Nutrition plays a foundational role in determining a child's future health outcomes. Adequate nutrients hold vitamins and minerals that ensure proper brain development and steady growth. Maintaining adequate nutrition requires access to resources to obtain food and foundational nutrition education.

Inequitable levels of access to achieving adequate nutrition have created health risks in the lives of some groups of children across the United States. Access to nutrition is often measured, labeled, or presented as food insecurity, defined as the lack of consistent access to adequate food to maintain a healthy and active lifestyle. Children who live in low-income communities are at a higher risk of experiencing food insecurity. Food insecurity can be severely detrimental to a child’s physical health, mental health, and academic performance. There is a common misperception that children who are obese and overweight are not food insecure. Stigmas around obesity have created this narrative. Food insecurity looks different for every person that is faced with this challenge.

It is essential to look at the long-term effects of inadequate nutrition on children and look for policy solutions to prevent food insecurity from increasing. Policy reform must be implemented to reverse childhood food insecurity and keep the population healthy. The State of Delaware and the country have worked to implement policies and regulations – including those related to accessing adequate nutrition – to keep children growing physically and mentally fit. Still, often once these problems arise, they are hard to reverse without the dedication from school, staff, government, policymakers, and parents to end these health risks associated with malnutrition and ensure the new generation of children don’t face hunger or the problems associated with poor nutrition.
FOOD INSECURITY

Food Insecurity is a health risk that impacts the well-being of children every day. In Delaware, over 30,000 children experienced food insecurity in 2020, totaling 15.1% of children under the age of 18. Kent County has the highest food insecurity rate in the child population at 20.4%, compared to New Castle County at 15.6%, and Sussex County at 17.3%. Over time, data shows that children are consistently more food insecure than adults.5

FIGURE 1

Child Food Insecurity: Delaware and Counties, 2020

While an overarching reason children don’t receive the proper nutrients is often poverty,6 high housing costs, medical expenses, and poor access to grocery stores play a significant role in this. The risks that come from food insecurity are delays in development, the risk of chronic illnesses, behavioral problems, and mental health problems.7 These physical and mental risks have the potential to last into a child’s adult life which starts a negative cycle. Vital nutrient quality and quantity within a child’s diet are crucial in development. If children are malnourished from birth until age two, the negative impacts are felt throughout their lifetime. The first two years are essential to a child’s mental and physical development. Health starts when a child is conceived, so the nutrition of the mother carrying the baby impacts the child at the start. Children who are born into poverty are more likely to have poor academic scores, drop out of high school, have inconsistent jobs, and more likely to stay in poverty as adults. It is important to make investments that reduce early childhood adversity. These investments lead to a strong foundation, improving physical and mental health and lifelong results.

FIGURE 2

Delaware Child Poverty Rate by County & Select Cities, Five-Year Average, 2017-2021

There are federal programs that supplement food quantity and assist families in providing their children with the proper nutrients. Studies have shown that federal nutrition programs are cost-effective and lead to healthier children that are able to succeed in the long term.8 The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a federal nutrition assistance program that supports mothers pre and post-partum, giving children access to the nutritional care they need even if they are born into poverty. WIC is a nutrition and education program that supports low-income pregnant, postpartum, and breastfeeding women, infants, and children under age five. This program provides foods to supplement the diets of pregnant, postpartum, breastfeeding women, infants, and children up to age 5, nutrition education breastfeeding support, and referrals to other health care services. In 2022, Delaware had 17,758 participants in WIC.9 Enrollment in WIC is essential for the future of a child. WIC helps improve birth outcomes and save health care costs, diet and diet-related outcomes, infant feeding practices, immunization rates, cognitive development, and pre-conceptional nutrition status. The program has continued to expand to increase family benefits and reach more diverse populations. As of October 1st, 2022, the Cash Value Benefit (CVB) for fresh fruits and vegetables has increased to $49 for...
breastfeeding women per month, $44 for a pregnant or postpartum woman per month, and $25 per month for children under five years old. As of January 2022, there has been an increase in choices for food packages. This includes brown rice and pasta, corn tortillas, grits, and increased options for cereal and yogurt. In addition, the WIC food package is expanding to meet nutritional needs and increase cultural options. The WIC food package is designed to meet protein, iron, vitamin C, and calcium requirements. The program isn’t designed to meet all the nutrition requirements but is targeted to meet specific growth needs for children and pregnant women. Division of Medicaid and Medical Assistance (DMMA) started a food box initiative to assist post-partum mothers. These boxes contain shelf-stable items delivered to the mother’s home for up to 8 weeks.¹⁰

FIGURE 3

Family member received WIC benefits within the last 12 months, Delaware, 2020-2021

![Chart showing percentage of family members who received WIC benefits](chart.png)

Source: National Survey of Children’s Health

Another federal program, the Supplemental Nutrition Assistance Program (SNAP) targets a broader group of people than WIC including low-income families, adults 60 and older, and people with disabilities. SNAP financially supports participants to buy a variety of foods that increase nutrition. Two-thirds of people participating in SNAP are children. SNAP participants receive an average of $127 per month, per person. The SNAP benefit formula enables the very lowest earning households to receive a greater benefit than those earning a higher amount, closer to the poverty line. This program gives eligible participants an Electronic Benefit Transfer (EBT), a monthly benefit that can be used at local grocery stores and farmers’ markets.¹¹ Family SNAP participation in Delaware is at 30.1%,¹² but only a portion of those eligible for this program are enrolled.

During the pandemic, SNAP benefits were expanded to meet an increase nutrition need within the community. These allotments increased monthly benefits by at least $95 to all SNAP households in an effort to alleviate some of the strain brought by the public health emergency. This universal increase was about more than enabling families to purchase nutritious groceries; it gave families the flexibility to reallocate money to other basic needs expenses and alleviate stress amid an uncertain time. Unfortunately, As of March 1, 2023, Delaware and the rest of the nation officially ended the emergency allotments awarded through SNAP. For this reason, significant impacts are to be expected in the coming months as the discontinuation of SNAP’s emergency allotments marks the beginning of the unwinding public health emergency that officially ended on May 11, 2023. SNAP benefits are further jeopardized in the 2023 Farm Bill, a piece of package legislation renewed every five years. This revision proposes stricter work requirements for

FIGURE 4

Number of Children Participants in SNAP by Zip Code

![Map showing number of children participants in SNAP by zip code](map.png)

Source: Delaware Department of Health and Social Services

Key:
- 11-140
- 141 - 400
- 401 - 1,310
- Above 1,310

November 2022 Snapshot
The social determinants of health (SDOH) are the conditions that have an impact on health and well-being. The SDOH are often categorized into five groups: economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context. Social determinants of health directly impact a family’s ability to access adequate nutrition. For example, neighborhood conditions that may impact physical access to food include neighborhood conditions, few grocery stores, or a lack of transportation.

Additionally, In August 2022, the Delaware Department of Education announced the U.S. Department of Agriculture policy for providing universal free and reduced lunches for children. In the 2022-2023 school year, schools returned to pre-COVID National School Lunch Program (NSLP), School Breakfast Program (SBP), and Afterschool Snack Program (ASSP) operations. The result is the return of free or reduced-price meal applications unless the school chooses to participate in Community Eligibility Provisions. This is a significant change that will impact children in school. All children were given free school meals during the pandemic regardless of income. Now, if children need free meals, they must fill out paperwork to prove that they meet the requirements similar to the process pre-pandemic. The change back to a more effort intensive approach to accessing food supports in schools will impact children living just above the poverty threshold; the new provisions create a barrier to quality nutrition for these kids. Although many factors apart from income affect a child’s ability to have adequate food in their diet, this new policy will make it harder for children to get the proper nutrients they need. A school should be a safe place for children, and free and reduced-cost lunches are designed to give healthy choices to children who may not have resources to otherwise access a well-balanced diet. Districts have been able to offset some of the costs of school lunches through community partners and donations to eliminate some hurdles to access.

The use of food banks by families often alleviates food insecurity not covered by SNAP. There are numerous programs that the Food Bank funds through community outreach. In 2020-2021, the Food Bank distributed 130,353 meals through the backpack program. This program provides food to children year-round, specifically when school is not in session and school meals are not available. Programs such as this can potentially reduce the problem of hunger for Delaware’s children.
a person’s degree of literacy. Nutritional and food literacies are subsections of health literacy, encompassing the understanding of food labels, food safety, and portioning.18

Food deserts are defined as areas, both in urban and rural areas, where residents face challenges accessing fresh and affordable foods. These areas lack grocery stores in close proximity to where residents live, making families rely on processed and high calorie foods from convenience stores or fast-food establishments to supplement their diet. The issue of access that is part of the food desert landscape is related to a lack of reliable transportation in low-income communities.

Neighborhood conditions – specifically poverty – impact a child’s access to healthy food options. Economic stability has a direct impact on meal budgeting, therefore food choices. Research has shown that consuming a diet most closely aligned with government recommendations (all fresh fruits and vegetables) is the most expensive diet.19 Families with low-income status often have to make difficult prioritization decisions, depending on which basic needs are essential at a given time. Thankfully, programs like SNAP and WIC help eliminate some of this stress on caregivers.

**FIGURE 6**

**Food Deserts**, 2019

Food deserts are defined as low income census tracts where a significant number or share of residents is more than 1 mile (urban) or 10 miles (rural) from the nearest supermarket.


**FIGURE 7**

**Percent of Children in Poverty by Census County Division, 2017-2021 Five-Year Average**

Key:

- Below 12.5%
- 12.6% - 16.0%
- 16.1% - 21.9%
- Above 21.9%

Source: UD Center for Community Research & Service, 2023; data from U.S. Census Bureau, 2017-2021 American Community Survey

**FIGURE 8**

**Number of Children in Poverty by Census County Division, 2017-2021 Five-Year Average**

Key:

- Below 510
- 511 - 845
- 846 - 1,220
- Above 1,220

Source: UD Center for Community Research & Service, 2023; data from U.S. Census Bureau, 2017-2021 American Community Survey
CHILDHOOD OBESITY

Any examination of food insecurity would be incomplete without touching on childhood obesity due to nutrition being an underlying factor among both challenges. Schools and communities have attempted to promote healthy eating and active lifestyles for children across the nation, but rates of childhood obesity have been on the rise. In 2020-21, 19.4% of Delaware children were overweight, and 16.8% were obese. Many factors have played a role, including lack of exercise, fast food, and increased screen time. In addition, obesity can be genetic. If proper precautions aren’t taken from the early years of a child’s life, this can impact a child in more ways than one when they grow up. Obesity can affect a child’s self-esteem, resulting in anxiety and depression. As a result, children have a lower quality of life and face social problems like bullying.

FIGURE 9

Child Weight Status, Delaware 2020-2021

<table>
<thead>
<tr>
<th>Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal weight</td>
<td>57.4%</td>
</tr>
<tr>
<td>Overweight</td>
<td>19.4%</td>
</tr>
<tr>
<td>Obese</td>
<td>16.8%</td>
</tr>
<tr>
<td>Underweight</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

Source: National Survey of Children’s Health

Childhood obesity is most seen in urban areas, minority populations, and low-income communities. Children in the lowest income group had an obesity rate of 23.1%. Often children in low-income communities don’t have the resources they need to stay physically active. The CDC recommends that children ages 6-17 do 60 minutes of moderate to vigorous daily activity. This includes aerobic exercise and muscle- and bone-strengthening. Studies show that children residing in poorly structured and social environments are 50% less likely to be physically active. One reason for lower physical activity is a lack of investment in low-income communities. While there are public parks and facilities in low-income communities, they are often unsafe. Children in the highest income group had an obesity rate of 8.6%. Children living in high-income communities have the proper resources they need, such as community sports centers and family support to keep children active and healthy. Resources such as the Delaware Physical Education Standards, SHAPE Delaware, and Healthy Delaware inform families and educators about exercise and how important movement is to a child’s health.

FIGURE 10

Child Physical Activity, Delaware 2020-2021

<table>
<thead>
<tr>
<th>Days/Week</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyday</td>
<td>22.7%</td>
</tr>
<tr>
<td>4-6 days</td>
<td>20.8%</td>
</tr>
<tr>
<td>1-3 days</td>
<td>42.4%</td>
</tr>
<tr>
<td>0 days</td>
<td>14.2%</td>
</tr>
</tbody>
</table>

Note: survey asks how many days/week child age 6-17 participates in exercise, play a sport, or participate in physical activity for at least 60 minutes

Source: National Survey of Children’s Health

Experts have expressed that lowering rates of childhood obesity relies on improving policies surrounding nutrition. A study by the National Institute of Health shows the impacts of school nutrition policies. By the third year of the study (of children ages 11-13), children participating had a BMI increase of 1%, whereas non-participating children had a 3-4% rise in their BMI, about 2 pounds of extra weight. It is essential to recognize that physical activity and nutritious food choices help a child stay healthy. In addition to this study on the importance of school lunches, federally funded programs, such as WIC, show that children participating in WIC ages 2-4 had a decline in obesity. Federally funded programs are vital to keeping children a healthy weight. These programs educate families, decreasing obesity and food insecurity rates. The increase in participation in WIC in low-income areas has increased the healthy food variation. Access to food is lacking in low-income areas, contributing to the obesity problem in the United States.
The Affordable Care Act has improved prevention and obesity coverage, which includes funding for the Childhood Obesity Demonstration Project. This program has used primary care and community-based strategies to prevent and treat childhood obesity. In addition, the U.S. Department of Health and Human Services has programs such as The Healthy Eating Index (HEI), which measures diet based on the national dietary guidelines on a scale of 0 to 100. The Dietary Guidelines for Americans (2020-2025) include the HEI. These guidelines detail every aspect of nutrition for each age group and provide physical activity recommendations. These guidelines and guidelines are implemented to educate families and communities on the importance of food and the consequences of not following guidelines.

Community efforts and education efforts alone are not enough. The complex problem of childhood food insecurity will require a complex solution that involves investment at national, state, and local levels. A multifaceted approach that addresses access to culturally appropriate foods, education, as well as investment in communities to reduce poverty and increase opportunity. Proper nutrition is vital to a child’s growth and well-being, if left unaddressed, health inequities are created leading to worse outcomes and more expensive care to reverse. There are services to support children in low-income communities with their nutrition intake. The WIC and Medicaid have done a tremendous job providing nutrition support for children and families. These programs have improved access to food in grocery stores and communities. Each year these programs are finding ways to improve access and partner up with organizations to help end food insecurity and childhood obesity. Though childhood obesity presents as a physical ailment, its occurrence is a testament to more significant problems at hand. Ultimately, there are quick solutions to relieve childhood hunger, but we must address the underlying issues of poverty and the social constructs that are the root cause of food insecurity. Our responsibility as a community is to ensure no child is hungry and they have the ability to thrive.

CONCLUSION

Community efforts and education efforts alone are not enough. The complex problem of childhood food insecurity will require a complex solution that involves investment at national, state, and local levels. A multifaceted approach that addresses access to culturally appropriate foods, education, as well as investment in communities to reduce poverty and increase opportunity. Proper nutrition is vital to a child’s growth and well-being, if left unaddressed, health inequities are created leading to worse outcomes and more expensive care to reverse. There are services to support children in low-income communities with their nutrition intake. The WIC and Medicaid have done a tremendous job providing nutrition support for children and families. These programs have improved access to food in grocery stores and communities. Each year these programs are finding ways to improve access and partner up with organizations to help end food insecurity and childhood obesity. Though childhood obesity presents as a physical ailment, its occurrence is a testament to more significant problems at hand. Ultimately, there are quick solutions to relieve childhood hunger, but we must address the underlying issues of poverty and the social constructs that are the root cause of food insecurity. Our responsibility as a community is to ensure no child is hungry and they have the ability to thrive.

References


Additional resources and data can be found in the KIDS COUNT in Delaware Issue Brief: Child Nutrition.
This report was produced by KIDS COUNT in Delaware, a project of the University of Delaware’s Center for Community Research and Service (CCRS) and is a collaborative effort of over forty organizations to enrich local and state discussion concerning ways to secure better lives for all children by proving policy makers and citizens with benchmarks of child well-being.

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