

The Importance of Nutrition for Health And Disease Prevention in Children Ages 0-6

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Background

Recent evidence shows that infancy, toddler years, and early childhood (ages 0-6) are perhaps the most important developmental stages for establishing healthy eating and exercise patterns. These patterns can provide optimal growth and cognitive development, and prevent a lifetime of obesity and nutrition related diseases. If children do not eat the appropriate nutrients and engage in physical activity during these early years, by the time they enter school, they may already show signs of cognitive impairment, be overweight or at risk for obesity, and have established eating patterns that result in a lifetime of insufficient intake of milk, fruits and vegetables and key nutrients, like iron and calcium.

Undernutrition

- In California, 14% of young children are anemic. Iron-deficiency anemia, one type of anemia, is seen in four to nine percent of all U.S. children one to four years of age. Iron-deficiency anemia is associated with long-term negative effects on brain development and function.
- The risks associated with lead toxicity are facilitated by poor nutrition and lack of iron. Low-income children tend to live in areas that have higher levels of lead.
- Insufficient calcium consumption can result in poor teeth and bone formation as well as increased risk for osteoporosis later in life. Milk is very costly in California, making it difficult for low-income families to consume what they need.
- Recommendations for calcium intake among school-aged children have increased, but actual intake of milk, a primary source of calcium, has decreased over the past 20 years.
- Inadequate fruit and vegetable intake can increase the future risk of contracting certain cancers and cardiovascular disease.

Obesity

- Approximately 8% of all pre-school age children are overweight, one-third of overweight pre-school children remain overweight as adults.
- Increasingly, overweight and obese children are experiencing health risks previously thought of as adult medical issues, such as type 2 diabetes, high blood pressure and high cholesterol levels. Eating habits and exercise patterns for children are most often established during their preschool years.
- Obesity can co-exist along with malnutrition, which carries risk of anemia, increased absorption of lead, and other malnutrition-related health problems.

Physical Activity

- It is estimated that the average preschooler watches 25.5 hours of television per week, and hours of television watched is positively associated with increased fat tissue.
- Children in low-income homes often do not have the ability to play in safe neighborhoods and engage in regular physical activity. They usually do not consume sufficient calories and many families purchase less-expensive, higher-fat foods in an attempt to feel full.

Opportunities

Children acquire and practice a number of health behaviors during this early period of life. They learn safety and hygiene behaviors, begin to develop dietary habits, develop food preferences, make physical activity choices, and demonstrate preferences for active or inactive play. State, Federal and local programs should fund comprehensive, coordinated programs to assist preschool children in developing healthy eating and physical activity habits.

Breastfeeding – Breastfeeding exclusively can greatly reduce the risk of childhood obesity, and can also decrease future risks for cardiovascular disease and type I diabetes mellitus. Breast-fed infants are exposed to a wider variety of tastes through mother’s milk and appear to accept a wider variety of new foods than do formula-fed infants. Breastfeeding education and support can increase the number of mothers breastfeeding.

Infant/Toddler Nutrition – Children’s taste preferences are learned through repeated exposure to foods, they are not innate. However, infants and toddlers do have an innate ability to self-regulate energy intake, if there is no external influence by parents or other caregivers. Parents and caretakers need to be aware of and responsive to feeding cues (both satiety and hunger). Parental consumption of fruits, vegetables, fat and sugar influence children’s dietary preferences. A 1999 California study found that children who were familiar with the recommendation of five daily servings of fruits and vegetables were significantly more likely to report eating a larger number of servings. During these years, parents and caretakers, as role models, can have a profound influence over their child’s developing palate and lifestyle habits.

Physical Activity – The preschool years are important for learning movement and developing motor skills. Physical activity programs at the preschool age need to focus on teaching children these skills, so that they will acquire them and enjoy practicing them. Parents who regularly participate in physical activity also provide positive role models for children. Preschool teachers, parents and childcare providers can have a major impact in this area.

Specific Program Recommendations

Evaluations of the WIC, Head Start, Food Stamp and Child Care Food Program have shown that these programs improve the nutritional status of participants.

- ***Support programs that promote breastfeeding and breastfeeding education***
 - Promote, support, and expand WIC, the Child Care Food Program and other local groups that offer breastfeeding education and support, to promote and expand existing breastfeeding programs.
- ***Strengthen and expand programs that offer nutrition resources as well as parent, provider, and teacher education on early childhood nutrition and physical fitness***
 - The WIC program and the Child Care Food Program are powerful avenues for educating parents and children about feeding cues and healthy behavior choices. Head Start, preschools, and all licensed or license-exempt child care sites should be encouraged to participate in the Child Care Food Program (CCFP) and should tell their parents about the benefits of participating in WIC.
 - An ongoing marketing campaign should be established to encourage parents to increase their participation in WIC, Head Start, Child Care Food Programs, and Food Stamps.
 - State funding should be increased for the food and administrative cost of operating the CCFP and WIC Farmers Market Program
 - WIC and CCFP sponsoring agencies should educate their clients about resources available to them, such as food stamps and food pantries.
 - Review and encourage increased low-fat milk intake, fruit and vegetable variety and fresh produce usage through the regular monitoring of CCFP menus.

- Encourage WIC to offer food packages that automatically specify 1% or skim milk at age 2 and use the annual WIC participant survey to monitor physical activity, milk choice, and fruit and vegetable practices.
- Require that emergency meals provide fruits and/or vegetables.
- ***Strengthen infrastructures that support healthy lifestyles for families and young children***
 - Implement comprehensive preschool health education programs at preschools, Head Start Centers, and child care programs through collaboration with Child Care Food Program sponsors. CCFP sponsors monitor their childcare sites at least three times a year, providing an excellent opportunity for on-site health education of providers, including a physical activity component. This is also an opportunity to provide materials for parents and activities for children in care.
 - Provide support for communities to help children to be more physically active and to provide neighborhoods that are safe for children.
 - Fund programs with older children as peer leaders to help teach younger children to develop healthy habits in physical activity and dietary behaviors.

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