** Implement physical activity and nutrition education from preschool through secondary school as part of a sequential, comprehensive school health education curriculum designed to help students adopt healthy eating and physical activity behavior.

**12.** Incorporate into the construction plans of all new schools and remodeling plans for existing schools, adequate inside and outside space for food services, physical education, and produce gardens either on-site or through joint use arrangements.

# HEALTHCARE SETTING

- **13.** Ensure reimbursement for obesity screening and prevention services for children above the 85<sup>th</sup> percentile of the sex specific body mass index growth charts.
- **14.** Convene experts to identify resource gaps in obesity treatment including gaps in geographic coverage and treatment modalities and develop guidelines for increasing these resources.

# WORKSITE SETTING

**15.** Establish and promote policies and environments in the workplace that support healthy eating, physical fitness and breastfeeding.

# **B.** <u>PROGRAMS AND INITIATIVES:</u> Increase the supply of effective interventions that promote physical activity and healthy eating in community, school, healthcare and workplace settings.

# **COMMUNITY SETTING**

- 1. Develop and implement programs that promote behavior change in eating and physical activity patterns for children, youth and their families through coordinated efforts that address unmet needs and avoid duplication of services.
- 2. Establish safe, well lighted walking, jogging, and bicycle paths or convert abandoned railroad right of ways to walking jogging and bicycle paths.
- 3. Develop vacant areas into parks, recreation space and community gardens.
- **4.** Provide areas to secure bicycles near work places, shopping areas and other public or private buildings.
- 5. Improve the safety of existing parks, recreational areas and schools by ensuring proper lighting and patrolling so that people feel safe when using these facilities.
- **6.** Make public stairwells accessible, ventilated, well lighted, safe and clean and post signs promoting stair utilization.
- 7. Combine physical and environmental activities, such as cleaning up beaches, park trails, roads and neighborhoods.

- 8. Secure access to outdoor playing fields, university or school track fields, parks, tennis court facilities and other similar community resources to allow use by community residents before and after regular business hours. Ensure adequate lighting and security is available for these venues.
- **9.** Develop community health worker programs that assist community members in educating their peers using culturally appropriate approaches and language, about achieving healthy lifestyles, with an emphasis on incorporating healthy eating and physical activity into their daily routines.
- **10.** Utilize community-driven processes, with community members actively involved in the assessment of community needs, and the design, implementation, and evaluation of programs to ensure that programs and other health promotion strategies are based on what people actually need and want.
- **11.** Develop linkages with the private sector (e.g. food, fitness and athletic apparel industry) to enlist businesses' support of community nutrition and physical fitness programs.
- **12.** Link local farms to city-sponsored and community-based programs and school districts. Cities should facilitate the collection of food from local farms and farmers' markets for delivery to public schools, childcare centers, after school programs, food banks, and other city education and social service programs.
- **13.** Develop an incentive system, such as a healthy restaurant guide or a rating system, to recognize and reward restaurants that provide healthy choices, appropriate portion sizes based on USDA guidelines, and provide accurate caloric and nutrient food labeling on menus.
- 14. Encourage the health, fitness, and sports clothing industry to support schools through advertising contracts, buying school sports uniforms and facility upgrades, and supplying healthy vending machine options to replace funds currently supplied by contracts with fast food and soda companies.
- **15.** Incorporate nutrition and physical fitness information as part of the Department of Children and Family Services (DCFS) training process for foster care families.

# SCHOOL SETTING

16. Develop a Coordinated School Health Program (CSHP) at each local education agency and adopt the use of the Centers for Disease Control and Prevention's School Health Index for Physical Activity and Healthy Eating as a tool for assessing the degree to which schools are meeting the nutrition and physical fitness standards for students. (See Appendix A-3 for a detailed description of specific actions to be taken in order to create a comprehensive CSHP.)

**17.** Increase enrollment of children into the federal school food consumption programs (breakfast, lunch, after-school, and summer food programs) as a means to decrease their consumption of competitive, unhealthy foods both on and off school campus.

# HEALTHCARE SETTING

- **18.** Establish a referral network of community and hospital based nutrition and physical activity programs for overweight and severely overweight children.
- **19.** Utilize public health nurses placed in DCFS field offices as resources to assist children's social workers with information and resources about prevention and treatment of overweight children.

# WORKSITE SETTING

- 20. Implement a model comprehensive worksite wellness program for County of Los Angeles employees and promote comprehensive worksite wellness among other employers in Los Angeles County. A comprehensive program should educate, motivate, and empower adults, who are role models for children, to adopt healthy life style choices that improve their overall quality of life and consist of the following components: 1) policies and environments that support healthy eating, physical activity participation and breastfeeding promotion; 2) health promotion education; 3) targeted prevention and health screening services; and 4) comprehensive health insurance coverage.
  - C. <u>RESEARCH AND EVALUATION:</u> Conduct surveillance to determine and monitor the prevalence of overweight based on Body Mass Index (BMI) and chronic diseases associated with overweight in childhood, and promote research to determine the effectiveness of programs targeted at improving nutrition and increasing physical activity in Los Angeles County.

# **COMMUNITY SETTING**

- Appoint accountable County department personnel to work in collaboration with community-based committees and agencies to develop an implementation plan of the recommendations and to monitor the plan's progress.
  - 2. Obtain and analyze California Physical Fitness Test raw data to guide policy and program development on improving student physical fitness.
  - **3.** Collect data regarding children and youth eating habits, physical activity patterns, chronic pediatric diseases associated with overweight, and height and weight to calculate BMI as part of the Los Angeles Health Survey.

4. Ensure all new publicly funded obesity prevention and treatment programs include an evaluation component to identify successful strategies that increase physical activity and healthy eating patterns.

## SCHOOL SETTING

- 5. Encourage collaborative research with universities, health care providers and health departments.
- 6. Ensure 100% participation in the California Physical Fitness Test.

## HEALTHCARE SETTING

7. Conduct research and evaluation on the prevention of obesity and treatment interventions for overweight children and the medical complications associated with obesity.

## WORKSITE SETTING

- **8.** Encourage collaborative research with universities and health departments on worksite wellness programs.
- D. <u>PUBLIC AWARENESS CAMPAIGNS</u>: Develop a public awareness campaign with specific focus on changing social norms to promote good nutrition and physical activity, and to educate the public and professionals about the risks of overweight and ways to prevent and treat overweight in children and youth.

## **COMMUNITY SETTING**

- 1. Play an active role in the development and promotion of existing public awareness campaigns such as the Centers for Disease Control and Prevention's National Youth Media Campaign (VERB It's what you do. <u>http://www.verbnow.com/</u>).
- 2. Publicize data about prevalence of overweight and obesity and the physical fitness status of Los Angeles County children and youth on websites and through articles, reports or other appropriate media to create a common understanding among the media, opinion leaders, and families that overweight in childhood is a serious problem.
- **3.** Promote nutrition education in supermarkets and restaurants through the use of point of decision marketing to encourage the purchase of whole grains, legumes, fruits and vegetables, and include information on healthy portion sizes and cooking instructions.

4. Publicly acknowledge local cities, neighborhoods, schools and community-based and faith-based organizations that foster widespread community participation to promote healthy eating and physical activity.

## SCHOOL SETTING

- 5. Develop promotional materials for use in classrooms and in cafeterias aimed at increasing consumption of fruits and vegetables, water, whole grains, and legumes.
- 6. Partner with existing public awareness campaigns such as the Centers for Disease Control and Prevention's National Youth Medial Campaign to promote physical activity and healthy eating in schools.

## HEALTHCARE SETTING

- 7. Provide information about nutrition and physical activity for health care professionals on the county website with links to other nutrition and physical activity websites.
- 8. Promote breastfeeding among all new mothers during prenatal and pediatric clinic visits.
- **9.** Develop promotional tools for health care providers to encourage screening for obesity such as pocket sized body mass index charts and health education materials regarding healthy eating, breastfeeding, and physical activity that health care providers can give to children and families.

## WORKSITE SETTING

**10.** Develop worksite based healthy eating and physical activity education and promotional tools including, but not limited to: point of decision signs to take the stairs, joining walking clubs, and publicizing nutritional content of cafeteria foods and vending machines.

# **SECTION VII: APPENDICES**

## Appendix A-1

## Individuals and Families Workgroup: Summary of Discussions

## Suggested Recommendations to the Board of Supervisors

#### A. Programs and Strategies

- 1. Facilitate focus groups to learn about individuals' and families' attitudes\_regarding diagnosis of childhood obesity and interventions that are culturally relevant, sensitive and acceptable in their delivery
- 2. Children in foster care have greater medical and mental health needs, which might exacerbate their risk of obesity.
- 3. Educate relative caregivers and foster parents about resources for nutrition and fitness.
- 4. Utilize Public health Nurses, placed in DCFS field offices, as resources to assist the children's social workers with information and resources.
- 5. Identify and promote promising practices for nutrition and physical activity programs to facilitate adaptation of successful programs in other communities
- 6. Offer more low-cost programs for families on healthy eating and exercise habits Programs should:

Be tailored to the literacy levels of participants and utilize visual or hands-on learning techniques when participants are illiterate

- Educate about healthy portion sizes
- Demonstrate healthy cooking so people learn how to prepare healthy meals Be family-friendly and not criticize parents for current practices which may promote obesity

Include time-management components so families learn how to juggle healthy cooking and exercise with work and other responsibilities

Include early intervention using public health nurses or lay educators for high quality education and support to families and children

Promote the concept of a "grocery tour" which educates people about produce available in different seasons, cooking with produce and other healthy ingredients, and meal preparation on a limited budget

Present parents various options for their children (and themselves) to exercise on a daily basis (e.g. walking up stairs rather than take the elevator, walking to the store, etc.)

- 7. Expand WIC or create new programs to provide vouchers to low-income families to purchase produce and other healthy foods
- 8. Encourage food banks to provide adequate amounts of produce to low-income families
- 9. Revive the "Passport Program" to promote free physical activity programs for families

## **Appendix A-1**

## Individuals and Families Summary Continued:

- 10. Involve supermarkets in providing nutrition education
- 11. Sponsor walking clubs at malls and other community locations such as schools or recreation centers/parks
- 12. Expand parent education opportunities by providing nutritional and physical fitness education to Parent Teachers Association and Head Start and Healthy Start parent advisory groups
- 13. Promote programs and strategies that focus on the whole family
- 14. Develop linkages with the private sector (e.g. athletic apparel industry) to enlist businesses' support of community nutrition and physical fitness programs
- 15. Pediatricians need to serve as a community resource for multiple services to prevent obesity
- 16. Create a mentor program where families, who are successfully raising fit and healthy weight children, successfully volunteer to mentor families in which children are overweight
- 17. Pediatricians and other health providers need to work with nutritionists for early intervention of obesity
- B. Public Awareness and Education Opportunities
  - 1. Develop a social marketing campaign for Los Angeles County to promote healthy eating and physical activity habits. Information messages need to:

be age and gender specific as well as have messages targeting the whole family send consistent messages using national guidelines, such as the USDA's Food Guide Pyramid and Dietary Guidelines for Americans

break down false barriers (e.g. individuals may say they do not have time to be physically active, but could utilize stairs instead of the elevator)

include tools on how to accomplish physical fitness

stress the impact and effect of obesity and that it has surpassed the effect of smoking, on one's health

focus on increased physical activity and fruit and vegetable consumption educate on healthy portion sizes

include famous athletes to promote physical activity

be integrated into everyday life situations (e.g. point of decision marketing – provide recipes in the grocery store on how to cook with fruits and vegetables)

incorporate messages that physical activity at any weight improves health (one does not have to be skinny and messages should not be about losing weight)

- 2. Educate staff at preschool and after school programs, as well as child care providers and about healthy eating habits so they can promote healthy eating at their programs (including healthy food in their vending machines)
- 3. Encourage television stations to offer programs on nutrition and healthy cooking, as well as physical activity

## Appendix A-1

## Individuals and Families Summary Continued:

4. Need to start a social movement concerning wellness of youth and families with the holistic approach

#### C. Policy/Advocacy Opportunities

- 1. Lobby for more funds to increase the number of community-based nutrition and physical fitness services for low-income families
- 2. Lobby for more funds to support university programs to train professional nutrition and physical education instructors
- 3. Recommend that the Department of Social Services, Community Care Licensing Division provide a unit or course on nutrition and physical fitness as a requirement for licensure of and employment of licensed child care providers
- 4. Increase coverage by health insurance for exercise and nutrition programs
- 5. Lobby for obesity to be construed as a legal issue, i.e. that parents who let their children become morbidly overweight are neglectful.
- 6. Encourage community residents to advocate for more markets and farmers' markets in their neighborhood
- 7. Promote standards of food quality county-wide so that all people, regardless of income and geography, have access to high quality produce and other healthy foods

#### D. <u>Research Opportunities</u>

- 1. Promote research to determine effectiveness of programs that seek to improve the eating and physical activity habits of individuals and families
- 2. Research what "healthier" communities statewide and nationwide are doing to decrease childhood obesity so we can learn from them
- 3. Research the link between physical activity on a regular basis and performance in school.

## Appendix A-2

# **Community Workgroup:** Summary of Discussions

## Suggested Recommendations to the Board of Supervisors

## A. Programs and Strategies

- 1. Advocate for programs that change norms and behavior
- 2. Maximize and develop partnerships between the Department of Health Services, Department of Parks and Recreation and schools, communities, churches, hospitals and the city of Los Angeles to provide wellness programs and space for physical activity programs
- 3. Coordinate with police and sheriff departments to facilitate safe play and exercise opportunities such as community walks, utilizing community based policing
- 4. Expand community gardening sites utilizing County property with priority given to schools and community housing projects
- 5. Encourage community specific programming (e.g. inner-city communities may need more indoor opportunities as there is lack of green space)
- 6. Advocate for workplace wellness programs to stress physical activity in the workplace during breaks and lunch time and offer incentives concerning good health (explore financial opportunities with employee health insurance programs as a result of wellness programs)
- 7. Promote and increase opportunities for non-competitive activities
- 8. Include private sector in building collaborations with the public and other agencies to increase nutrition and physical activity opportunities
- 9. Establish quarterly messages regarding nutrition and physical activity in County paychecks support fitness breaks and include educational messages in newsletters, with pay warrants, etc
- 10. Model publicly funded food programs after WIC by providing educational messages along with food stamps and meals on wheels.
- 11. Encourage gardening in general, not just in low-income areas.
- 12. Provide funding to groups that can serve as a community conduit, rather than funding the activity itself.
- 13. Facilitate rebuilding of communities
- 14. Give residents pedometers so that they can count the number of steps they walk every day and encourage businesses to give discounts to individuals who walk
- 15. Empower community residents about how to advocate for what they need. For example, empower residents to take part in public hearings on where fast food businesses will be located.
- 16. Tap into existing resources, such as 1) the entertainment community 2) CBOs that are already providing services and 3) the census as an educational opportunity.
- 17. Initiate or beef up Healthy Cities campaigns throughout the County and make sure every city has a Plan of Action that addresses obesity and physical fitness.

## Appendix A-2

#### **Communities Continued:**

- 18. Ensure Community designed health education strategies and programs (This was suggested as its own category and not under programs and services)
  - Conduct needs assessments at the neighborhood level and get the data back into the hands of community members so that communities can develop their own recommendations for what will work in their area. The Partnership for the Public's Health project in the Montebello neighborhood of Lohart was given as an example).
  - Conduct trainings at the community level that seek to empower residents in areas like leadership skills and community organizing.
  - Utilize programs that help to develop and organize community members, like the promotora model.
- B. <u>Public Awareness and Education Opportunities</u> "Public Awareness and Education Opportunities" should come before any other section.
  - 1. Develop public awareness/social marketing campaigns with specific focus on changing social norms. Information messages need to:
    - be age and gender specific as well as have messages targeting the whole family and communities
    - break down false barriers (e.g. individuals may say they do not have time to be physically active, but could utilize stairs instead of the elevator)
    - include tools on how to accomplish physical fitness
    - stress the impact and effect of obesity and that it has surpassed the effect of smoking, on one's health
    - focus on increased physical activity and fruit and vegetable consumption
    - be integrated into everyday life situations (e.g. point of decision marketing taking the stair is better for your health than riding the elevator)
  - 2. Need to start a social movement concerning wellness of youth and families with the holistic approach
  - 3. Educate and inform the media, and get their buy in (i.e. like Project REACH does)
- C. Policy/Advocacy Opportunities
  - 1. Support SB19 on school nutrition
  - 2. Support SB 1520 on Soda taxation
  - 3. Investigate potential policy change at the city and county level
  - 4. Mandate comprehensive workplace wellness programs in all County facilities
  - 5. Offer incentives for workplace wellness programs of County grantees
  - 6. Promote physical activity stations and community gardens in Public Housing Projects
  - 7. The Board of Supervisors should develop ongoing relationships with individuals that make policy on physical fitness, nutrition, and obesity issues and continue to take a stand on these issues in the future.

## Appendix A-2

## **Communities Continued:**

#### D. Research Opportunities

- 1. Promote research to determine effectiveness of programs targeting improving nutrition and increasing physical activity in communities
- 2. Establish a centralized information source (website) to promote successful programs and resources
- 3. Direct appropriate funding opportunities for research and service delivery to stakeholders
- 4. Utilize the L.A. Health Survey to gather and map changes regarding children and youth physical fitness
- 5. Ensure Info Line has adequate information about physical fitness, obesity, and nutrition programs; if not, increase the quality and quantity of information or start a new toll free line specifically on these issues.
- 6. Ensure data is disseminated in a timely fashion, so that research can be translated into action.

## **Appendix A-3**

## Schools Workgroup: Summary of Discussions

#### Suggested Recommendations to the Board of Supervisors

- A. Develop a Coordinated School Health Program (CSHP) at each local education agency and adopt the use of the Centers for Disease Control and Prevention's School Health Index for Physical Activity and Healthy Eating as a tool for assessing the degree to which schools are meeting the nutrition and physical fitness standards for students. The actions to be taken to create a CSHP include the following:
  - 1 School Policies & Environment
    - a. Publish comprehensive written District policies related to health, nutrition and physical education.
    - b. Create school-site committees that include students, parents, and community partners to oversee school health, nutrition and physical activity programs.
    - c. Provide access to adequate facilities for physical activities during and outside of school hours.
    - d. Orient all staff to District health policies.
    - e. Advocate for health education or physical education to be a college entrance requirement.
    - f. Offer physical activity before lunchtime.
    - g. Prohibit use of physical activity as punishment, and the use of food as a reward or punishment.
    - h. Prohibit sale and distribution of foods of low nutritional value on the school campus, such as, sodas and candy.
    - i. Identify fund raising efforts that support healthy eating to replace fundraisers such as candy sales.
    - j. Advocate for SB19 standards to be adhered to at all grade levels.
    - k. Ensure sufficient time to eat school meals.
    - 1. Advocate for nutrition and physical fitness education to be a requirement in the curriculum for teacher training at the university level.
    - m. Ensure that all new schools constructed can accommodate: sufficient indoor and outdoor space for physical education; a cafeteria with sufficient space for on-site cooking as well as a salad bar; and an on-campus produce garden.
    - n. Create high school academies focusing on nutrition and physical activity.
    - o. Encourage colleges and universities to promote college credit opportunities for students who work with schools and communities in the areas of nutrition and physical education.

## **Appendix A-3**

#### **Schools Continued:**

- 2 Health Education
  - a. Mandate health education taught by credentialed health education teachers.
  - b. Provide students with sequential, standards-based health curriculum.
  - c. Promote culturally appropriate examples of all health topics including physical activity and nutrition.
  - d. Promote an integrated interdisciplinary approach to health education.
  - e. Provide incentives to assure that nutrition education including how to cook healthy meals is addressed at every grade/school.
  - f. Advocate for funding for health education on nutrition and physical activity, so these subjects are given the time in the curriculum given to other funded subjects such as drugs and HIV prevention.
  - g. Promote health education mentoring programs focusing on nutrition and physical activity for high school student to work with elementary students.
- 3 Physical Education
  - a. Provide physical education, which meets minimum time requirements and has students active at least 50% of the time.
  - b. Utilize a sequential, standards-based curriculum taught by qualified teachers.
  - c. Ensure a student/teacher ratio comparable to other subjects.
  - d. Improve teacher professional development.
  - e. Increase opportunities for extracurricular physical activities for all students.
  - f. Develop joint use agreements with parks, fitness centers, and community centers to create more resources for physical activity in schools.
- 4 Health Services
  - a. Collaborate with Health Services and other school staff to ensure that students' dietary and medical needs are accommodated.
  - b. Provide time for key staff members to meet regularly regarding optimum nutrition and physical activities for students.
  - c. Promote physical activity and healthy eating across the curriculum.
- 5 Nutrition Services
  - a. Ensure that school breakfast and meal programs adhere to or exceed National standards and statutory regulations.
  - b. Ensure that cafeteria meals, a la carte offerings, and venues outside the cafeteria include a variety of appealing and nutritional choices, including choices of fruits, vegetables, whole grain and low-fat dairy products.
  - c. Increase the availability of quality salad bars in schools.
  - d. Ensure that cafeteria and eating areas are clean, safe and pleasant.

## **Appendix A-3**

## **Schools Continued:**

- e. Ensure that food service staff are credentialed and adequately trained.
- f. Advocate for higher reimbursement for free and reduced cost school meals.
- g. Ensure that all school sponsored programs, such as after school activities, athletics, and fundraisers adhere to nutrition standards.
- h. Provide produce gardens in all schools.
- 6 Counseling, Psychological, and Social Services
  - a. Ensure that mental health staff have training in promotion of physical activity and healthy eating and in identification of eating disorders.
  - b. Ensure that mental health staff have opportunities to participate in planning and policy development concerning physical activity and nutrition.
  - c. Ensure that students with problems are referred to appropriate intervention sources and monitor to ensure participation.
  - d. Health Promotion for Staff
  - e. Provide physical activity/fitness, nutrition education and weight management programs for staff.
  - f. Ensure access to health screening for all employees.
  - g. Include staff health promotion as part of the District budget.
  - h. Family/Community Involvement
  - i. Educate families about physical activity and nutrition.
  - j. Involve parents, students, teachers, and community in planning school meals and health programs.
  - k. Allow community access to school facilities outside of school hours.
  - 1. Promote community health programs and services.

## Appendix A-4

# Health Care Workgroup: Summary of Discussions

## Suggested Recommendations to the Board of Supervisors

- A. <u>Programs and Strategies</u>
  - 1. Advocate that kids above >85% BMI receive a nutritional and fitness evaluation from their medical provider
  - 2. Develop standardized, assessment, treatment and referral protocols in DHS facilities for overweight and obese individuals.
  - 3. Establish a celebrity-based ongoing Task Force to draw attention to the prevention of childhood obesity and promotion of physical fitness
  - 4. Establish a database to track BMI and make data available (potential data sites to include foster care, WIC and CHDP) Track BMI at the community level.
  - 5. Promote community and school linkages with hospitals that promote physical fitness and nutrition. Hospital with current community linkages include: Volunteer Hospital Association, California Hospital Medical Center and Huntington Memorial
  - 6. Work with the private sector weight loss companies (e.g. weight watchers, Jenny Craig) to create countywide programs for children regardless of ability to pay
  - 7. Develop a fitnessgram tool to be used in schools to track BMI at all grade levels and identify children at risk for overweight and obesity.
  - 8. Utilize school nurses for BMI screening and mandate screening at all grade levels.
  - 9. Increase community based resources like KidShape to support and offer services to children and youth.
  - 10. Implement support groups for parents and children in health care and school settings
  - 11. Incorporate mental health services to address mental health issues associated with lack of physical activity, poor nutrition, overweight and obesity. (i.e. depression, eating disorders, self-esteem, body image, abuse, etc.)
  - 12. Play nutrition and physical activity videos in waiting rooms and in schools make videos interesting
  - 13. Utilize celebrities to promote fitness through media campaigns and task force participation.
  - 14. Provide referrals to community programs based on BMI.
  - 15. Mandate a dietitian visit for all children >85% BMI
- B. Public Awareness and Education Opportunities
  - 1. Advocate for Los Angeles County medical schools to include curriculum on how to counsel overweight and obese patients
  - 2. Mandate nutrition and physical fitness education of Department of Health Services medical providers (health care providers: MDs, Nurses, Health Educators)
  - 3. Educate health care providers through conferences, pamphlets and website access.

## Appendix A-4

## **Health Care Continued:**

- 4. Mandate nutritional and physical fitness education to be a requirement of CME programs.
- 5. Mandate nutrition, physical activity and Health education for child care and foster care families (tied to licensure)
- 6. Promote educational information for all pregnant women who have diabetes, develop gestational diabetes or are overweight/obese
- 7. Support public awareness campaigns
  - Messages need to be culturally appropriate
  - Campaigns need celebrity sponsorship
  - Nutrition and physical activity messages need to be about prevention, having fun and staying healthy
  - Create a logo for L.A.
  - Make fitness HIP
  - Use billboards with real people
  - Advertise physical activity and nutrition resources
- C. Policy/Advocacy Opportunities
  - 1. Appoint a child and youth physical activity and nutrition legislative advisor to the Board of Supervisors
  - 2. DHS to develop a comprehensive resource guide of nutrition, weight loss, and physical activity programs for medical providers (guide to be regularly updated)
  - 3. Incorporate weight perception questions on the L.A. Health Survey for children
  - 4. Incorporate physical fitness and nutrition into the core Department of Health Services Public Health goals
    - Use BMI for measuring overweight and obesity
    - Taxation on soda and high sugar, high fat, low nutrient foods
    - Funding to support community based nutrition and physical activity programs (Develop a referral base)
    - Advocate for funding to support media campaigns
    - Advocate for the preservation of CHDP
    - Promote legislation to reimburse medical providers for overweight and obesity prevention services.
    - Advocate for all entitlement programs cover obesity treatment and prevention
    - Warning labels on high fat and high sugar foods
    - Promote and support physical activity and nutrition legislation
  - 5. Require restaurants to provide a healthy option (low sugar, low fat, low calorie) on all menus (Could link this requirement to the restaurant letter grade system or develop a grading system for healthfulness of food)
  - 6. Promote prevention opportunities, such as incentives for HMOs that provide health education and disease prevention classes.
  - 7. Develop a task force of hospital/clinic directors and administrators to develop and facilitate physical activity and nutrition opportunities.

## **Appendix A-4**

## **Health Care Continued:**

- D. Research Opportunities
  - 1. Develop pilot projects to determine the efficacy of screening for obesity and providing counseling and/or treatment to those who are obese
  - 2. Promote research to determine effectiveness of programs targeting improving nutrition and increasing physical activity in County residents
- E. Non-Health Care Related Recommendations
  - 1. Develop community programs that are bilingual/bicultural and meet the community's needs and desires.
    - Community Kitchens where healthy meals could be prepared for the neighborhood
    - Physical activity programs that are not viewed as exercise (e.g. dance programs)
    - Parent and child support groups
  - 2. Optimize the use of County space, allowing community based programs to conduct services
  - 3. Mandate daily physical activity and health education (including nutrition) for all grades.
  - 4. Increase after-school programs
  - 5. Incorporate BMI calculation and nutrition/physical activity into general school curriculum (e.g. calculate BMI in math class, and write essays regarding nutrition and physical activity in English class)

## **Appendix A-5**

#### **Existing Resources as Identified by Ad Hoc Workgroups:**

Local Programs Kid Shape Reach 2010 WIC YMCA Boys and Girls Club 5 a Day - works with 9-11 year olds in schools; planning to expand. **Boy Scouts** Girl Scouts **SPARKS CLASS** Parks Beyond the Bell **Farmers Markets** CANFIT Project Lean (Leaders Encouraging Activity and Nutrition) - "Food on the Run" program in schools. Serves middle and high schools on an as-requested basis Pasadena Department of Public Health **DHS** Promotora Program DHS Ask the Dietitian DHS Stepping Up To Better Health Food on the Run Kids in Fitness PACE Program (Prescription for Physical Activity). After the patient fills out a short survey, s/he is given a prescription for physical activity. Power Play Dave Heber's program for teens Weight Watchers' points are a form of education. Walking programs - Take the stairs to strengthen your heart (there's data on promoting stairways) Pedometers - some schools-based programs use them. Children's Hospital obesity treatment program "Changing the Scene" grants in Santa Monica and Hawthorne for policy development. CDC Index for Healthy Schools - simpler, easier to follow than "Changing the Scene." Nutrition Network – LAUSD only. Goal is to increase fruit and vegetable consumption. Can fund projects such as salad bars, can pay for gardening curriculum and training (not equipment anymore).

## **Appendix A-5**

## **Existing Resources Continued:**

Promotora project in SPA 4, using Hathaway – parent education by parents for parents.

American Cancer Society works in schools

A "best practice" is being implemented in the Seattle public school system; the media helped them produce a video for their project.

#### National Programs with possible local sites or funded programs

National Center for Chronic Disease Prevention and Health Promotion American Association for Active Lifestyles and Fitness Presidents Council on Physical Fitness and Sports Shape Up America National Recreation and Park Association American Alliance for Health, Physical Education, Recreation and Dance Amateur Athletic Union National Association for Sport and Physical Education American Council on Exercise National Association for Health and Fitness Centers for Disease Control National Institute of Health

## Appendix B

# COMMUNITY FORUM GALLERY INFORMATION PARTICIPANTS

American Cancer Society	American Heart Association
Sonya Lopez, Cancer Control Specialist 213-386-6102 ext. 231 <u>sonya.lopez@cancer.org</u> Linda Roberts, Cancer Control Specialist 310-348-0356 ext. 233 <u>linda.robert@cancer.org</u> 7531 W. Slauson Ave. Suite 200 Culver City, CA 90230 310-348-0356 ext. 233	Melinda Arizmendez, Youth Market Vice President 1055 Wilshire Blvd. Suite 900 Los Angeles, CA 90017 213-202-5078 melinda.arizmendez@heart.org
Beyond The BellJohn Leichty, Assistant SuperintendentJohn.liechty@lausd.netDorothy Padilla, Administrative CoordinatorDorothy.Padilla@lausd.net333 S. Beaudry Ave.Los Angeles, CA 90017213-241-4109	Boys and Girls Club of America, Los Angeles County AllianceStuart Mc Cammon, Director 2635 Pasadena Ave. Los Angeles, CA 90031 562-981-8855 smccammon@bgca.org
California Diabetes Control Program	California Nutrition Network/ELAC
Mary Lou Chavez, M.P.H. Area Health Promotion Specialist 10114 Scott Ave. #15 Whittier, CA 90603 562-902-2203 <u>mbivian@aol.com</u>	Manjit Kaur, Ph.D., M.P.H. Program Manager East L.A. College 1301 Avenida Cesar Chavez Monterey Park, CA 91754 323-265-8916 <u>manjitkaurjs@msn.com</u>
<b>Child Health and Disability Prevention</b> <b>Program (CHDP)</b>	<u>Children's Hospital of Los Angeles,</u> <u>Kids n Fitness</u>
Judith Pascual, M.S., R.D. 626-569-6046 Nancy Adelman, Health Educator 626-569-6037 9320 Telstar Ave., Suite 226 El Monte, CA 91731	Marsha Mackenzie, R. D. 4650 Sunset Blvd. #8 Los Angeles, CA 90027 323-669-5423 <u>mmackenzie@chla.usc.edu</u>

# Appendix B

<b>Community Health Councils, Reach 2010</b>	Crenshaw Y.M.C.A./L.I.T.E
Joyce Jones-Guinyard, Larry Henderson, Nicole Evans & Forrest Fykes 3761 Stocker St. Suite 201 Los Angeles, CA 90008 323-295-9372 ext. 18 joyce@chc-inc.org	Jamal Y. Speakes 3820 Santa Rosalia Drive Los Angeles, CA 90008 818-388-2841
Dairy Council of California	Food Security Coalition
Lori Ludlow, Territory Manager <u>lludlow@dairycouncilofca.org</u> Susan Bogert, R.D., Territory Manager <u>sbogert@dairycouncilofca.org</u> 6167 Bristol Parkway suit 300 Culver City, CA 90230 310-342-6122	Andy Fisher, Executive Director P.O. Box 209 Venice, CA 90294 310-822-5410 andy@foodsecurity.org
Health Edutainment Corp., Stretch-N-	Health Net
Grow/ Nutrafit Stuart Bramar, President 10573 West Pico Blvd. #840 Los Angeles, CA 90064 310-839-4693 groupupfit@aol.com	Benjamin Nate, Senior Health Specialist 333 S. Arroyo Park Los Angeles, CA 91105 714-429-3158 <u>Benjamin.nate@healthnet.com</u>
Kid Shape	<u>Kids In Sports</u>
Christiane Wert, Program Director 8733 Beverly Blvd. St. 400 Los Angeles, CA 90048 310-652-0891 <u>cwert@kidshape.com</u>	Heidi Talbott, Office Administrator 605 West Olympic Blvd. Suite 720 Los Angeles, CA 90015 213-765-1900 <u>info@kidsinsportla.org</u>

## Appendix **B**

<b>LA City Commission For Family and Youth</b>	<b>Latino Community Diabetics Council</b>
Edward Farias	Diana Deleon, M.P.H
200 N. Spring Street, 22 <sup>nd</sup> Floor	523 W. 6th Street, Suite #840
Los Angeles, CA 90012	Los Angeles, CA 90014
213-978-1840	213-489-3428
Los Angeles County Physical Fitness	Project Lean
Program	
	Dr. Shirley Thornton, Coordinator
Eloisa Gonzalez, M.D., M.P.H.	3530 Wilshire Blvd. Suite 800
3530 Wilshire Blvd. Suite 800	Los Angeles, CA 90010
Los Angeles, CA 90010	213-351-7861
213-351-7887	sthorton@dhs.co.la.ca.us
egonzalez@dhs.co.la.ca.us	
Sport Fitness International/Youth Fitness	<u>United Filipino – American Nutritionists &amp;</u>
Program and Competitions	<u>Dietitians Assoc. Inc</u> .
Howard and Karen Schwartz, President	Ninfa Guzman, R. D.
8033 Sunset Blvd. #920	17919 Calla Barcelona
Los Angeles, CA 90046	Rolling Heights, CA 91748
323-850-3777	626-965-9456
nacusa@aol.com	nguzman@dmhmsh.state.ca.us
WIC – PHF	<u>5 A Day</u>
Pina Hernandez, Outreach Specialist	Marvin Espinosa, Project Coordinator
12781 Schavarum Ave.	2 Coral Circle Bldg. B
Erwin Dale, CA 91706	Monterey Park, CA 91755
626-856-6618 ext. 260	323-838-4542
pina@phfewic.org	maespinoza@ucdavis.edu

## Appendix C

## NATIONAL AND STATE RECOMMENDATIONS

#### 1. NATIONAL RECOMMENDATIONS

- A. The Surgeon General's Report to Prevent and Decrease Overweight and Obesity<sup>110</sup>
  - I. The Nation must take an informed, sensitive approach to communicate with and educate the American people about health issues related to overweight and obesity. Everyone must work together to:
    - a. Change the perception of overweight and obesity at all ages. The primary concern should be one of health and not appearance.
    - b. Educate all expectant parents about the many benefits of breastfeeding.
    - c. Educate health care providers and health profession students in the prevention and treatment of overweight and obesity across the lifespan.
    - d. Provide culturally appropriate education in schools and communities about healthy eating habits and regular physical activity, based on the Dietary Guidelines for Americans, for people of all ages. Emphasize the consumer's role in making wise food and physical activity choices.
  - II. The Nation must take action to assist Americans in balancing healthful eating with regular physical activity. Individuals and groups across all settings must work in concert to:
    - a. Ensure daily, quality physical education in all school grades. Such education can develop the knowledge, attitudes, skills, behaviors, and confidence needed to be physically active for life.
    - b. Reduce time spent watching television and in other similar sedentary behaviors.
    - c. Build physical activity into regular routines and playtime for children and their families. Ensure that adults get at least 30 minutes of moderate physical activity on most days of the week. Children should aim for at least 60 minutes.
    - d. Create more opportunities for physical activity at worksites. Encourage all employers to make facilities and opportunities available for physical activity for all employees.
    - e. Make community facilities available and accessible for physical activity for all people, including the elderly.
    - f. Promote healthier food choices, including at least 5 servings of fruits and vegetables each day, and reasonable portion sizes at home, in schools, at worksites, and in communities.
    - g. Ensure that schools provide healthful foods and beverages on school campuses and at school events by:
      - Enforcing existing U.S. Department of Agriculture regulations that prohibit serving foods of minimal nutritional value during mealtimes in school food service areas, including in vending machines.
      - Adopting policies specifying that all foods and beverages available at school contribute toward eating patterns that are consistent with the Dietary Guidelines for Americans.

## Appendix C

- ♦ Providing more food options that are low in fat, calories, and added sugars such as fruits, vegetables, whole grains, and low fat or nonfat dairy foods.
- ◊ Reducing access to foods high in fat, calories, and added sugars and to excessive portion sizes.
- h. Create mechanisms for appropriate reimbursement for the prevention and treatment of overweight and obesity.
- III. The Nation must invest in research that improves our understanding of the causes, prevention, and treatment of overweight and obesity. A concerted effort should be made to:
  - a. Increase research on behavioral and environmental causes of overweight and obesity.
  - b. Increase research and evaluation on prevention and treatment interventions for overweight and obesity and develop and disseminate best practice guidelines.
  - c. Increase research on disparities in the prevalence of overweight and obesity among racial and ethnic, gender, socioeconomic, and age groups and use this research to identify effective and culturally appropriate interventions.

## **B.** Healthy People 2010 Goals<sup>111</sup>

- I. Improve accessibility of nutrition information, nutrition education, nutrition counseling and related services, and healthful foods in a variety of settings and for all population groups.
- II. Focus on preventing chronic disease associated with diet and weight, beginning in youth.
- III. Strengthen the link between nutrition and physical activity in health promotion.
- IV. Maintain a strong national program for basic and applied nutrition research to provide a sound science base for dietary recommendations and effective interventions.
- V. Maintain a strong national nutrition-monitoring program to provide accurate, reliable, timely, and comparable data to assess status and progress and to be responsive to unmet data needs and emerging issues.
- VI. Strengthen State and community data systems to be responsive to the data users at these levels.
- VII. Build and sustain broad-based initiatives and commitment to these objectives by public and private sector partners at the national, state, and local levels.

# C. Task Force on Community Prevention Services<sup>112</sup>

- I. Recommendations are based on a systematic review of community interventions shown to increase physical activity.
  - a. Develop large-scale, highly intensive, community wide campaigns with sustained high visibility. Messages regarding physical activity behavior should be promoted through television, radio, newspaper columns and inserts, and trailers in movie theatres.

## Appendix C

- b. Develop point of decision prompts to encourage stair use. Motivational signs should be place close to elevators and escalators encouraging use of nearby stairs for health benefits or weight loss.
- c. Develop programs tailored to individuals' readiness for change or specific interest. Program design should include helping participants incorporate physical activity into their daily routines by teaching them behavioral skills specifically: 1) goal setting and self monitoring, 2) building social support, 3) behavioral reinforcement through self-reward and positive self-talk, 4) structures problem-solving, and 5) relapse prevention.
- d. Develop social support interventions in community settings that focus on changing physical activity behavior through building, strengthening, and maintaining social networks that provide supportive relationships for behavior change. Examples include exercise buddies, exercise contracts, and walking groups.
- e. Modify school-based curricula and policies to increase amount of moderate or vigorous activity, increase the amount of time spent in physical education class, or increase the amount of time students are physically active in physical education class.
- f. Create or enhance access to places for physical activity combined with informational outreach activities. Examples include attractive sidewalks, stairwells, walking or biking trails, and exercise facilities in communities or workplace.

## D. National Consensus Panel on School Nutrition<sup>113</sup>

- I. Elementary Schools
  - a. Eliminate sale of all foods sold outside the school meal program during the school day.
  - b. Food and beverage items sold during morning and afternoon breaks must meet the standards described for secondary schools.
- II. Secondary Schools
  - a. Allow the sale of water, low-fat/non-fat milk, and beverages that contain at least 50% fruit juice with no added sweeteners.
  - b. Eliminate sale of soft drinks, sports drinks, punch, iced tea, and other drinks containing less that 50% real fruit juice.
  - c. Eliminate the sale of beverages containing caffeine (except chocolate milk).
  - d. Snacks, sweets and side dishes should not contain more than 30% calories from fat or 10% calories from saturated fat.
  - e. Snacks, sweets and side dishes should not contain more than 35% added sugar by weight (except fresh, dried or canned fruits and vegetables)
  - f. Limit portions sizes for snacks, sweets, side dishes and entrées.
    - $\Diamond$  Portion size chart available
  - g. Require the availability of quality fruits and vegetables at any place competitive foods are sold.

## Appendix C

#### 2. STATE OF CALIFORNIA RECOMMENDATIONS

## **A.** The Public Health Institute<sup>114</sup>

- I. Increase public awareness on the extent and causes of poor eating and exercise habits in adolescents and adults, the increasing rates of overweight, and the serious health, educational and economic implication for teens.
- II. Communicate to parents, educators, health professionals and other adults who work with adolescents the environmental and policy strategies available to promote health eating and exercise and prevent overweight to help them incorporate appropriate preventive measures in their own settings.
- III. Set reasonable expectations for slowing or reversing the rise in rates of obesity. Proceed with caution when implementing health promotion programs and policies to avoid stigmatizing at-risk and overweight adolescents, and put measures in place to prevent or eliminate discrimination.
- IV. Promote leadership from the food and fitness industries, as well as other business that market to adolescents, to modify the design and marketing of products that have a negative impact on dietary quality, physical activity, body image and overall health attitudes and beliefs.
- V. The federal government should coordinate a state nation response led by the Centers for Disease Control and Prevention. Similar to the early stage of other epidemics, an action-oriented nation grants program should be initiated.

# **B.** California Center for Public Health Advocacy – California Working Families Policy Summit<sup>115</sup>

- I. The State Legislature should establish a surcharge on the wholesale distribution of carbonated beverages. The revenue raised from the "soda surcharge" should be deposited into a "Child Health and Achievement Fund" to support programs that promote healthy eating and physical activity for children and adolescents, beginning with the following:
  - a. State leadership activities:
    - ♦ Develop major social marketing campaigns to promote healthy eating & physical activity.
    - Fund expiring foundation grant-funded child nutrition initiatives such as 5-A-Day Power Play, Food on the Run, and SHAPE California.
    - ♦ Continue to conduct and report the results of surveys and other surveillance efforts.
    - Oevelop a Childhood Obesity Annual Report to the legislature, describing the status of childhood nutrition and physical activity needs, practices, and related health conditions.
    - Provide programmatic and legal technical assistance to help schools and communities establish and implement local programs, policies, and regulations.

## Appendix C

- b. Community Programs: Make incentive funds available to public and nonprofit agencies to:
  - Oevelop health-friendly community and transportation infrastructures, including parks, bike trails, safe walkways, and junk food-free zoning ordinances.
  - ♦ Gather input from residents to develop local nutrition and physical activity action plans.
  - ♦ Improve nutrition and physical activity standards in after-school and childcare programs.
  - ♦ Encourage affordable high quality grocery stores, farmers markets, and community gardens to be established in low-income neighborhoods.
- II. The State Legislature and State School Board should work to ensure that the total school environment supports the developments of lifelong healthy eating and physical activity for all students.
  - a. Physical Education
    - Ensure that all elementary school students participate in quality physical education by establishing and adopting educational standards for physical education as a separate area of study.
    - Require strict enforcement of the existing State physical education mandates.
    - Require that questions about the importance of physical activity appear on the SAT 9 Test.
    - Require that schools provide parents written notification of their child's fitness test results.
    - Require school performance evaluations to include physical fitness test results.
    - Provide funding to schools to (a) decrease physical education class size to equal other courses, (b) hire at least one credentialed physical education teacher for every elementary school at least one day/week, and (c) provide professional development support for teachers in physical education.
  - b. Nutrition
    - ♦ Ensure that SB 19 (Escutia) is fully funded through 2007, implemented, and enforced.
    - Require that at least half of all food and beverages offered for sale on middle and high school campuses from vending machines, school stores, and as a la carte options meet the nutritional standards outlined in SB 19 (Escutia) for elementary school nutrition breaks.
    - ♦ Require that drinking water is available at multiple sites on school campuses.
    - ♦ Eliminate all commercialism of junk food from school campuses.
    - ♦ Require behavior-focused nutrition education to be integrated into the K-12 curriculum.

## Appendix C

- Require that questions about the importance of healthy eating appear on the SAT 9 Test.
- c. School Infrastructure
  - ♦ The State Legislature should utilize bond measures to raise funds to ensure safe and efficient operations of school cafeterias, PE facilities, and water fountains.
- III. The State Legislature should work to restrict corporate advertising of junk food to young children, and ensure that consumers have the information they need to make healthy food choices
  - a. Hold legislative hearings on the practice of junk food advertising targeting children.
  - b. Within the State's jurisdiction (as determined by the Attorney General), prohibit local television stations from purchasing junk food ads for broadcast during children's programs.
  - c. Within the State's jurisdiction (as determined by the Attorney General), limit junk promotions targeting young children.
  - d. Require nutrition labeling on printed and posted menus and on all food packages in chain restaurants. Labels should not assume multiple servings per item.
  - e. Require that 25% of menu options in fast food restaurants be "Heart-Healthy."
- IV. The Governor, State Legislature and the California Congressional delegation should work to assert California's influence to advocate for changes in federal laws and regulations.
  - a. Reduce or eliminate national television advertising of junk food to young children by:
    - Funding the University of California to publish a scientific report on the practice and health and economic consequences of marketing junk food to young children.
    - ♦ Holding Congressional hearings about corporate marketing practices.
    - Advocating for changes in Federal Trade Commission regulations.
  - b. Support through funding and federal policy California's efforts to:
    - $\diamond$  Establish competitive food standards in public schools.
      - ♦ Require nutrition labeling for restaurant foods.
      - Rebuild nutrition- and physical activity- related school and community infrastructures.
      - $\diamond$  Increase reimbursement for healthy school meals.
      - $\diamond$  Ensure that every child has access to affordable health care.

## Appendix D

Healthy People 2010-Summary of Objectives for Nutrition and Overweight, Physical Activity, and Related Areas of Concern<sup>116</sup>

## Nutrition and Overweight

Goal: Promote health and reduce chronic disease associated with diet and weight.

Number	Objective Short Title	
Weight Status and Growth		
19-1.	Healthy weight in adults	
19-2.	Obesity in adults	
19-3.	Overweight or obesity in children and adolescents	
19-4.	Growth retardation in children	
Food and Nutrient Consumption		
19-5.	Fruit intake	
19-6.	Vegetable intake	
19-7.	Grain product intake	
19-8.	Saturated fat intake	
19-9.	Total fat intake	
19-10.	Sodium intake	
19-11.	Calcium intake	
Iron Deficiency and Anemia		
19-12.	Iron deficiency in young children and in females of childbearing age	
19-13.	Anemia in low-income pregnant females	
19-14.	Iron deficiency in pregnant females	
Schools, Worksites, and Nutrition Counseling		
19-15.	Meals and snacks at school	
19-16.	Worksite promotion of nutrition education and weight management	
19-17.	Nutrition counseling for medical conditions	

## **Food Security**

19-18. Food security

## **Appendix D**

## **Physical Activity**

Goal: Improve health, fitness, and quality of life through daily physical activity.

## Number Objective Short Title

#### Physical Activity in Adults

- 22-1. No leisure-time physical activity
- 22-2. Moderate physical activity
- 22-3. Vigorous physical activity

## Muscular Strength/Endurance and Flexibility

- 22-4. Muscular strength and endurance
- 22-5. Flexibility

## Physical Activity in Children and Adolescents

- 22-6. Moderate physical activity in adolescents
- 22-7. Vigorous physical activity in adolescents
- 22-8. Physical education requirement in schools
- 22-9. Daily physical education in schools
- 22-10. Physical activity in physical education class
- 22-11. Television viewing

#### Access

- 22-12. School physical activity facilities
- 22-13. Worksite physical activity and fitness
- 22-14. Community walking
- 22-15. Community bicycling

#### **Related Objective Areas of Concern**

#### Access to Quality Health Services

1-3. Counseling about health behaviors

#### Arthritis, Osteoporosis, and Chronic Back Conditions

2-9. Cases of osteoporosis

#### Cancer

- 3-1. Overall cancer deaths
- 3-3. Breast cancer deaths
- 3-5. Colorectal cancer deaths
- 3-10. Provider counseling about cancer prevention

## Appendix D

## **Chronic Kidney Disease**

4-3. Counseling for chronic kidney failure care

## Diabetes

- 5-1. Diabetes education
- 5-2. New cases of diabetes
- 5-6. Diabetes-related deaths

## **Educational and Community-Based Programs**

- 7-2. School health education
- 7-5. Worksite health promotion programs
- 7-6. Participation in employer-sponsored health promotion activities
- 7-10. Community health promotion programs
- 7-11. Culturally appropriate and linguistically competent community health promotion programs

## **Food Safety**

- 10-4. Food allergy deaths
- 10-5. Consumer food safety practices

#### **Health Communication**

11-4. Quality of Internet health information sources

#### Heart Disease and Stroke

- 12-1. Coronary heart disease (CHD) deaths
- 12-7. Stroke deaths
- 12-9. High blood pressure
- 12-11. Action to help control blood pressure
- 12-13. Mean total blood cholesterol levels
- 12-14. High blood cholesterol levels

#### Maternal, Infant, and Child Health

- 16-10. Low birth weight and very low birth weight
- 16-12. Weight gain during pregnancy
- 16-15. Spina bifida and other neural tube defects
- 16-16. Optimum folic acid levels
- 16-17. Prenatal substance exposure
- 16-18. Fetal alcohol syndrome
- 16-19. Breastfeeding

#### **Mental Health and Mental Disorders**

18-5. Eating disorder relapses

#### **Substance Abuse**

26-12. Average annual alcohol consumption

#### **Appendix E**

#### Healthier US Initiative<sup>117</sup>

- Revitalize the President's Council on Physical Fitness and Sports. An important step in communicating the Administration's message on fitness and health is the revitalization of the President's Council on Physical Fitness and Sports. Football legend Lynn Swann will chair the council, and Olympic softball gold medallist and orthopedic surgeon Dr. Dot Richardson will serve as vice chair. The other members of the Council include professional athletes and trainers, U.S. Olympians, physicians and leading private sector experts. The Council will coordinate its activities with Federal, state, and private entities to serve communities across the country more effectively.
- Develop Agency-Wide Activities to Promote Personal Fitness. The President signed an Executive Order that directs certain Federal agencies to review all policies, programs, and regulations related to physical activity, nutrition, screenings, and making healthy choices. The agencies will propose revisions, modifications, or new actions to further improve the promotion of personal fitness, and forward the recommendations to the President within 90 days.
- Be Physically Active Every Day. Many chronic diseases can be prevented with modest exercise, in some cases as simple as walking for half an hour. For example, if just 10% of adults began walking regularly, America could save \$5.6 billion in costs related to heart disease. There are countless opportunities for physical activity that do not need to be strenuous or very time-consuming to be beneficial. Administration actions to promote physical activity include:

Declaring a Fee-Free Weekend in America's National Parks and Federal Lands Creating a HealthierUS.gov Web Site to Provide a Central Link to Government Fitness Resources Promoting the Use of Public Lands and Water Highlighting the Rivers, Trails, and Conservation Assistance Program

Eat a Nutritious Diet. Americans should make simple adjustments to their diet and avoid excessive portions. Increasing fruit and vegetable consumption is a central part of a healthier diet, and good overall nutrition lowers the risk of getting heart disease, stroke, cancer, and osteoporosis. Administration actions to promote better nutrition include:

Enhancing the National 5 A Day for Better Health Program Promoting Nutrition Curriculum and Education in Our Schools Supporting the Eat Smart-Play Hard Campaign

Get Preventive Screenings. Americans may be surprised to learn how a simple test like a cholesterol screen or a blood pressure check can reveal current health status and identify a need to adjust diet or behavior. Administration actions to promote preventive medicine include:

Creating the Healthy Communities Innovation Initiative Raising Awareness of Diabetes Screening, Especially for Women Strengthening and Improving Medicare

Make Healthy Choices. Avoid tobacco and drugs and the abuse of alcohol and make smart and safe choices in your everyday life. Administration actions to promote healthy choices include:

Creating a CDC Tobacco Control Toolkit Highlighting the Drug Free Communities Support Program Promoting Bicycle Safety Initiatives

# SECTION VIII: END NOTES

<sup>1</sup> U.S. Department of Health and Human Services. The surgeon general's call to action to prevent and decrease overweight and obesity. [Rockville, MD]: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; (2001). Website: <u>http://www.surgeongeneral.gov/sgoffice.htm</u>.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> Strong, W.B., Physical activity and children. <u>Circulation.</u> 81: 1697-1701, (1990).

<sup>6</sup> Tell, G.S., and Vellar, O.D., Physical fitness, physical activity, and cardiovascular disease risk factors in adolescents: the oslo youth study. <u>Prevention Medicine</u>. 17: 12-24, (1988).

<sup>7</sup> Treiber, F.A., Strong, W.B, Arensman, F.W., and Gruber, M., Relationships between habitual physical activity and cardiovascular responses to exercise in young children. In, <u>Children and Exercise XIII</u>, S.C. Oseid and K.H. Carlson (Eds.) Champaign, IL: Human Kinetics Publishers, 1989, pp. 285-294.

<sup>8</sup> Roccini, A, Katch, J., Anderson, J., Hinderliter, et al., Blood pressure in obese adolescents: effect of weight loss. <u>Pediatrics</u> 82: 16-23, (1988).

<sup>9</sup> Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. Physical activity and good nutrition: essential elements to prevent chronic diseases and obesity, at a glance, 2002. Website: <u>http://www.cdc.gov/nccdphp/dnpa/dnpaaag.htm</u>.

<sup>10</sup> U.S. Department of Health and Human Services. Healthy People 2000: national health promotion and disease prevention objectives. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, Office of the Assistant Secretary for Health, 1990, pp. 6, 379-380. DHHS pub. no. PHS 91-50212. Website: <u>http://www.health.gov/healthypeople/document/</u>.

<sup>11</sup> Cohen, J., Overweight kids: why should we care?, California Research Bureau, 2000.

<sup>12</sup> Krebs-Smith S., Cook D., Subar A., Cleavland L., Friday J., and Kahle L., Fruit and vegetable intakes of children and adolescents in the United States. <u>Archives of Pediatric and Adolescent Medicine</u>; 150: 81-86 (1996).

<sup>13</sup> Ibid.

<sup>14</sup> Subar A., Krebs-Smith S., Cook A., and Kahle L., Dietary sources of nutrients among U.S. children, 1989-1991. <u>Pediatrics</u> 1998; 102:913-923.

<sup>15</sup> Center on Hunger, Poverty and Nutrition., Statement on the link between nutrition and cognitive development in children. Tufts University School of Nutrition. 1994.

<sup>16</sup> Roberts, S.B. and Heyman M.B., How to feed babies and toddlers in the 21<sup>st</sup> century. in <u>Zero to Three: Bulletin of</u> <u>Zero to Three: National Center for Infants, Toddlers, and Families</u>. August/ September 2000. Volume 21, Issue 1.

<sup>17</sup> Kuczmarski, R.J., Ogden C.L., Grummer-Strawn L.M., et al. (2000). CDC Growth Charts: United States. Advance Data No. 314. Website: <u>http://www.cdc.gov/nccdphp/dnpa/growthcharts/guideintro.htm</u>.

<sup>18</sup> U.S. Department of Health and Human Services. The surgeon general's call to action to prevent and decrease overweight and obesity., Op. Cit.

<sup>19</sup> Ibid.

<sup>20</sup> Goran, M., Metabolic precursors and effects of obesity in children: a decade of progress, 1990-1994. <u>American</u> <u>Journal of Clinical Nutrition</u>. 73:2, 158-171. Feb. 2001.

<sup>21</sup> Centers for Disease Control and Prevention., Youth Risk Behavior Surveillance System: 2001 Results. Website: <u>http://www.cdc.gov/nccdphp/dash/yrbs/index.htm</u>.
 <sup>22</sup> Slusser, W., Cohen, S. Winham, D., and Neumann, C., Obesity in urban, low income, los angeles elementary

<sup>22</sup> Slusser, W., Cohen, S. Winham, D., and Neumann, C., Obesity in urban, low income, los angeles elementary school children Abstract, Obesity Conference, Atlanta, Georgia, 1999.

<sup>23</sup> California Department of Education, California Physical Fitness Test, 2001. Website: <u>http://www.cde.ca.gov/statetest/pe/pe.html</u>.

<sup>24</sup> Center on Hunger, Poverty and Nutrition., Op. Cit.

<sup>25</sup> Los Angeles County Department of Health Services., 1999-2000 Los Angles County Health Survey.

<sup>26</sup> Los Angeles Times article, "Conference Brings Attention to Poor Nutrition of Children," 11/4/01.

<sup>27</sup> Healthy Eating & Physical Activity Qualitative Research, Results from Focus Groups, November 13, 1998, by Regino Chavez 3536 Parrish Ave., Los Angeles, CA 90065-3419 (323) 254-6630, prepared for Nutrition Network for Healthy, Active Families, California Department of Health Services.

<sup>28</sup> Centers for Disease Control and Prevention., Op. Cit.

<sup>29</sup> Linder, C.W., and DuRant R.H., Exercise, serum lipids, and cardiovascular disease-risk factors in children. <u>Pediatric Clinics of North America</u>. 29: 1341-1354 (1982).

<sup>30</sup> Morrison, J.A., and Glueck C.J., Pediatric risk factors for adult coronary heart disease: primary atherosclerosis prevention. <u>Cardiovascular Review Report.</u> 2: 1269-1281 (1981).

<sup>31</sup> Shear, C.L., Freedman, D.S, Burke, G.L., Harsha, D.W, Webber, L.S., and Berenson, G.S., Secular trends of obesity in early life: the Bogalusa heart study. <u>American Journal of Public Health.</u> 78: 75-77 (1988).

<sup>32</sup> Mossberg, H.O., 40-year follow-up of overweight children. <u>Lancet</u>, *2*, 491-493., 1989.

<sup>33</sup> Lloyd, J.K., Wolf, O.H, and Whelen, W.S., Childhood obesity: a long-term study of height and weight. <u>British</u> <u>Medical Journal</u>. *2*, 145-148 (1961).

<sup>34</sup> Haase, K.E. and Hasenfeld, H., Zur Fettsucht im Kindesalter. 2. Kinderheilkunde (Kind), 78, 1 (1958).

<sup>35</sup> Charney, E., Goodman, H.C., McBride, M., Lyon, B., and Pratt, R., Childhood antecedents of adult obesity. <u>New England Journal of Medicine.</u>, *295*, 6-9, 1976.

<sup>36</sup> Abraham, S., and Nordseick M., Relationship of excess weight in children and adults. <u>Public Health Reports</u>. *75*, 263-273 (1960).

<sup>37</sup> Schonfled-Warden, N., Warden, C., Pediatric obesity: an overview of etiology and treatment. <u>Pediatric Endocrinology</u>. 44:2, 339-354. 1997.

<sup>38</sup> U.S. Department of Health and Human Services. The Surgeon General's call to action to prevent and decrease overweight and obesity., Op. Cit.

<sup>39</sup> Ibid.

<sup>40</sup> Morbidity and mortality associated with elevated body weight in children and adolescents. <u>American Society for</u> <u>Clinical Nutrition</u>. 63:445s-7s. 1996.

<sup>41</sup> U.S. Department of Health and Human Services. The Surgeon General's call to action to prevent and decrease overweight and obesity. Op. Cit.

<sup>42</sup> California Working Families Policy Summit: Remarks by Harold Goldstein, Executive Director, California Center for Public Health Advocacy, 2002.

<sup>43</sup> Moore, L.L., Lombardi, D.A., White, M.J., Campbell, J.L., Oliveria, S.A., and Ellison, R.C., Influence of parents' physical activity levels on activity levels of young children. *Journal of Pediatrics*. 118: 215-219, (1991).

<sup>44</sup> Klesges R.C., Eck, L.H., Hanson, C.L., Haddock, C.K., and Klesges, L.M.. Effects of obesity, social interactions, and physical environment on physical activity in preschoolers. <u>Health Psychology</u>. 9: 435-449, (1990).

<sup>45</sup> Sallis J.F., Alcazar, J.E., McKenzie, T. L., Hovell, M.F., Kolody, B., and Nader, P.R., Parental behavior in relation to physical activity and fitness in 9-year-old children. <u>American Journal of Diseases of Children</u>.146:1383-1388, (1992).

<sup>46</sup> Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. Op. cit.

<sup>47</sup> U.S. Department of Health and Human Services. Healthy People 2010. Op. cit.

<sup>48</sup> Anderson, R.E.; Crespo, C.J.; Bartlett, S.J.; et al. Relationship of physical activity and television watching with body weight and level of fatness among children: Results from the Third National Health and Nutrition Examination Survey. Journal of the American Medical Association 279:938-942, (1998).

<sup>49</sup> Variyam, J. Overweight children: is parental nutrition knowledge a factor?, <u>Food Review</u> Vol. 24, Issue 2, 18-22, May-August 2001.

<sup>50</sup> Krebs-Smith, S., Cook, D., Subar, A., Cleavland, L., Friday, J., and Kahle, L., Fruit and vegetable intakes of children and adolescents in the United States. <u>Archives of Pediatric and Adolescent Medicine</u>. 150: 81-86. (1996).

<sup>51</sup> Ibid.

<sup>52</sup> Subar, A., Krebs-Smith, S., Cook A., and Kahle, L., Dietary Sources of Nutrients Among U.S. Children, 1989-1991. <u>Pediatrics</u>. 102:913-923, (1998).

<sup>53</sup> Center on Hunger, Poverty and Nutrition., Op. Cit.

<sup>54</sup> Sallis, J.F., Johnson, M.F., Calfas K.J, Caparosas, and Nichols, J.F., Assessing perceived physical environmental variables that may influence physical activity. <u>Research Quarterly for Exercise and Sport</u>.58:345-51 (1997).

<sup>55</sup> Los Angeles County Department of Health Services, Los Angeles County Health Survey 1999-2000.

<sup>56</sup> California State Board of Education Policy, Waiver guidelines physical education requirements. Education Code Section 33050 et seq. Policy # 99-03, June 1999.

<sup>57</sup> United States Department of Agriculture. Foods sold in competition with USDA school meal programs: a report to congress. Washington D.C. January 2001.

<sup>58</sup> National Nutrition Monitoring and Related Research Act of 1990. <u>Public Law</u>. 101-445, (1990).

<sup>59</sup> Kushner R.F., Thorp F.K., Edwards J., Weinsier R.L., Brooks C.M., Implementing nutrition into the medical curriculum: a user's guide. <u>American Journal of Clinical Nutrition</u>. 52:401-3, (1990).

<sup>60</sup> American Journal of Clinical Nutrition, Vol. 68, 894-898, Copyright © 1998 by The American Society for Clinical Nutrition, Inc.

<sup>61</sup> Swanson A.G., Nutrition sciences in medical-student education. <u>American Journal of Clinical Nutrition</u>. 53:587-8, (1991).

<sup>62</sup> Weinsier, R.L, Boker, J.R., Morgan, S.L., et al., Cross-sectional study of nutrition knowledge and attitudes of medical students at three points in their medical training at 11 southeastern medical schools. <u>American Journal of Clinical Nutrition</u>. 48:1-6, (1988).

<sup>63</sup> Storym M.T., Neumark, S.T., Zainer, D.R., et. al., Management of child and adolescent obesity: attitudes, barriers, skills and training needs among health care professionals. <u>Pediatrics</u>. 110:210-214, (2002).

<sup>64</sup> Fredrick, L., Trowbridge, M.D., Denise, Safkar, et. al., Management of child and adolescent obesity: study, design, and practitioner characteristics. <u>Pediatrics</u>. 110:205-209, (2002).

<sup>65</sup> Rippe, J., McInnis, k.J. NS Melanson, K.J., Physician involvement in the management of obesity as a primary medical condition. Obesity Research. Nov: 9 Suppl. 4: 3023-3115, (2001).

<sup>66</sup> American Dietetic Association. American dietetic association survey shows americans can use some help in sizing up their meals. May 20, 2002. Website: <u>http://www.eatright.org/pr/2002/052002b.html</u>.

<sup>67</sup> Rolls, B.J., Engell, D., Bich, L.L., Serving portion size influences 5-year-old but not 3-year old children's food intake. Journal of the American Dietetic Association, Feb; 100(2): 232-34, (2000).

<sup>68</sup> California Center for Public Health Advocacy, California Working Families Policy Summit: Recommendations to Promote Nutrition and Physical Activity for Children and Adolescents, 2002.

<sup>69</sup> Borzekowski, D. and Robinson, T., The 30-second effect: An experiment revealing the impact of television commercials on food preferences of preschoolers. <u>Journal of the American Dietetic Association</u>, 101(1), January (2001).

<sup>70</sup> National Institutes of Health, Funding Research. Website: <u>http://www.4.od.nih.gov/officeofbudget/FundingResearchAreas.html</u>.

<sup>71</sup> Centers for Disease Control and Prevention. Funding by Budget and Sub-budget Activities. Website: <u>http://www.cdc.gov/fmo/fmofybudget.html</u>.

<sup>72</sup> Jacobsen, M. and Brownell, K., Small Taxes on Soft Drinks and Snack Foods to Promote Health. <u>American</u> Journal of Public Health, 90:854-857, (2000).

<sup>73</sup> Ibid.

<sup>74</sup> Arkansas Soft Drink Tax Act. Title 26, Subtitle 5, Chapter 57, Subchapter 9.

<sup>75</sup> California Center for Public Health Advocacy, Op. Cit.

<sup>76</sup> New Schools Better Neighborhoods, Website: <u>http://www.nsbn.org</u>.

<sup>77</sup>Pate, R., Trost, S., Mullis, R., Sallis, J., Wechsler, H, Brown, D., Op. Cit

<sup>78</sup> Center for Civic Partnerships (2002). Fresh ideas for community nutrition and physical activity. Sacramento, CA: Public Health Institute.

<sup>79</sup> Progressive Los Angeles Network (PLAN) and The Center for Food and Justice, Urban and Environmental Policy Institute, Occidental College. Food and Nutrition Priorities for Los Angeles and 21-Point Agenda; <u>http://www.progressivela.org/resources/index.htm</u>, 2001.

<sup>80</sup> Sallis, J.F., Johnson, M.F., Calfas, K.J., Caparosas, Nichols, J.F., Op. Cit.

<sup>81</sup> Los Angeles County Department of Health Services, Los Angeles County Health Survey 1999-2000.

<sup>82</sup> U.S. Department of Health and Human Services, Public Health Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion., Op. Cit.

<sup>83</sup> American Dietetic Association, Op. Cit.

<sup>84</sup> Rolls B.J, Engell D., Bich L.L., Op. Cit.

<sup>85</sup> American Eating Habits: Changes and Consequences. U.S. Department of Agriculture, Economic Research Service, Food and Rural Economics Division. Agriculture Information Bulletin No. 750.

<sup>86</sup> Borzekowski, D., Robinson, T., Op. Cit.

<sup>87</sup> Johnson, C.C., Osganian, S.K., Budman, S.B., et al. CATCH: family process evaluation in a multicenter trial. <u>Health Education Quarterly</u>. (suppl. 2):S91-S106, (1994).

<sup>88</sup> National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases. Survey results link parental physical activity to children's behaviors. <u>Weight-Control Information Network</u> 4(2): 2-3. (1998).

<sup>89</sup> Goetzel, R.Z., et al., "What is ROI? a systematic review of return on investment studies of corporate health and productivity management initiatives." AWHP'S <u>Worksite Health</u>. Volume 6, (1999).

<sup>90</sup> Powell, D.R., Characteristics of successful wellness programs. <u>Employee Benefits Journal</u>, (pp 15-21) September, (1999).

<sup>91</sup> University of Michigan Health Management Research Center., The ultimate 20th century cost benefit analysis and report, March 2000.

<sup>92</sup> Glik, D.C., Kronenfeld, J.J, and Jackson, K., Predictors of wellness: role performance behaviors, <u>American</u> Journal of Health Behavior, Volume 20, (1996).

<sup>93</sup> Goetzel,R.Z., et al., Op. Cit.

<sup>94</sup> Powell, D.R., Op. Cit.

<sup>95</sup> Institute of Medicine., Nutrition during lactation. Washington, DC: National Academy Press, pp. 24-25, 161-171, 197-200. (1991).

<sup>96</sup> U.S. Department of Health and Human Services. Healthy People 2000., Op. Cit.

<sup>97</sup> Cohen, R, Lang, L, and Slusser W., A description of a male-focuses breastfeeding promotion corporate lactation program. Journal of Human Lactation. 18(1), (2002).

<sup>98</sup> Cohen, R., Mrtek, M.B., Mrtek, R.G., Comparison of maternal absenteeism and infant illness rates among breastfeeding and formula-feeding women in two corporations. <u>American Journal of Health Promotion</u>. 10(2):148-153, (1995).

<sup>99</sup> Heining, M.J., Dewey, K.G., Health effects of breastfeeding for mothers: a critical review. <u>Nutrition Research</u> <u>Reviews</u>. 10:35-56, (1997).

<sup>100</sup> Ball TM, Write AL. Health care costs of formula-feeding in the first year of life. <u>Pediatrics</u>. 9:89-110 (1999).

<sup>101</sup> Sackett, D.L., et al., Evidence-based medicine: what it is and what it isn't., <u>British Medical Journal</u> 312 (Jan 13, 1996) 71-72.

<sup>102</sup> Gardner, S.E., Brounstein, P.J., and Stone, D.B., Guide to science-based practices. (2001). Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention, Division of Knowledge Development and Evaluation.

<sup>103</sup> Centers for Disease Control and Prevention. Increasing physical activity: a report on recommendations of the Task Force on Community Prevention Services. MMWR 2001;50(No.RR-18).

<sup>104</sup> Carroll, A., Craypo, L., and Samuels, S., Evaluating nutrition and physical activity social marketing campaigns: a review of the literature for use in community campaigns. Center for Advanced Studies in Nutrition and Social Marketing, University of California, Davis, CA. 2000.

<sup>105</sup> Pate, R., Trost, S., Mullis, R., Sallis, J., Wechsler, H., Brown, D., Op. Cit.

<sup>106</sup> Bauman, A.E., Bellew, B., Owen, N., Vita, P., Impact of an australian mass media campaign targeting physical activity in 1998. <u>American Journal of Preventive Medicine</u>. 21 (1), (2001)

<sup>107</sup> Alcalay, R. and Bell, R.A., Promoting nutrition and physical activity through social marketing: current practices and recommendations. Center for Advanced Studies in Nutrition and Social Marketing, University of California, Davis, CA. 2000.

<sup>108</sup> National WIC Breastfeeding Promotion Project evaluation, 2002. Website: http://www.social-marketing.org/success/cs-nationalwic.html.

<sup>109</sup> Alcalay, R. and Bell, R.A., Op. Cit.

<sup>110</sup> The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity 2001: Website: <u>http://www.surgeongeneral.gov/sgoffice.htm</u> Publications, Calls to Action.

<sup>111</sup> Healthy People 2010: Website: <u>http://www.health.gov/healthypeople/document/</u>.

<sup>112</sup> Centers for Disease Control and Prevention. Increasing physical activity: a report on recommendations of the Task Force on Community Prevention Services. MMWR 2001;50 (No.RR-18).

<sup>113</sup> California Center for Public Health Advocacy. National consensus panel on school nutrition: recommendations for competitive food standards in California schools. March 2002. Website: http://www.publichealthadvocacy.org/school food standards.

<sup>&</sup>lt;sup>114</sup> Public Health Institute. 1998 California teen eating, exercise, and nutrition survey. September, 2000.

<sup>&</sup>lt;sup>115</sup> California Center for Public Health Advocacy, California working families policy summit: nutrition and physical activity for children and adolescents. January 2002.

<sup>&</sup>lt;sup>116</sup> Healthy People 2010: Website <u>http://www.health.gov/healthypeople/document/</u>.

<sup>&</sup>lt;sup>117</sup> Healthier US Initiative. Website: <u>http://www.healthierus.gov</u>.