Healthy and Active Before 5:
Action Plan to Reduce Childhood Obesity in Contra Costa County
Good nutrition and regular physical activity are fundamental to promoting healthy growth and development in young children. Establishing healthy habits early helps prevent chronic disease in future years. To help ensure all Contra Costa County children get a healthy start in life, Kaiser Permanente, First 5 Contra Costa, the Contra Costa Child Care Council and Families CAN have joined together with Contra Costa Health Services to form Healthy and Active Before 5—a countywide collaborative effort to address the problems of early childhood obesity. The goal of Healthy and Active Before 5 is to create a healthier Contra Costa by increasing options for healthy eating and active living in our county through focusing on supportive environments and positive parenting.

A Leadership Council was formed to provide overall guidance and expertise in crafting this action plan. The Healthy and Active Before 5 Leadership Council is composed of leaders and decision-makers in government, health care, children’s services, the faith community, businesses, education, public safety and non-profits. An Executive Committee composed of representatives from Kaiser Permanente, First 5 Contra Costa, the Contra Costa Child Care Council, Families CAN, Contra Costa Health Services, and the West County HEAL (Healthy Eating, Active Living) Collaborative provided day-to-day project oversight. Working with the Executive Committee, Prevention Institute supported the Healthy and Active Before 5 project by designing and facilitating the planning process, conducting the community forums. They also developed an electronic survey that was widely disseminated to key stakeholders throughout the county, and a series of community forums. Over 85 key stakeholders responded to the survey and contributed their insights regarding the most effective strategies to address childhood obesity in Contra Costa County. One hundred and thirty community members attended one of the five bilingual community forums held throughout the county where families and childcare providers spoke about the issues which impact them in trying to assure healthy lifestyles for their children.

### Background

Contra Costa County has witnessed a dramatic increase in rates of pediatric obesity over the last 30 years with particularly rapid increases amongst low-income, African-American and Hispanic children and youth. Information from the California Pediatric Nutrition Surveillance

<table>
<thead>
<tr>
<th>BMI for age greater than 95%</th>
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<tbody>
<tr>
<td>All</td>
</tr>
<tr>
<td>Hispanic</td>
</tr>
<tr>
<td>Black</td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td>17.3%</td>
</tr>
<tr>
<td>19.1%</td>
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<td>14.1%</td>
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<td>12.0%</td>
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</tbody>
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Table 1: Low Income Contra Costa County Children Ages 2 - 5 in 2006
Information from the 2006 California Pediatric Nutrition Surveillance Survey in (BMI) for age, for children in Contra Costa County overall between the ages of 2 and 5 years has tripled to a rate of 17.3%. The 2006 data further reveal racial disparities in rates of overweight, particularly for children over the age of 2 (Table 1). Recent studies have shown that overweight preschoolers are 5 times more likely to be overweight at age 12, and that childhood overweight is a strong predictor for adult obesity and the associated problems of diabetes, hypertension, and other lifetime problems.

Increasing scientific evidence has shown that breastfeeding significantly reduces rates of childhood obesity. Data gathered on in-hospital infant feeding in 2006 through the California Newborn Screening reveal that exclusive breastfeeding rates differ by race. (Table 2). Babies who are not exclusively breastfed at hospital discharge are at increased risk of early cessation of breastfeeding. The Academy of Pediatrics recommends exclusive breastfeeding for the first six months and continued breastfeeding after introduction of solid food for at least the first 12 months. In California less than 24% of infants are exclusively breastfed at 6 months. Many women terminate breastfeeding early when they return to work.

The rising rates of obesity for toddlers, children and adolescents in Contra Costa present a tremendous challenge to the future health and prosperity of the county. Overweight children and adults are at a higher risk for a variety of chronic diseases, including Type 2 Diabetes Mellitus, high blood pressure, heart disease and stroke. Children seen today in local hospitals and clinics have previously unseen early diabetes, high blood pressure and poor self-esteem associated with the obesity. The obesity epidemic presents tremendous financial costs to our society as well, with an estimated $117 billion per year nationwide cost of direct medical services and lost productivity. Obesity is truly an urgent threat to Contra Costa.

Table 2: Exclusive breastfeeding at Hospital Discharge in Contra Costa –
Newborn Screening Percentage of Infants

<table>
<thead>
<tr>
<th>Race</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>43.3</td>
</tr>
<tr>
<td>Asian</td>
<td>57.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>55.2</td>
</tr>
<tr>
<td>White</td>
<td>63.6</td>
</tr>
</tbody>
</table>

*Body Mass Index (BMI) is a number calculated by using height and weight measurements that gives a general indication if weight falls within a healthy range.
Approaches to the Challenge

Many people believe that dealing with overweight and obesity is a personal responsibility. To some degree they are right, but it is also a community responsibility. When there are no safe, accessible places for children to play or adults to walk, jog, or ride a bike, that is a community responsibility. When school lunchrooms or office cafeterias do not provide healthy and appealing food choices that is a community responsibility. When new or expectant mothers are not educated about the benefits of breast-feeding, that is a community responsibility. When we do not require daily physical education in our schools, that is also a community responsibility. There is much that we can and should do together.


Preventing childhood obesity requires a comprehensive approach that addresses the various forces that influence eating and physical activity for young children and their families. The nutrition and activity behaviors of infants, toddlers and preschoolers are largely determined by the choices of their parents, families and key care providers. It is essential to provide an appropriate level of information and support about the importance of healthy eating, physical activity and limited television to these key decision makers. Educational efforts, however, are only one part of the solution and must be complemented by broader community-level interventions. There is increasing evidence that the characteristics of the physical environment—from the presence of parks to the availability of healthy foods in neighborhood stores—is directly linked to eating and activity behavior. Research shows that even the most comprehensive educational efforts result in only modest changes in behavior. According to the Institute of Medicine:

“It is unreasonable to expect that people will change their behavior so easily when so many forces in the social, cultural, and physical environment conspire against change. If successful programs are to be developed to prevent disease and improve health, attention must be given not only to the behavior of individuals, but also to the environmental context within which people live.”

The ultimate goal of childhood obesity prevention efforts, and for this Action Plan, is to create food and activity environments in neighborhoods and key children’s institutions that motivate and support children and families to adopt healthy behaviors.
Studies Linking Healthy Eating and Active Living to Community Environments and Organizational Practices

- Communities that develop pedestrian and bicycle-friendly infrastructure with links to destinations of interest have more physically active residents.\textsuperscript{9}

- Communities that build bicycling and walking trails, support exercise programs, and provide public areas such as parks and sidewalks can boost the physical activity levels of residents.\textsuperscript{10}

- Creation of or enhanced access to places for physical activity can result in a 25\% increase in the percentage of people who exercise at least three times per week.\textsuperscript{11}

- African-American residents increased their fruit and vegetable intake by an average of 32\% for each supermarket in their census tract.\textsuperscript{12}

- Low fruit and vegetable consumption are linked to the poor selection of these items in the nearest neighborhood supermarkets.\textsuperscript{13, 14}

- Higher food prices, particularly higher fruit and vegetable prices, were significantly related to greater increases in BMI in elementary school children.\textsuperscript{15}

- California hospitals with comprehensive breastfeeding policies have higher rates of exclusive breastfeeding than hospitals without strong policies.\textsuperscript{16}
PRINCIPLES AND STRATEGIES TO SUPPORT THE REDUCTION OF CHILDHOOD OBESITY AMONGST CHILDREN 0 – 5 IN CONTRA COSTA COUNTY†

In order to best achieve the goal of reducing childhood obesity amongst children 0-5 in Contra Costa County, Healthy and Active Before 5 developed a set of eight overarching principles. The principles focus on ensuring that families and care providers have the information they need to make healthy eating and physical activity decisions. They also emphasize the importance of making changes in key community environments and settings in order to make healthy eating and activity choices easier.

†Appropriate quotes will be inserted from the surveys and community forums.
Principles

Principle 1 - Support and promote breastfeeding and the use of breastmilk as the normal way to feed infants, for at least the first year of life.

Principle 2 - Increase the availability, accessibility and demand for affordable, healthy foods in all neighborhoods.

Principle 3 - Increase the availability and utilization of safe places to play and be physically active for all young children and their families.

Principle 4 - Improve the food and physical activity environment in preschool and child care settings by offering high quality nutritious foods and opportunities for physical activity and play.

Principle 5 - Support the elimination of and reduce the exposure to marketing of foods of low nutritional value to children.

Principle 6 - Encourage the reduction of TV and other screen time for children 0 - 5.

Principle 7 - Assure that families and young children receive quality preventive care through pregnancy and early childhood.

Principle 8 - Ensure that key community sectors provide parents and other care providers with the information and support they need to make healthy eating and activity choices for their children.

“I work in child care and it is not uncommon for children’s first words to be French fries.”
Principle 1:

Support and promote breastfeeding and the use of breastmilk as the normal way to feed infants, for at least the first year of life

Breastfeeding benefits the mother, the baby, the family and society. Human milk is uniquely superior for feeding the human infant. It is easy to digest and contains over 200 components for healthful development and protection against disease. There is strong evidence that factors in breast milk protect infants from a wide variety of illnesses including respiratory and digestive tract infection, ear infections and urinary tract infections. In addition, studies have shown an association of breastfeeding and reduced risk of becoming an overweight child.\(^\text{17}\)

Communities can support breastfeeding by:
- Ensuring that the pregnant woman and her family are informed about breastfeeding,
- Supporting the mother’s infant-feeding choice in the hospital,
- Providing help and encouragement when she returns home with her newborn,
- Accepting breastfeeding, even in public, as the appropriate way to feed her infant.

Breastfeeding mothers and babies benefit when their environments, the home, public spaces and workplaces accommodate and encourage breastfeeding.
Strategies that support Principle 1:

1. Inform the community of California laws that give women the right to breastfeed in public settings and to have a comfortable, private space at work for expressing breastmilk.

2. Encourage churches, stores, child care programs, preschools and public facilities to comfortably accommodate breastfeeding women when they need to nurse their baby.

3. Work with local community colleges, schools and libraries to support breastfeeding by including breastfeeding information in courses and book collections.

4. Encourage all Contra Costa hospitals and outpatient medical facilities to adopt standards of medical practice that encourage exclusive breastfeeding, including:
   - Measurement of breastfeeding rates in their patient population
   - Adoption of written/institutional policies that support exclusive breastfeeding, using guidance from Baby-Friendly USA Initiative’s 10 Steps
   - Training of all health care staff in the skills needed to implement the policies

5. Advocate for increased insurance benefits and public health funding for breastfeeding services and programs to ensure that all breastfeeding mothers have access to support and breastfeeding supplies as needed.
Principle 2:

Increase the availability, accessibility and demand for affordable, healthy foods in all neighborhoods

Many families face challenges in purchasing and preparing the nutritious foods that are recommended to keep their children healthy and well. Frequently cited barriers include poor availability of fresh fruits and vegetables and other healthy foods in neighborhood food stores as well as the higher cost of healthy foods. Families and children are more likely to buy and prepare healthy foods when these foods are available, affordable and culturally appropriate. Creating neighborhood food environments that motivate and support individuals to eat a healthy diet should make it easier to achieve long-term, broad-based improvements in eating trends.

Strategies that support Principle 2:

1. Work with neighborhood stores in underserved areas to offer and effectively market more affordable fresh produce, non-fat dairy items, and other healthy foods.
2. Support policies that increase the enrollment in WIC, Food Stamps and Child Care Meal Programs.
3. Adopt vending machine standards that eliminate the sale of sodas, candy and foods of low nutritional value in community facilities serving young children (hospitals, clinics, libraries, community centers).
4. Work with food pantries, soup kitchens and faith-based institutions to carry and serve more healthy foods, including fruits and vegetables.
5. Establish accessible farmers’ markets/farm stands in underserved areas.

“I have 7 kids and Albertson’s had a deal: $10 for 10 cereals. They were all sugary cereals but [healthy cereal] is $5 a box. I have to buy what will feed my 7 kids and what I can afford.”
Principle 3:
Increase the availability and utilization of safe places to play and be physically active for all young children and their families

Physical activity and play come naturally to young children and occupy an important role in early childhood development. Families of young children should be able to walk around their neighborhoods easily and have easy access to a variety of opportunities for their children to engage in activity. The availability and accessibility of age appropriate programs, playground equipment and facilities, perceptions of safety, cleanliness and ambiance as well as the design of streets and sidewalks all influence children’s activity levels. Families and care providers frequently cite lack of safety and general ambiance as a reason they will not take young children to nearby parks and playgrounds or have them play outside their homes. Making existing parks, play spaces and the general neighborhood environment safe and clean will encourage greater outdoor play.

Strategies that support Principle 3:

1. Improve street design so that it is easy and safe to walk and bike (including a Safe Routes to School Program).

2. Work with parks and recreation and other community based programs to increase the availability and affordability of programs that support active play and physical activity for young children and their families.

3. Promote an overall community atmosphere that feels pleasant and safe, and that encourages outdoor recreation and play in all communities.

4. Increase the availability and desirability of age-appropriate playgrounds and facilities for all young children.

5. Work with cities to develop ordinances in apartment and multi-unit housing complexes allowing children the space and noise tolerance for active play.
Principle 4:

Improve the food and physical activity environment in preschool and child care settings by offering high quality nutritious foods and opportunities for physical activity and play.

Preschools and child care provide a foundation for shaping future lifestyle behaviors and offer an ideal opportunity to instill healthy habits by offering a variety of healthy foods and promoting fun physical activity and play. The food served in preschool and child care settings significantly contribute to children’s overall nutritional intake. A key objective during these early years is to introduce children to a large variety of healthy foods, especially fresh fruits and vegetables, to develop children’s taste buds and affinity for different foods. Physical activity remains a natural part of young children’s play and development. Children’s environments should encourage children’s tendencies to be physically active through activities that are safe, fun and age appropriate. In addition to offering healthy foods and opportunities for play and activity, preschool and child care staff should serve as role models for these healthy behaviors.

“It’s hard for those of us who are working. We get home when it’s almost dark and it’s not safe for women and their children.”
Strategies that support Principle 4:

1. Promote participation in the Child Care Food Program for low income children.

2. Adopt, promulgate, and support nutrition standards for healthy meals, snacks and beverages.

3. Adopt, promulgate, and support physical activity standards and curriculum that promote developmentally appropriate safe physical activity and play in preschools and child care facilities.

4. Train staff to model positive eating and activity behaviors (i.e., leading activity sessions, preparing healthy food options).
Principle 5:
Support the elimination of and reduce the exposure to marketing of foods of low nutritional value to children

Food and beverage advertising has become a pervasive element in the daily lives of even the youngest children. In its 2005 report, Food Marketing to Children and Youth: Threat or Opportunity?, the Institute of Medicine concluded that there is “strong evidence that TV advertising of foods and beverages has a direct influence on what children choose to eat.” Children five and under are especially vulnerable to the influence of advertising because they can not distinguish truth from advertising. It is possible to counteract the negative influences of marketing to children by encouraging practices in neighborhood food establishment, public spaces and child care and preschool settings that promote healthy eating for children and youth.

Strategies that support Principle 5:

1. Work with restaurants to create dining experiences which promote healthy foods and limit marketing of unhealthy foods for young children.

2. Work with neighborhood stores to develop marketing and product placement guidelines (e.g., candy-free check-out aisles) that promote healthy foods and limit marketing of unhealthy foods for young children.

3. Work with policy makers to develop ordinances that limit young children’s exposure to marketing of unhealthy foods.

4. Adopt standards for child care centers and preschools that limit advertising of food products and set guidelines for the use of promotional items or gifts.
Principle 6:
Encourage the reduction of TV and other screen time for children 0-5

Limited television exposure and an enriched home environment have been shown to be important determinants of a child’s health and developmental achievements. In particular, a child who watches more than 2 hours of television, video games and/or computer time a day is very likely to be overweight. A study conducted in 2002 concluded that for each additional hour of television watching, the likelihood of a child being overweight increased by 6%. Studies of young children have shown that TV watching promotes the consumption of unhealthy foods. A 2007 Kaiser Family Foundation concluded that amongst the food ads aimed at children there was not a single ad for fruits or vegetables targeted at children or teens. The study also concluded that even children as young as 2 – 7 see approximately 30 hours worth of food ads annually. As the popularity of children’s television shows as well as video and computer games grows, it is important to counteract their influences on children’s eating and activity behaviors.

Strategies that support Principle 6:

1. Work with child care centers and preschools to adopt, promote and promulgate the American Academy of Pediatrics’ recommendation to limit TV, video and computer time to less than 2 hours a day for children over 2 years of age and no television for children under 2.

2. Work with health care providers, home visiting programs and community organizations to communicate tools and strategies that reduce exposure to television screen time for families with young children.

“There is a huge difference between the state run and privately run preschools. The state has lower standards.”
Principle 7:

Assure that families and young children receive quality preventive care through pregnancy and early childhood

Doctors and other medical practitioners have an influence on the eating and activity behaviors of their patients and medical visits are an ideal opportunity to instill healthy habits. Studies have documented that brief counseling sessions integrated into regular medical check-ups have a beneficial impact on patients’ physical activity levels and dietary practices. Adopting preventive practices including regular communication about breastfeeding, healthy eating and physical activity, routine screenings and developing referral systems for additional support (e.g., dieticians, lactation specialists, etc.) are key to addressing the negative health outcomes of poor eating and physical inactivity during pregnancy and early childhood.

Strategies that support Principle 7:

1. Work with Contra Costa hospitals and outpatient medical facilities to adopt standards of medical practice that use Body Mass Index (BMI) screening and preventive care counseling to reduce rates of pediatric overweight in young children. Standards should include:

   • Measurement of the rates of use of BMI and provider counseling of at-risk children,
   • Documentation of infant feeding practices and breastfeeding counseling,
   • Adoption of written institutional policies that support effective preventive counseling regarding obesity in all well child visits,
   • Training of all health care staff in the skills needed to provide brief preventive counseling regarding pediatric obesity, including nutrition, breastfeeding, television reduction and physical activity counseling.

2. Expand use of health care venues to accommodate health education classes, WIC and other community programs that promote healthy lifestyles for young children and reduce rates of pediatric obesity.

3. Increase access to culturally and linguistically appropriate preventive healthcare for pregnant woman and young children.

4. Work with policy makers to ensure all families and young children are continuously enrolled in healthcare coverage.
Principle 8:

Ensure that key community sectors provide parents and other care providers with the information and support they need to make healthy eating and activity choices for their children.

Parents, families and other key care providers serve as key role models for children 0-5 in terms of establishing eating and activity behaviors. In order to instill healthy choices in children 0-5, these role models should receive the necessary culturally appropriate information and support. Merely providing information in the form of handouts and brochures, however, is often not enough. Informational materials must be complemented by motivational guidance that more directly encourages healthy behaviors. A successful approach requires partnerships among health care providers, community-based organizations, children’s institutions, and businesses as well as government agencies.

Strategies that support Principle 8:

1. Work with home visiting programs, family resource centers, libraries, community programs and child care centers and preschools to engage parents in programs that support physical activity, healthy eating habits and breastfeeding.

2. Create community-wide opportunities for healthy lifestyle classes (such as cooking healthy on a budget).

3. Initiate social marketing campaigns to promote healthy lifestyles for young families (including reduction of television and other screen time, increasing fruit and vegetable consumption, and breastfeeding).

“There are never enough activities for young children. If they exist, they cost a lot of money.”

†† Quotes 1 - 7 are from Community Forum participants.
2006 Pediatric Nutrition Surveillance: Contra Costa. Available on http://ww2.dhcs.ca.gov/services/chdp/Documents/PedNSS/2006/16b0to5.pdf showed that the incidence of obesity, defined as >95% Body Mass Index (BMI) is a number calculated by using height and weight measurements that gives a general indication if weight falls within a healthy range.

Philip R. Nader, Marion O’Brien, Renate Hosts, Robert Bradley, Jay Belsky, Robert Crosnoe, Sarah Friedman, Zuguo Mei, Elizabeth J. Susman. Identifying Risk for Obesity in Early Childhood Pediatrics, Sep 2006; 118: e594 - e601


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