

Running on Empty:

Nutritional Access for Children in Cook County, IL

EXECUTIVE SUMMARY



February 2010

Prepared by the Social IMPACT Research Center for the Greater
Chicago Food Depository

SOCIAL **IMPACT** RESEARCH CENTER
...dynamic information on contemporary social issues



Acknowledgements

This study would not have been possible without the time and energy contributed by a dedicated group of volunteers who traveled the county for trainings and field work and who proved without fail to be enthusiastic, wonderful with children, thorough, flexible, and a delight to work with. We thank you.

Likewise, numerous program administrators and staff lent their expertise, space, and program time to this study. Without their commitment to the study goals, recruitment efforts, and patience, this effort would never have reached its ambitious sampling goals. Thank you for all you did for this study and all you do to help nurture Cook County children.

Study Information

Research Team: Amy Terpstra, Amy Rynell, Lindy Carrow, Alyssa Nogaski, and Andrew Roberts (formerly) – Social IMPACT Research Center

The Social IMPACT Research Center (IMPACT) is a nonprofit organization that investigates today's most pressing social issues and solutions to inform and equip those working toward a just global society. IMPACT, a program of Heartland Alliance for Human Needs & Human Rights, provides research, policy analysis, consulting, technical assistance, communications, and coalition building to projects in Illinois, the Midwest, and nationally. Visit www.heartlandalliance.org/research to learn more.

33 W. Grand Ave., Ste 500 | Chicago, IL 60654 | 312.870.4949 | research@heartlandalliance.org

Advisory Team: Theresa Del Vecchio, Alicia Huguelet, and Annie Lionberger – Greater Chicago Food Depository

The Greater Chicago Food Depository, Chicago's food bank, is a nonprofit food distribution and training center providing food for hungry people while striving to end hunger in our community. The Food Depository distributes donated and purchased food through a network of 600 pantries, soup kitchens, and shelters to 500,000 adults and children in Cook County every year. Innovative training programs and initiatives developed by the Food Depository also work to provide men, women, and children with the tools necessary to break their individual cycles of poverty. Visit www.chicagosfoodbank.org to learn more.

4100 W. Ann Lurie Pl. | Chicago, IL 60632 | 773.247.3663 | chicagosfoodbank@gcfd.org

Suggested Citation: Terpstra, A., & Carrow, L. (2010, February). *Running on empty: Nutritional access for children in Cook County, IL*. Executive Summary. Chicago: Social IMPACT Research Center.

Copyright © 2010 by Social IMPACT Research Center at Heartland Alliance
All rights reserved

Table of Contents

Importance of Addressing Child Hunger	4
Unserved Children & Program Coverage Findings	6
Summer Program Coverage	7
School Year Program Coverage	8
Balancing Highest Number of Unserved Children with Worst Program Coverage	9
Food Insecurity Findings	9
Nutritional Intake Findings	10
Recommendations	12
Running on Empty – Full Study	Available at www.heartlandalliance.org/research
Appendix A: Methodology	Available at www.heartlandalliance.org/research
Appendix B: Data Entry Process	Available at www.heartlandalliance.org/research



Running on Empty

In an effort to make informed program expansion and improvement decisions, the Greater Chicago Food Depository commissioned the Social IMPACT Research Center of Heartland Alliance to conduct a study of child nutrition program coverage and child nutrition and hunger in Cook County, Illinois.

This study examined the geographic coverage of child nutrition programs to identify areas that have the greatest number of unserved children and have the worst program coverage. The study also took an in-depth look at the nutritional lives of children attending summer nutrition programs. Insights in these two areas are vital to helping organizations like the Greater Chicago Food Depository make sound programmatic and expansion decisions that will best meet the nutritional and hunger needs of Cook County's most vulnerable children.

Importance of Addressing Child Hunger

Despite America's vast wealth, child hunger, along with its numerous consequences, continues to be a persistent national issue. Millions of households in the United States struggle to consistently obtain adequate, high quality food – a situation called food insecurity. In 2008, there were 17.1 million households, representing 49.1 million people, experiencing food insecurity in the United States.¹ Nationally, the rate of food insecure households rose from 11.1 percent in 2007 to 14.6 percent in 2008. In Illinois, 11.1 percent of households experienced food insecurity.*

Children are particularly susceptible to food insecurity: 16.7 million food insecure people are children, with a national child food insecurity rate of 22.5 percent.² Overall, households with children have nearly twice the rate of food insecurity (21.0 percent) as those without children (11.3 percent).

Rising food insecurity and hunger are byproducts of rising poverty and declining incomes. Since 2000:³

- Nationally, an additional 5.2 million people are in poverty. Median household income declined by \$2,235.
- In Illinois, an additional 240,280 people are in poverty. Median household income declined by \$3,968.
- In Cook County, an additional 55,789 people are in poverty. Median household income declined by \$4,758.

* Though national data reflect 2008, data for 3 years, 2006-2008, were combined to provide more reliable statistics at the state level.

This eroding economic stability, coupled with the rising price of food and other basic goods this decade, has left many struggling to feed their families.

Adequate nutritious food is critical for healthy living and for increasing food security, yet Americans' dietary intake often does not meet nutritionists' recommendations for what people should eat to maintain healthy lives. While many Americans all along the socioeconomic spectrum exhibit poor eating habits, people with low incomes have fewer opportunities to improve their diets; the consumption of highly nutritious food is limited by the cost of such food and by limited access to stores that serve a variety of fresh, healthy foods.

For a family trying to feed its children on a tight budget, their dollar must be stretched as far as possible. Filling, high calorie foods are often less expensive and more readily available in low-income communities than highly nutritious but more expensive foods. Studies conducted in Chicago have found that "food deserts," areas where individuals and families do not have access to grocery stores that offer healthy foods such as fresh fruits and vegetables, exist mostly on the South and West sides of the city⁴ where there are also higher rates of low-income and minority households. Food deserts in Chicago affect nearly 200,000 children.⁵

Addressing child hunger is important due to how poor nutrition, food insecurity, and hunger limit development and contribute to poor outcomes for children:

- Research shows that one of the most powerful predictors among the many that influence a child's physical and cognitive development is a child's level of food insecurity.^{6 7}
- Not having access to a variety of highly nutritious food is a key risk factor in poor physical health, mental health, developmental outcomes, and education outcomes for children.^{8 9}
- Longitudinal research has shown a relationship between food insecurity and children's academic performance, weight, and social development.¹⁰

There are a variety of federally-funded, state-administered nutrition programs that seek to mitigate these negative affects by addressing child hunger and children's nutritional needs. The majority of these programs are delivered through the institutions that children frequent, most notably schools, but also daycare centers, afterschool programs, and family childcare homes, among others. These programs, along with the Supplemental Nutrition Assistance Program (SNAP, formerly called food stamps), which provides resources to needy families to purchase food, are nutritional cornerstones for millions of low-income families with children in Illinois.

This study captures the scale of child hunger and nutrition in Cook County, Illinois, and explores how well these programs are meeting children's needs.

Unserved Children & Program Coverage Findings

Need for Child Nutrition Programs

For the purposes of this study, “need” was defined as eligibility for free and reduced-price school lunches through the National School Lunch Program.

School children are eligible for free and reduced lunches if their family’s income falls below 130% of the federal poverty line (to be eligible to receive meals for free) or 185% of the federal poverty line (to be eligible to receive meals at a reduced rate).

In September 2009, 465,606 Cook County children were eligible for free lunches and 59,113 eligible for the reduced-price meals.

Data for the first portion of this study were requested from the state for six child nutrition programs: the National School Lunch Program, the School Breakfast Program, the Afterschool Cares Program, the Seamless Summer Option, the Summer Food Service Program, and the Child and Adult Care Food Program. The data, which included information by site on the number of meals/children served, were aggregated to Chicago community area and municipal levels. The need in any given community area and municipality was then matched with the number of children served by a program and with other program components, such as number of sites. The analysis revealed the geographies that have the highest absolute number of unserved children and the worst overall program coverage in relation to need.

Nutrition programs are a critical line of defense against child hunger, though at their current scale they fall far short of meeting the need in Cook County, Illinois. For instance, taken together, all summer child nutrition programs in Chicago community areas served only 4.50 lunches *in the entire month of July* for every 1 child in need, despite there being 31 days (21 week days) during which lunch could be served.

Due to a limited number of sites serving them, certain meals, such as snacks, barely make a dent in meeting the need. And no single meal, not even lunch during the school year which is bolstered by the presence of the National School Lunch Program, is serving the ideal 21 meals (one on every weekday) for every one child in need.

When compared to school year program coverage, summer program coverage stacks up poorly. When school lets out for the summer, the school meals that hundreds of thousands of Cook County children rely on end leaving many families struggling to fill this nutritional void. There are simply not enough summer program sites (and/or enough capacity at those sites) to fill even half the gap left when school year programs end.

This study’s findings highlight specific Chicago community areas and Suburban Cook County municipalities with the highest number of children in need *not* served on an average day by nutrition programs and also the areas with worst program coverage as measured by a cumulative ratio analysis of program components. While program investments in the highlighted areas are of critical importance in terms of filling the *worst*

gap in coverage, program expansion efforts are needed – year round, but particularly during in the summer – in nearly every one of Chicago’s 77 community areas and every one of the 106 Suburban Cook County municipalities included in this analysis.

Summer Program Coverage

Only one of Chicago’s 77 official community areas, O’Hare, had no summer program sites at all. Eighteen Suburban Cook County municipalities with children in need had no summer program sites at all.

Of the areas that did have nutrition programs operating in the summer, the following Chicago community areas and Suburban Cook County municipalities had the highest number of unserved children on an average day during the summer. Bolded geographies indicate that the community area or municipality also appears on the list of areas with the highest number of unserved children during the school year.

Chicago Community Areas With the Highest Number of Unserved Children During the Summer

- | | | |
|--------------------------|----------------------------|-------------------------|
| 1. South Lawndale | 8. New City | 15. Chicago Lawn |
| 2. Belmont Cragin | 9. Humboldt Park | 16. Irving Park |
| 3. Austin | 10. Douglas | 17. Roseland |
| 4. West Town | 11. North Lawndale | 18. Ashburn |
| 5. Near West Side | 12. Englewood | 19. West Englewood |
| 6. Gage Park | 13. Logan Square | 20. East Garfield Park |
| 7. Brighton Park | 14. Lower West Side | |

Suburban Cook County Municipalities With the Highest Number of Unserved Children During the Summer

- | | | |
|---------------------------|-------------------------|--------------------------|
| 1. Cicero | 8. Blue Island | 15. Wheeling |
| 2. Berwyn | 9. Evanston | 16. Oak Lawn |
| 3. Chicago Heights | 10. Maywood | 17. Park Forest |
| 4. Calumet City | 11. Melrose Park | 18. Northlake |
| 5. Harvey | 12. Dolton | 19. South Holland |
| 6. Palatine | 13. Lansing | 20. Bellwood |
| 7. Streamwood | 14. Des Plaines | |

The community areas and municipalities with the highest number of unserved children in the summer are clustered in certain regions of the city and county. The community areas with the highest number of unserved children are clustered on the northwest, west, and southwest sides of Chicago. Many of the suburban municipalities with the highest number of unserved children border the city of Chicago, particularly the southern and western boundaries. There are also a number of municipalities with the highest number of unserved children in north Suburban Cook County.

School Year Program Coverage

Municipalities and Chicago community areas are better served by child nutrition programs in the school year than in the summer, due largely to the far-reaching nature of school lunches and to a lesser extent school breakfasts (Illinois ranks last among all states in school breakfast participation).¹¹

Despite having better coverage than summer programs, there are still geographies, listed below, that have high numbers of unserved children and that would benefit from investments in school year child nutrition programming. Bolded geographies indicate that the municipality or community area also appears on the list of areas with the highest number of unserved children during the summer.

Chicago Community Areas With the Highest Number of Unserved Children During the School Year

1. Belmont Cragin	8. New City	15. West Ridge
2. South Lawndale	9. Douglas	16. Lower West Side
3. Near West Side	10. Humboldt Park	17. Roseland
4. West Town	11. Englewood	18. Ashburn
5. Austin	12. North Lawndale	19. Portage Park
6. Gage Park	13. Logan Square	20. Chicago Lawn
7. Brighton Park	14. Irving Park	

Suburban Cook County Municipalities With the Highest Number of Unserved Children During the School Year

1. Cicero	8. Evanston	15. Oak Lawn
2. Berwyn	9. Melrose Park	16. Wheeling
3. Chicago Heights	10. Blue Island	17. South Holland
4. Palatine	11. Maywood	18. Northlake
5. Calumet City	12. Lansing	19. Park Forest
6. Streamwood	13. Des Plaines	20. Mt. Prospect
7. Harvey	14. Dolton	

Most community areas and municipalities with highest numbers of unserved children during the summer are the same as those with the highest numbers during the school year. The community areas with the highest number of unserved children during the school year are clustered on the northwest, west, and southwest sides of Chicago. Many of the suburban municipalities with the highest number of unserved children border the city of Chicago, particularly the southern and western boundaries. There are also a number of municipalities with the highest number of unserved children in northern Suburban Cook County.

Balancing Highest Numbers of Unserved Children with Worst Program Coverage

Most of the areas with the highest absolute number of unserved children are *not* areas with the worst program coverage *in relation* to need. To determine geographies with the worst program coverage, a ratio analysis was conducted. The ratio analysis looked at need in relation to various program components (number of total sites; number of meals served on an average day; number of total meals served during the month; total number each of early snacks, breakfast meals, morning snacks, lunch meals, afternoon snacks, supper meals, and evening snacks served during the month; number of Saturday sites; and number of Sunday sites) and then ranked community areas and municipalities based on their relative ratios. The ratio analysis is useful for identifying program coverage *in relation to need* and serves as a level playing field for geographies of varying sizes (i.e., larger geographies do not have more weight simply by virtue of having more children in need).

There is overlap between the listings of community areas with the highest number of unserved children (as measured by number of children not served on an average day) and those with the worst program coverage (as measured by ratio rankings):

- **The Chicago community areas of Brighton Park, Gage Park, and Douglas appear on both lists for summer programs.**
- **The Chicago community areas of Brighton Park and Douglas appear on both lists for school year programs.**
- **The Suburban Cook County municipality of Oak Lawn appears on both lists for school year programs.**

This overlap indicates that program expansion efforts aimed at these areas have the greatest potential to fill nutrition program gaps and reach large numbers of children in need.

Food Insecurity Findings

Over HALF of children were food insecure.

In addition to examining program coverage and numbers of unserved children, this study also examined the nutritional lives of a sample of Cook County children. Surveys about food security and food consumption in the past 24 hours were conducted in July 2009 with 437 children ages 7 to 17 in out-of-school programs across Chicago and in some areas of Suburban Cook County.

Out-of-school programs play a critical role in the summer nutritional lives of children. Out-of-school programs meet outside of school hours at schools, parks, churches, community centers, or other places, and generally combine a mix of academic, recreational, or cultural activities for children and youth. The out-of-school programs in

this study were nutrition program sites, which means they serve federally-reimbursed meals that meet certain nutritional guidelines.

The children who participated in this study experienced extremely high rates of food insecurity:

- Overall, over half (53.9 percent) of the children were food insecure.
- 39 percent of the children were food insecure without hunger. Children experiencing food insecurity without hunger report reduced quality, variety, or desirability of diet, but little or no indication of reduced food intake.¹²
- Nearly 1 in 6 children experienced food insecurity with hunger, meaning that they report multiple indications of disrupted eating patterns and reduced food intake.¹³

The extraordinarily high levels of food insecurity among these children who are attending programs that are service delivery sites for federal nutrition programs underscores how vitally important child nutrition programs truly are in meeting a great need.

Nutritional Intake Findings

The children in this study had less than ideal nutritional intake, and certain meals were more likely than others to not be nutritious.

- In no main food group (fruits, vegetables, grains, dairy, proteins) did even half of the children meet the recommended daily allowance (RDA) established by the U.S. Department of Agriculture.
- Only 16.7 percent of children met the RDA for proteins.
- 28 percent of all children did not eat any fruit in the last 24 hours, and 46 percent did not eat any vegetables at all.
- A mere 7.8 percent of all children met the RDA for both fruits and vegetables.
- Only 0.7 percent met the RDA for all five food groups.
- After dinner snack servings were more likely than other meals to be consumed at home and to consist of junk foods, pop/other non-fruit juice drinks, and water, and less likely than other meals to consist of more nutritious foods like vegetables, fruit, and proteins.

In no main food group were even half of the children meeting the recommended daily allowance.

Additionally, many children skipped meals:

- Around 15 percent of children did not eat breakfast.
- 23 percent of children did not eat lunch.
- 15 percent of children did not eat dinner.

- All told, 45 percent of children missed a main meal in their last 24 hours.
- Snacks, whether served as part of the nutrition program or obtained in other ways from elsewhere, played a very important role in filling in the gaps for children that miss meals:
 - 14.9 percent that missed breakfast had a morning snack.
 - 60.6 percent that missed lunch had an afternoon snack.
 - 50.0 percent that missed dinner had an after dinner snack.
 - 20.5 percent that did not eat all three meals had a morning snack, 61.5 percent had an afternoon snack, and 47.2 percent had an after dinner snack.

Out-of-school programs were second only to the home as the primary food provider for children in this study. With rising poverty, eroding incomes, and rising costs of basic goods including food, increasing numbers of parents are having a difficult time feeding their children. A number of findings highlight the centrality of the out-of-school program in the nutritional lives of children:

- 61.8 percent of all lunch food servings the children consumed came from the out-of-school program, along with 31.9 percent of morning snack servings, 25.6 percent of afternoon snack servings, and 23.9 percent of breakfast servings.
- The out-of-school program served healthier food than the home: As a percent of overall food servings, foods consumed from the out-of-school programs were less likely to consist of junk foods, water, pop/other non-fruit juice drinks, and fried foods than home. On the flip side, the programs' food offerings were more likely to consist of dairy, fruit, and vegetables, than home.
- Out-of-school programs had a significant impact on fruit and vegetable consumption. While 58.1 percent of children consumed no fruit servings from home, only 32.5 percent did not consume any fruit servings from both home and their out-of-school program (65.4 and 50.3 percent for vegetables, respectively).

Out-of-school programs play a critical role in serving daytime meals, serve healthier food than the home, and have a significant impact on fruit and vegetable consumption.

With such a pronounced presence in the lives of the children they serve, improvements in the content and offering of food at these programs can truly have a profound impact on children's nutritional intake. Additionally, program expansion efforts – whether by increasing the number of sites, the capacity of existing sites, or the number of meals served – can have a significant impact on the number of children served.

Recommendations

A number of areas where child nutrition programming in Cook County can be strengthened to address child hunger surfaced through this study. Below are a series of recommendations and objectives aimed at expanding programs to areas of greatest unmet need and improving existing child-centered nutrition programs.

Recommendation 1: Expand child nutrition programs to the times of year and geographies with the least program coverage.

Objective 1a: Enroll more Summer Food Service Program and Child and Adult Care Food Program sites in areas of greatest need.

Objective 1b: Target families at food pantries, schools, after-school programs, churches, libraries, and other community institutions to share information on child-centered programming near them to increase participation, specifically focusing on increasing awareness and participation in summer programs.

Recommendation 2: Increase the amount of meals and snacks offered through nutrition programs at out-of-school programs.

Objective 2a: Expand meal and snack offerings as allowed by current program rules.

Objective 2b: Advocate for additional meal reimbursement opportunities across child nutrition programs.

Recommendation 3: Enhance the nutritional quality of the meals children are most likely to get from out-of-school programs, namely breakfast, lunch, and morning and afternoon snacks.

Objective 3a: Exceed the minimum meal nutritional requirements mandated by federal funding by providing more whole fruits, vegetables, and proteins.

Objective 3b: Launch innovative new programming, and funding to support it, that can help improve the quality of food served at child nutrition programs while at the same time strengthen communities.

Objective 3c: Advocate for higher federal meal reimbursement rates to allow for the purchase of more healthy foods, which are often more costly.

Recommendation 4: Decrease the availability and consumption of competing, less healthy foods at school and in afterschool and summer programs.

Objective 4a: Discourage on-site competing sources of food such as vending machines or candy for sale in the office, and ban outside food from being consumed at the out-of-school program.

Recommendation 5: Extend program influence into the times of day, particularly evenings, when children are least likely to eat adequate, nutritious food.

Objective 5a: Create new funding opportunities for program add-ons, like take-home after-dinner snacks.

Objective 5b: Educate children and their parents/guardians about children's nutritional needs.

These recommendations are applicable to the work of a variety of providers and advocates in the child nutrition arena including food providers like the Greater Chicago Food Depository, child-centered programs that serve meals or snacks, local and federal policymakers, and funders.

While this assessment and resulting recommendations focused specifically on child nutrition programming and children's experiences with food intake, children's food experiences cannot be disentangled from their family's ability to access and purchase high quality, nutritious food. Therefore, addressing poverty addresses food insecurity and is a key strategy in ending child hunger; any efforts to address child hunger through children's nutrition programming must be accompanied by broader efforts to increase family economic security and expand access to quality, nutritious food.

Though the current economic and policy environment may seem a challenging one in which to advocate for program expansions, the hardships faced daily by low-income families struggling to feed their children command timely attention and action. The physical, mental/emotional, and cognitive outcomes for children experiencing hunger and food insecurity underscore the importance of addressing childhood hunger to improve the life chances of children. If left unaddressed, the effects of growing child hunger will have a devastating effect on the health and development of millions of children, compromise families' ability to get ahead, and erode the stability of entire communities.

¹ U.S. Department of Agriculture. (2009). Food security in the United States: Key statistics and graphics. Retrieved from http://www.ers.usda.gov/Briefing/FoodSecurity/stats_graphs.htm#food_secure

² Ibid.

³ Social IMPACT Research Center's analysis of the U.S. Census Bureau's 2000 Decennial Census and 2008 American Community Survey.

⁴ Mari Gallagher Research & Consulting Group. (2006). Examining the impact of food deserts on public health in Chicago. Chicago: Author.

⁵ Mari Gallagher Research & Consulting Group. (2009). The Chicago food desert progress report. Chicago: Author.

⁶ Gunderson, C., & Kreider, B. (2009). Bounding the effects of food insecurity on children's health outcomes. *Journal of Health Economics*, 28, 971-983.

⁷ Alaimo, I., Olson, C., Frongillo Jr., E., & Briefel, R. (2001, May). Food insufficiency, family income, and health in US school-aged children. *American Journal of Public Health*, 91(5), 781-786.

⁸ Arimond, R., & Ruel, M.T. (2004). Dietary diversity is associated with child nutritional status: Evidence from 11 demographic and health surveys. *Community and International Nutrition*, 134(10), 2579-2585.

⁹ Dufour, D.L. (1997). Nutrition, activity, and health in children. *Annual Review of Anthropology*, 26, 541-565.

¹⁰ Jyoti, D.F., Frongillo, E.A., & Jones, S.J. (2005). Food insecurity affects school children's academic performance, weight gain, and social skills. *Journal of Nutrition*, 135, 2831-2839.

¹¹ Food Research and Action Center. (2009, December). *School breakfast scorecard, school year 2008-2009*. Washington, DC: Author.

¹² U.S. Department of Agriculture Economic Research Service. *Food security in the United States: Definitions of hunger and food security*. Retrieved from <http://www.ers.usda.gov/Briefing/FoodSecurity/labels.htm>

¹³ Ibid.