## Children's Defense Fund Child Nutrition Fact Sheet

July 2010



Proper nutrition is essential to a child's health and wellbeing. Ensuring that all children have access to nutritious food will ultimately improve educational outcomes, reduce rates of childhood obesity, and enhance the physical, mental and emotional health of our children.

### **Hunger and Food Insecurity**

Food insecurity affects over twelve million U.S. households.<sup>1</sup> Food insecure households are those that struggle to afford the food that their family needs.<sup>2</sup> This is particularly devastating for children, whose developmental well being depends on access to adequate nutrition. In 2009, nearly one in four households with children struggled to afford their food.<sup>3</sup>

#### Hunger and food insecurity negatively affect the health and well-being of a child.

- Preschool and school-aged children who are food insecure are more likely to suffer from problems like anxiety.<sup>4</sup>
- Elementary school children who experience severe food insecurity are four times more likely than their peers to require mental health counseling; seven times more likely to be classified as clinically dysfunctional; and seven times more likely to get into fights frequently.<sup>5</sup>
- Food insecure children are more vulnerable to infections, and end up hospitalized with illnesses that their food secure peers fight off successfully on their own or with basic primary care.<sup>6</sup>
- Low birth-weight babies whose families are food insecure in early childhood are almost 28 times more likely than their peers to be overweight or obese at age 4 1/2.<sup>7</sup>

#### Food insecurity has also been linked to poor education outcomes.

- Data suggests that by third grade, children who had been food insecure in kindergarten had a 13 percent drop in their reading and math test scores compared to their food secure peers.<sup>8</sup>
- Children whose families experienced food insecurity while the child was a toddler are 3.4 times more likely to be obese at age 4 <sup>1</sup>/<sub>2</sub>.<sup>9</sup>
- Data indicate that food insecure teens are more likely to have repeated a grade and missed more school days, and that more than 40 percent of teens living in food insecure households had repeated a grade as compared to 20.7 percent of food secure teens.<sup>10</sup>
- Food-insufficient teenagers are more than twice as likely to have been suspended, almost twice as likely to have a lot or some difficulty getting along with others, and four times as likely to have no friends.<sup>1</sup>

### **Poor Nutrition**

Getting enough food to eat does not ensure that a child has a proper diet. Insufficient nutrient intake during childhood has been linked to physical and mental health problems as well as emotional and behavioral problems, learning deficiencies, and lower grades.<sup>11</sup>

#### Many children's diets in the United States fall considerably short of recommended dietary standards.<sup>12</sup>

- Studies have revealed that the diets of many children consist of low intakes of fruits, vegetables, whole grains, fiber, and calcium-rich foods, and higher than recommended intakes of foods and beverages high in fat, sodium, and added sugars. <sup>13</sup>
  - The USDA's Food Guide pyramid recommends the amount of one's daily intake that should come from each of six food groups: grains, vegetables, fruit, dairy, protein, and fats and sweets. These are based on the total nutrients that one should consume daily for optimal health.

- Nationally, only two percent of children and adolescents meet the USDA Food Guide pyramid recommendations, and sixteen percent of children do not meet any food group recommendations.<sup>14</sup>
- Only 22 percent of young people in the US eat the recommended five or more servings of fruits and vegetables each day.<sup>15</sup>
- Vegetable consumption among children and teens diminished by 42 percent and percent respectively between 1997 and 2002.<sup>16</sup>
- Children today eat much more fast food than they did in the past; nearly 20 percent of caloric intake among 12 to 18 year olds comes from fast food, compared with 6.5 percent in the late 1970s.<sup>17</sup> This has contributed to the increasingly poor nutrition of children as fast foods tend to be high in fat and low in necessary nutrients.<sup>18</sup>
- Poor nutrition is also evident in the disordered eating behavior of many children who practice unsafe methods of weight control. Among students who dieted for weight control, about half said they hardly eat or fast, 16 percent reported using diet pills, 12 percent claimed they vomit after meals, and 8 percent reported using laxatives.<sup>19</sup>
  - Further, although full-syndrome eating disorders are fairly rare among children and adolescents, they are a serious cause of morbidity and mortality in this group. More than 10 percent of individuals with anorexia nervosa admitted to university hospitals eventually die from the disorder.<sup>20</sup>

#### Children who consume a diet low in proper nutrients suffer from poor health outcomes.<sup>21</sup>

- Children require sufficient energy, protein, and other nutrients for growth as well as maintenance of body functions. Thus, inadequate intakes of energy, protein, or certain micronutrients will be reflected in slow growth rates, delayed sexual maturation, inadequate bone mass, and low body reserves of micronutrients.<sup>22</sup>
- Poor nutrition is one of the key factors contributing to the childhood obesity epidemic in the US. <sup>23</sup> Further, obese children and adolescents are more likely than their lower-weight counterparts to develop hypertension, high cholesterol, and Type 2 Diabetes when they are young, and they are more likely to be obese as adults. <sup>24</sup>
- Certain dietary patterns developed in childhood and carried into adulthood result in long-term health problems, with an increased risk for chronic diseases such as obesity, heart disease, osteoporosis, and some types of cancer later in life.<sup>25</sup>
- Inadequate nutrition lowers resistance to infectious disease, and may adversely affect the ability of children to function at peak mental and physical ability.<sup>26</sup>
- Proper nutrition during childhood is important for good bone health. Studies show a correlation between higher intakes of calcium during childhood and adolescence and improved bone density.<sup>27</sup> The majority of children and adolescents do not consume the recommended intakes of calcium, but maintaining adequate calcium intake during childhood and adolescence is critical to achieving peak bone mass.<sup>28</sup>
- Poor dietary habits of children, particularly a frequent intake of sugars, contribute to the development of dental caries (tooth decay). Dental caries have become the single most common chronic disease among American children.<sup>29</sup>

#### A lack of proper nutrients in children's diets also negatively affects their ability to learn.<sup>30</sup>

- Among a study of fourth grade students, those who had the least protein intake in their diets had the lowest achievement scores.<sup>31</sup>
- Children with iron deficiencies in their diet are at a disadvantage academically.<sup>32</sup> Iron deficiency in infancy may cause permanent loss of IQ later in life, and anemic children tend to do poorly on school tests in vocabulary, reading, and other subjects.<sup>33</sup> Iron deficiency is also known to impair psychomotor development and physical activity.<sup>34</sup>
- Studies show a direct link between not eating breakfast and reduced intellectual performance.<sup>35</sup> Children who eat breakfast are more alert and perform better in all areas in the classroom.<sup>36</sup>

## **Disparities in Child Nutrition**

Food insecurity and poor nutrition affect certain groups of children in the Untied States more than they affect others. In particular, disparities in child nutrition exist between different racial or ethnic groups as well as between different socioeconomic groups.

# Several disparities exist in child nutrition amongst different racial or ethnic groups in the United States, with children of color suffering from poor nutrition outcomes more than White children.

- Children of color in the Untied States are disproportionately impacted by diseases attributed to poor nutrition, including obesity, diabetes, and cardiovascular disease. While 28.2 percent of White children ages six though nineteen are considered overweight or at risk for overweight, 35.4 percent of non-Hispanic Black and 39.9 percent of Mexican American children meet this designation.<sup>37</sup>
- Although the number of food insecure families in the United States has increased as a whole over the past several years, there are marked racial and ethnic disparities in changes over time in household and child food insecurity, with non-Hispanic Black children experiencing the most profound increases.<sup>38</sup>
- A number of recent studies have shown that the types of food and beverages advertised to African Americans and Latinos are often less healthful than those marketed to general audiences. This is particularly harmful for minority children, as food is the most frequently advertized product category on children's television.<sup>39</sup>
- African American, Hispanic, and Native American children have a higher prevalence of dental problems due to poor nutrition.<sup>40</sup>

## Additional disparities in child nutrition exist between different socioeconomic groups. Poor American children are affected by poor nutrition and lack of food more than are wealthier American children.

- Geographic variation plays a large role in nutritional disparities, particularly with regards to "food deserts". Many low-income urban communities lack ready sources of healthy food choices, such as supermarkets and grocery stores.<sup>41</sup>
- Evidence exists that nutrition-related disorders are greater among low-income households than among the rest of the population. For instance, iron deficiency anemia is twice as common in poor children between ages one and two than it is in the general population.<sup>42</sup>
- Often linked with nutritional deficits, poor children in the United States experience higher rates of growth stunting and wasting than do their non-poor counterparts (13 percent and 5 percent respectively).<sup>43</sup>
- Dental caries (tooth decay) attributed to poor nutrition affect low-income groups twice as much as they do higher-income families.<sup>44</sup>

- <sup>2</sup> FRAC report
- <sup>3</sup> FRAC report
- <sup>4</sup> "Reading, Writing and Hungry"
- <sup>5</sup> "Reading, Writing and Hungry"
- <sup>6</sup> "Child Food Insecurity: The Economic Impact on our Nation" 2009, Feeding America
- <sup>7</sup>"Reading, Writing and Hungry"
- <sup>8</sup> "Reading, Writing and Hungry"
- <sup>9</sup>"Reading, Writing and Hungry"

<sup>10</sup> "Food Insufficiency and American School-Aged Children's Cognitive, Academic, and Psychosocial Development" Katherine Alaimo *Pediatrics* 

<sup>11</sup> (FROM ORIGINAL SHEET, FIND SOURCE)

<sup>12</sup> (Nutrition Standards for Foods in Schools)

- <sup>13</sup> (Nutrition Standards for Foods in Schools)
- <sup>14</sup> (Munoz through Nutrition Standards for...)

<sup>15</sup> (www.consumersunion.org... Etc.)

- <sup>16</sup> (<u>www.consumersunion.org</u>... Etc.)
- <sup>17</sup> (<u>www.consumersunion.org</u> ... etc)
- <sup>18</sup> (ERIC clearinghouse)
- <sup>19</sup> (ERIC clearinghouse)
- <sup>20</sup> (APA, 2000 through Nutrition Standards for Foods in Schools)
- <sup>21</sup> (Nutrition Standards for Foods in Schools)
- <sup>22</sup> (Nutrition Standards for Foods in Schools)

<sup>&</sup>lt;sup>1</sup> "Reading, Writing and Hungry: The consequences of food insecurity on children, and on our nation's economic success" November 2008, Issue Brief #8, Partnership for America's Economic Success

<sup>23</sup> (IOM Report Brief)

<sup>24</sup> (IOM Report Brief)

<sup>25</sup> (Nutrition Standards for Foods in Schools)

- <sup>26</sup> (Nutrition Standards for Foods in Schools)
- <sup>27</sup> (source)
- <sup>28</sup> (Nutrition Standards for Foods in Schools)
- <sup>29</sup> (DHHS, 2004b from Nutrition Standards for Foods in Schools)
- <sup>30</sup> (ERIC clearinghouse)
- <sup>31</sup> (ERIC Clearinghouse)
- <sup>32</sup> (Howard Taras)
- <sup>33</sup> (ERIC clearinghouse)
- <sup>34</sup> (IOM 2001 through Nutrition Standards for Foods in Schools)
- <sup>35</sup> (www.healthyschoolsWA.org)
- <sup>36</sup> (<u>http://ltc.umanitoba.ca/wiki</u>... etc.) HAS SOURCE
- <sup>37</sup> (<u>www.consumersunion.org</u>.. Etc. from CDC's most recent National Health and Nutrition Examination Survey (NHANES) in 1999-2002)
- <sup>38</sup> <u>http://ars.usda.gov/research/publications/publications.htm?seq\_no\_115=183429</u>
- <sup>39</sup> www.consumersunion.org. ... etc
- <sup>40</sup> Nutrition Standards for Food in Schools
- <sup>41</sup> IOM Report Brief
- <sup>42</sup> ERIC clearinghouse
- <sup>43</sup> <u>http://education.stateuniversity.com/pages/2330/Poverty-Education.html</u>
- <sup>44</sup> Nutrition Standards for food in schools