

PARTNERSHIP  
FOR AMERICA'S  
ECONOMIC  
SUCCESS

# Reading, Writing and Hungry

The consequences of food insecurity on children,  
and on our nation's economic success



*Hungry children represent not only a moral crisis but also a dire educational and economic risk for the nation.*

*Children who go hungry in kindergarten are noticeably behind their peers in reading and math by third grade. Hungry children suffer from hyperactivity, absenteeism, and generally do worse both socially and academically in school. They are more likely to need special assistance or repeat a grade. And some of them may never catch up.*

When parents cannot afford healthy meals for their babies and toddlers, the consequences are potentially devastating. Failing to systematically and comprehensively address the issue of food insecurity among children—an issue that currently plagues over 12 million U.S. households<sup>1</sup>—hurts their ability to succeed in school and in life. It also hinders the nation's ability to develop the productive workforce that we need.

Early childhood health experts from the Children's Sentinel Nutrition Assessment Program and the Food Research and Action Center find, in a paper for the Partnership for America's Economic Success, that food insecurity among young children carries significant economic costs for individuals and families, and therefore economic problems for society as a whole.

It does not have to be this way. Instead of letting our economic downturn make a desperate situation worse, we should address this problem now by promoting programs and initiatives that invest in children and build our economy. By acting now, we can provide every child in America with the basic necessities to begin life well, and every American taxpayer with the hope of a brighter socioeconomic future for our country.

**Food insecurity is a lifecycle issue that creates a "domino effect" of negative consequences**



Low birth weight and birth defects



Obesity



Mental health issues



Dental health problems



Poor education outcomes



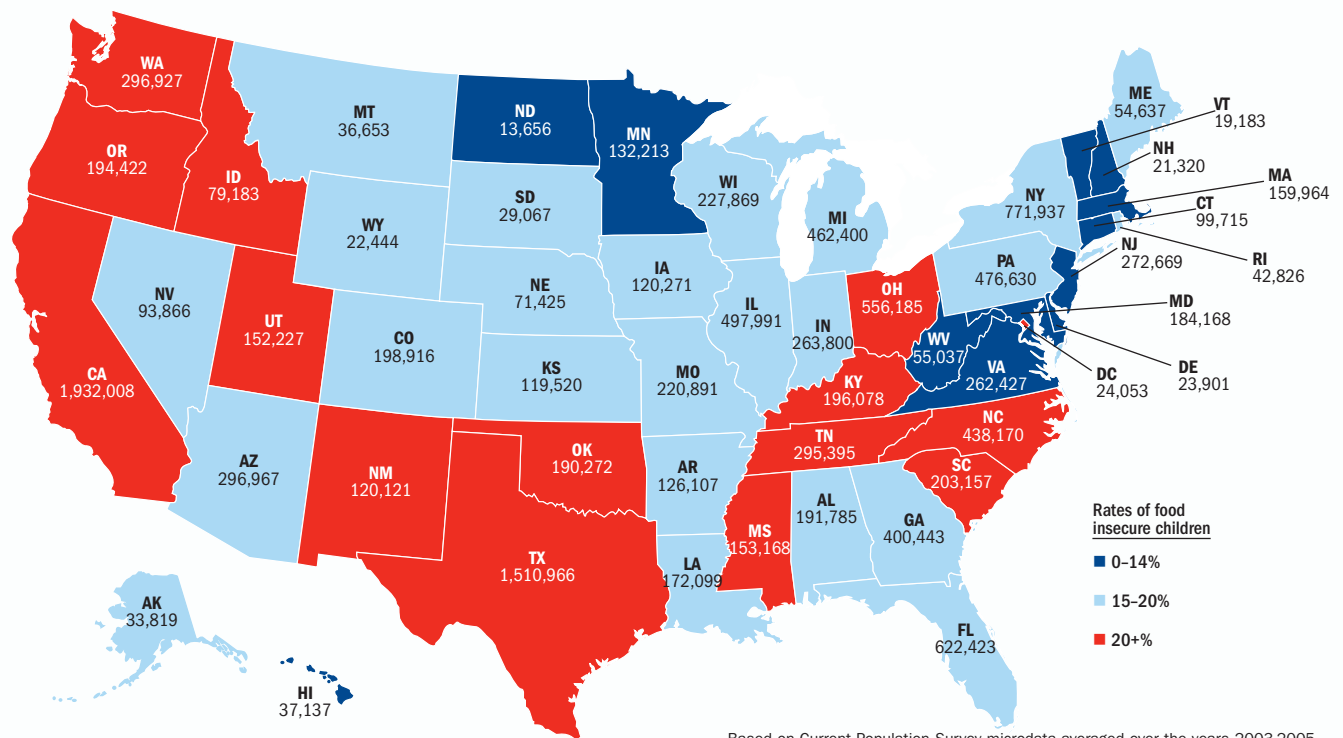
Longterm economic costs





## Average Number and Percentage of Food Insecure Children Aged 0-17

Too many children in America experience food insecurity.



Based on Current Population Survey microdata averaged over the years 2003-2005.

## Early Childhood Health Outcomes

Food insecurity impairs proper physical growth and development in young children and creates pathways for poor health. Growing up without proper nourishment puts children at an early disadvantage, and they often lag behind their peers on multiple fronts. Poor health limits children's ability to grow and learn, thus reducing adult earnings and increasing adult health costs.

### Obesity

In industrialized Western nations, the least expensive foods tend to be processed and high in sodium, sugar, and calories, but low in nutrients. This causes excess consumption of calories and significantly increases the likelihood of a child being overweight or obese. Food insecure children are more likely to be obese, especially if they are not eligible for food assistance programs, because their families may cope with tight budgets by

buying these cheaper, less healthy foods. In addition, buying healthy foods in low income neighborhoods may be difficult.<sup>6</sup> Obesity is not only a health concern, but an economic one; in 2003, obesity-related disease management among 6-to-17 year olds cost the United States \$127 million, and the cost continues to rise.<sup>7</sup>

### Food insecurity contributes to obesity

- Low birthweight babies whose families were food insecure in early childhood are almost 28 times more likely than their peers to be overweight or obese at age 4 ½.<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 ½.<sup>9</sup>
- Preschool children who are overweight have been found to be five times more likely than their peers with normal weights to be overweight at age 12.<sup>10</sup>
- Almost 14% of all preschool children in the U.S. are overweight.<sup>11</sup>



**If you need to feed a hungry child on a tight budget, what would you choose?**



**Soda**  
**\$.99**  
**917 calories**



**Milk (2%)**  
**\$2.99**  
**976 calories**

Calories are important to feel satiated; however those calories need to come from foods with vitamins and minerals, rather than sugar and preservatives. Food insecure families have a difficult time affording nutritious food items for their children, and many are forced to choose quantity over quality. Consuming unhealthy food at a young age can have particularly adverse effects, setting dangerous pathways for health outcomes, educational achievement, and socio-emotional development.

**Mental health**

Children who suffer from early food insecurity are also more likely to experience mental health issues through their adolescence and young adulthood. Preschoolers and school-aged children who experience hunger have higher rates of internalizing problems, such as anxiety.<sup>12</sup> Elementary school children experiencing 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>13</sup>

**Dental Health**

The same cheap foods—highly processed and sugary—that can cause obesity in young children can also increase the incidence of early childhood tooth decay.<sup>14</sup> Indeed, poor dental health is more common among low-income children. Treatment for severe tooth decay for children ages 0-5 costs an average of between \$1,500 and \$6,000 per incidence.<sup>15</sup>

**Long-term educational outcomes**

Food insecurity in early childhood can limit a child’s cognitive and socio-emotional development, ultimately impairing school achievement and thus long-term productivity and economic potential. Data has shown that, by the third grade, children who had been food insecure in kindergarten saw a 13% drop in their reading and math test scores compared to their food-secure peers.<sup>16</sup> Hungry children are also more likely than their non-hungry peers to suffer from hyperactivity, absenteeism, generally poor behavioral, and poor academic functioning.<sup>17</sup>

***Black and Latino households are significantly more likely to be food insecure than the average household in the US. Over 20% of Latino and 25% of Black households with children are food insecure, compared to 15% of all households in the U.S.<sup>18</sup>***



***By the third grade, children who had been food insecure in kindergarten had a 13% drop in their reading and math test scores compared to their food-secure peers.<sup>19</sup>***

Food insecurity also increases the chance that a child will need special education services, an additional preventable cost. Children classified as hungry are twice as likely as their non-hungry peers to be receiving special education services and to have repeated a grade.<sup>20</sup> With the average annual cost of educating a child around \$6,800 in 2001, and special education services an additional \$6,000, a food insecure child who needs special education services costs nearly double that of one who does not, and a child who must also repeat a grade can cost nearly four times as much as a student who neither needs special education nor repeats a grade.<sup>21</sup> Food insecurity thus not only inhibits children's functioning while they are in school, but can also increase the cost of their education.

**Food assistance programs reduce, but do not eliminate, food insecurity and its negative impacts**

- WIC enrollment from birth increases iron levels among preschoolers and lowers their incidence of iron-deficiency anemia.<sup>22</sup>
- Children who received food stamps had better overall vitamin and mineral intake than children whose family income was low, but too high to qualify for food stamps.<sup>23</sup>
- Food stamp receipt reduces rates of child hospitalizations among food-insecure families.<sup>24</sup>

## Prevention and Policy Solutions

Food insecurity and lack of proper nutrition affect children before they are born, with those impacts continuing and accumulating throughout childhood. Prevention is thus a critical tool for ensuring proper development and avoiding long-term societal costs. Programs like WIC (Supplemental Nutrition Program for Women, Infants, and Children) and Food Stamps, which have been proven to reduce food insecurity, are substantially less expensive than paying for its negative consequences.

These programs also provide significant returns on the investment; for example, WIC saves between \$1.77 and \$3.13 in Medicaid costs for each dollar spent, and every five dollars of food stamps benefits creates nearly double that amount in local economic activity.<sup>25,26</sup> Studies have shown that WIC increases the number of women receiving prenatal care, reduces the incidence of low birth weight and fetal mortality, reduces anemia in young children, and enhances the nutritional quality of participants' diets.<sup>27</sup> This means that while participating in programs like WIC and food stamps save immediate costs, there are also significant cost-savings in future health expenses of the mother and the child.

More investment, however, is warranted; children of near-poor families, who often are not eligible for these programs, could also benefit from them. In one study, the group that had a lower socioeconomic status and received food stamps was less food insecure and had better overall nutrient intake<sup>28</sup> than the group that was not eligible for food stamps because of their higher average socioeconomic status.

***WIC saves between \$1.77 and \$3.13 in Medicaid costs for each dollar spent.<sup>29</sup>***

