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This report presents results from the Community Childhood Hunger Identification Project (CCHIP), a research project that used survey techniques to document the extent of hunger among low-income families with at least one child under the age of 12. The report's six chapters provide: (1) an overview of the project, identifying its major components; (2) results from the seven local CCHIP surveys (conducted in Hennepin County, Minnesota; Pontiac, Michigan; Suffolk County, New York; Hartford, Connecticut; Central Valley, California; Polk County, Florida; and Sumter County, Alabama), and a description of the characteristics of hungry families and the effects of hunger on children; (3) a description of food assistance programs administered by the federal government, including the Food Stamp Program, the National School Lunch Program, and the Summer Food Service Program for Children; (4) a discussion of emergency food programs that focuses on characteristics of those who use them; (5) an analysis of the relationship between hunger and poverty; and (6) an analysis of the relationship between employment status and hunger. The report summarizes key findings and suggests policy recommendations for ending childhood hunger. The 10 appendixes include descriptions of the pilot and demonstration projects; of CCHIP survey sites and survey methods; of methods for estimating national hunger rates; and of a sample design for the Pontiac, Michigan, CCHIP survey. (MM)
Community Childhood Hunger Identification Project

A Survey of Childhood Hunger in the United States

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Community Childhood Hunger Identification Project

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March 1991

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# Table of Contents

**Introduction** ...................................................................................................................... i  
**Foreword** ............................................................................................................................ i  
**Acknowledgements** ........................................................................................................... ii  

**Executive Summary** ......................................................................................................... v  

**Chapter 1**  
*The Community Childhood Hunger Identification Project (CCHIP)* ........................................ 1  

- Introduction ....................................................................................................................... 1  
- How is Hunger Defined? ..................................................................................................... 2  
- How is Hunger Measured? .................................................................................................. 2  
- Components of the Community Childhood Hunger Identification Project .................................... 2  
  - Phase I - Development ..................................................................................................... 3  
  - Phase II - Replication and Evaluation ............................................................................. 3  
  - CCHIP Surveys Conducted in Phase II Which are Contained in this Report .................... 3  
  - Evaluation ....................................................................................................................... 3  
- Summary ............................................................................................................................. 7  

**Chapter 2**  
*Hunger Among Low-Income Families with Children* ............................................................. 9  

- What is the Extent of Hunger in the CCHIP Survey Sites? .................................................. 9  
- Methods of Projecting the Extent of Hunger in the United States ........................................ 9  
- How Many Children Suffer From Hunger in the United States? ........................................ 11  
- What Percentage of Families in the United States Suffer from Hunger? ............................. 12  
- How Many Days per Month do Hungry Families Suffer from Various Aspects of Food Insufficiency? .................................................................................................................. 12  
- What are the Characteristics of Hungry Families? ............................................................... 14  
  - Economic Characteristics ............................................................................................... 14  
  - Demographic Characteristics ......................................................................................... 14  
- Program Participation and Reliance on Emergency Food Providers .................................. 14  
- What is the Impact of Hunger on Children? ...................................................................... 14  
- Summary ............................................................................................................................. 16  

**Chapter 3**  
*Federal Food Assistance Programs* .................................................................................... 19  

- Introduction ....................................................................................................................... 19  
- What is the Food Stamp Program? .................................................................................... 19  
  - What were the Characteristics of Food Stamp Participants in CCHIP Surveys? ............... 20  
  - What were the Food Expenditures and Hunger Rates of Food Stamp Participants in CCHIP Surveys? .................................................................................................................. 20  
  - What were the Barriers to Participation in the Food Stamp Program? ......................... 23
What Changes in the Food Stamp Program are Needed to Reduce Childhood Hunger? ................................................................. 23
What is the Special Supplemental Food Program for Women, Infants and Children (WIC)? ............................................................... 25
What were the Characteristics of WIC Participants in CCHIP Surveys? .................................................................................. 25
What were the Barriers to the WIC Program? ......................................................................................................................... 27
What is the National School Lunch Program? ......................................................................................................................... 27
What is the School Breakfast Program? ................................................................................................................................. 27
What were the Characteristics of the Households Whose Children Participated in the School Lunch Program? ............................ 29
What were the Characteristics of Households Whose Children Participated in the School Breakfast Program? ............................ 29
What were the Barriers to Participation in the School Breakfast Program Among Eligibles? ....................................................... 32
What is the Impact of School Meal Participation? ...................................................................................................................... 32
What is the Summer Food Service Program for Children? ........................................................................................................ 32
What were the Characteristics of Participants in the Summer Food Service Program for Children? .................................................. 33
What were the Barriers to Participation in the Summer Food Service Program for Children? ....................................................... 33
What is the Impact of Federal Food Assistance Program Participation on Hunger? ........................................................................... 33
Summary .................................................................................................................................................................................. 36
The Food Stamp Program ......................................................................................................................................................... 36
The Special Supplemental Food Program for Women, Infants and Children (WIC) ............................................................................ 37
The National School Lunch and School Breakfast Programs .................................................................................................. 37
The Summer Food Service Program for Children ................................................................................................................. 38

Chapter 4
Emergency Food Programs ......................................................................................................................................................... 41
Introduction .................................................................................................................................................................................. 41
What were the Characteristics of Soup Kitchen Users? ................................................................................................................ 41
What were the Characteristics of Food Pantry Users? .................................................................................................................. 43
How Does Participation in Food Stamps Compare with Reliance on Emergency Food Programs? .................................................. 43
Is Demand for Emergency Food from Soup Kitchens and Food Pantries a Reliable Indicator of a Community Hunger Problem Among Low-Income Families? .................................................................................. 46
Summary .................................................................................................................................................................................. 46

Chapter 5
Hunger and Poverty: The Relationship Between Income and Expenses .................................................................................. 51
How is Poverty Defined? ......................................................................................................................................................... 51
What are the Trends in the Poverty Rate? ..................................................................................................................................... 51
How Do Rates of Poverty and Hunger Relate? .......................................................................................................................... 53
The Hunger Equation: What is the Relationship Between Income and Expenses? ................................................................. 53
How Much Do Low-Income Families Spend on Food and Shelter? ............................................................. 58
What is the Monthly Budget for Households Below the Poverty Level? .................................................. 58
Summary ............................................................................................................. 61

Chapter 6
Employment Status and Hunger ........................................................................ 63
Introduction ........................................................................................................... 63
Economic Recovery and Low Wage Jobs .............................................................. 63
What are the Characteristics of Employment Status Differences Among CCHIP Households? .......................................................... 65
How Are Family Budgets Affected by Unemployment? ........................................... 67
What are the Barriers to Employment for Single Parents? ........................................ 67
How are Family Budgets Affected by Full-Time Employment? .................................. 71
How Do These Families Compare? ........................................................................ 71
Summary ............................................................................................................. 73

Key Findings ......................................................................................................... 75

Policy Recommendations ..................................................................................... 79
Short-Term Steps to Ending Childhood Hunger ..................................................... 79
Longer Term Vision ............................................................................................... 82

Endnotes ............................................................................................................ 85

Appendices
A. Description of the Pilot Project ......................................................................... 91
B. Description of the Demonstration Project ............................................................. 92
C. Description of Seven CCHIP Survey Sites .......................................................... 93
D. CCHIP Survey Methods .................................................................................... 97
E. Methods for Estimating National Hunger Rates ................................................ 98
F. Health and School Absenteeism — Characteristics of Hungry Families Compared to Non-Hungry Families ................................................................. 99
G. Sample Design for the Pontiac, Michigan, CCHIP Survey .................................. 100
H. CCHIP Sites and Contacts ................................................................................ 101
I. CCHIP Site Acknowledgements ........................................................................ 102
J. CCHIP Technical Advisory Committee .............................................................. 104
COMMUNITY CHILDHOOD HUNGER IDENTIFICATION PROJECT

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Foreword

Millions of kids are hungry in America. This is the dramatic but inescapable conclusion that emerges from the national report of the Community Childhood Hunger Identification Project—the most rigorous and comprehensive study of childhood hunger ever conducted in this country.

The results of the seven local CCHIP studies provide an indication of the extent of hunger among children and families in the United States. In a nation whose wealth and resources are the envy of the world, literally millions of children do not get enough to eat on a regular basis.

Hunger hurts everyone. It robs children of proper physical development and the ability to learn. It causes health problems and increases education costs. Hungry children who cannot concentrate in school are less likely to reach their potential and become fully productive adults—which ultimately means that our society will be less competitive in the world marketplace.

Among our key findings:

- An estimated 5.5 million children under age 12 in this country are hungry.
- An estimated 11.5 million children under age 12 are hungry or at risk of hunger.
- Hungry children are two to three times more likely than children from non-hungry low-income families to have suffered from individual health problems such as unwanted weight loss, fatigue, irritability, headaches, and inability to concentrate in the six month period prior to the survey.

- Hungry children are absent from school one and a half times as many days than children from non-hungry families.

The study paints a disturbing picture of the day-to-day struggle of low-income households to maintain a nutritionally adequate diet. It shows that shelter (housing and utility) costs dominate the budgets of most of these households, leaving little money for food and other necessities. It shows that many working families, including those with a member employed full time, cannot escape hunger. It shows that low-income families are quite resourceful in marshalling public and private food assistance, yet often cannot meet their families' needs. And that when hunger hits a family, the parents are usually the first to do without food so their children can eat.

The widespread childhood hunger found in this study is a national shame: but fortunately it is a shame that can be ended.

In the long run, pursuit of various strategies to reduce the level and pain of poverty will reduce hunger among American children. But, kids can't wait for the long run.
There is a wealth of evidence, including new findings in this study, that suggest that by strengthening an array of federal programs already in place, much of the childhood hunger problem in this country can be eliminated. They include such children's programs as the Special Supplemental Food Program for Women, Infants and Children (WIC); the School Breakfast Program; the National School Lunch Program; and, the Summer Food Service Program for Children. Many of these programs are underfunded or underutilized. In addition, few people realize that 51 percent of all Food Stamp Program recipients are children and that 83 percent of all food stamp benefits go to families with children. Food stamp benefits are low and barriers to participation prevent millions of children and families from receiving program benefits.

Program improvements recommended at the conclusion of this report provide the centerpiece of a Campaign to End Childhood Hunger that we at FRAC, in partnership with anti-hunger groups across the country, are launching with the release of this report. It is a long-term public education and public policy advocacy effort that has the ultimate goal of gaining food security for all children and families in the United States. We invite all readers of this report to contact us for more information.

If we are truly committed to ensuring that no child goes hungry in the United States, we must begin to develop as careful and comprehensive a battle plan for the fight against childhood hunger as we have for political campaigns and military operations. We have the resources and the knowledge to do so much good for our children.

Through publication of this report and the launch of the Campaign we hope to inspire a national debate on childhood hunger and immediate action to remedy it — for no child goes hungry by choice and no one gains when a child goes hungry. If not for moral reasons alone, then for pragmatic economic reasons, we must put an end to childhood hunger. It is imperative that we begin now.

Acknowledgements

We at FRAC are proud to have completed the enormous undertaking that the CCHIP study represents. The cost to our organization alone over the past three years has been in excess of a half million dollars; when added to the costs of our local sites, the total study costs exceed one million dollars.

CCHIP has been funded almost exclusively from private sources. While a full list of national and local contributors is included elsewhere in the full report, special recognition is due the Primerica Foundation for initiating this project in 1984. The project had the active support of then Chairman and CEO of Primerica, William S. Woodside, who now serves as Chairman of Sky Chef, Inc., Peter Goldberg, now the President of the Prudential Foundation and then Vice President for Public Responsibility for Primerica, played a major role in conceptualizing and actualizing this project.

Special thanks also are due the Kraft General Foods Foundation, the largest underwriter of the CCHIP study and this report. Kraft General Foods Foundation has also joined in the Campaign to End Childhood Hunger — providing invaluable assistance at the national and local levels.

Other support at the national level has been generously provided for CCHIP by:

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Sara Lee Foundation
William T. Grant Foundation.

Thanks is also due to dozens of foundations, corporations and others who contributed to individual CCHIP studies.

The role of state and local groups across the country has been essential to the success of this project. Many of the groups conducting CCHIP surveys are very small — with limited budgets and already overextended staffs. The rigorous science required in the CCHIP methodology meant that raising the money and managing the study were enormous challenges. The groups conducting these studies
are specifically acknowledged elsewhere in the full report, but we want to reinforce our gratitude for the tremendous contribution of all who participated at the local level — including project supervisors, interviewers, and the families interviewed.

One statewide organization — the Connecticut Association for Human Services — deserves special praise. It was this group that had the foresight and gumption to initiate CCHIP in 1984. It was CAHS that conducted the original pilot test in New Haven, Connecticut and also played a strong supportive role in the subsequent Hartford survey. Matthew Melmed, the Executive Director of CAHS, and Helen Ward, the Director of Research, deserve the primary credit for pioneering CCHIP. Laura Cohen, Director of the Connecticut Anti-Hunger Coalition, has been instrumental in following through on their work.

We are also deeply indebted to an eminent group of academicians and researchers for serving as the Technical Advisory Committee (TAC) for CCHIP. While all TAC members are listed elsewhere in the full report, special mention is warranted for Dr. Victor W. Sidel, who chaired the committee. The TAC members gave generously of their time and talent to assure the credibility and soundness of the study’s methodology and the accuracy of its findings.

Finally, recognition is due those who actually made CCHIP happen on the national level. Although all FRAC staff have been involved, Lynn Parker, our Director of Nutrition Policy and Research, planted the seeds for this project in the mid-1980s by bringing together for the first time academicians who were interested in working together to figure out how to document hunger at the community level. She deserves special praise for coordinating many aspects of this project and serving as liaison to the CCHIP staff.

Members of the CCHIP staff, however, are those who have literally lived and breathed this project for over three years. Through sheer hard work, great personal sacrifice, and tremendous dedication, this lean staff has compiled a remarkable record of achievement. Invaluable contributions have been provided by staff members Valerie J. Wehler, Dr. Richard I. Scott, Dr. Jennifer J. Anderson, John M. Anthony, Iona A. Wehler and Sara B. Ducey. Drs. Scott and Anderson also served on the Technical Advisory Committee.

Ultimate praise and credit for the completion of the CCHIP study rests with Project Director Cheryl A. Wehler. She has brought extraordinary intelligence and perseverance to the overwhelming task of completing this project. This has required not only sophisticated research skills and an ability to interpret complex data, but also strong management capabilities to recruit and supervise the CCHIP staff and to assist small, grassroots groups in conducting this complicated study. More than anyone else, the completion of this CCHIP study is a tribute to Cheryl Wehler’s skill and dedication.

Robert J. Fersh
Executive Director
Food Research and Action Center
March 1991
Executive Summary

Overview

Millions of kids are hungry in America. But these children often seem invisible. In fact, many Americans are unaware of the dimensions of the tragic but solvable problem of hunger here at home. It's time to make childhood hunger a national priority.

During the 1980s, reports from local feeding programs, state networks, and regional coalitions spoke painfully about the growing specter of hunger, especially among families with children. An economic downturn combined with cuts in federal safety-net programs — including food assistance programs — increased the demand for emergency food.

But many policymakers discounted these reports as anecdotal. They questioned the reliability of the information. In 1984, the President's Task Force on Food Assistance concluded that it could not "report definitive evidence on the extent of hunger" because an acceptable measure had not yet been developed.

To document the need, a comprehensive, scientifically valid study of hunger among low-income families with children under the age of 12 was developed by the Connecticut Association for Human Services with the assistance of a distinguished panel of child health and research experts. National replication of the study, called the Community Childhood Hunger Identification Project, or CCHIP, was coordinated in seven sites across the country by the Washington, D.C.-based Food Research and Action Center (FRAC). This report is based on the results of these seven CCHIP studies.

Key Findings*

If combined hunger rates from the seven surveys hold for the nation as a whole, when applied to the latest and best available national data, an estimated 5.5 million American children under 12 are hungry. This means that one out of every eight children under 12 living in the United States is probably hungry.

According to the same projections, an additional six million children under 12 are at-risk of hunger because their families are experiencing food shortage problems. Taken together, 11.5 million American children under 12 are either hungry or at-risk of hunger based on these estimates. Put differently, one out of every four children in the United States is likely to experience at least one food shortage problem.

The impact of hunger on children in families surveyed by CCHIP manifests itself through health problems, problems which affect school attendance. When

*The national results included in this report were derived from CCHIP surveys conducted in seven sites across the nation. Each of the seven surveys was representative of the population of low-income families (at or below 185% of poverty) with at least one child under 12 in the geographic area sampled. The results from the combined samples can be used as a basis for projecting national estimates of the number of children hungry or at risk of hunger, although the combined samples are not statistically representative of this population in the entire United States.

The CCHIP sites are located in seven of the nine Census Bureau divisions and all four of the Census Bureau regions of the United States. Since the sites were chosen to accomplish representation of states that varied with regard to geographic size, population size, urbanness/rurality, economic structure and geographic location, it is reasonable to expect the sample of 2,335 randomly-selected households may reflect similar characteristics of other low-income families with at least one child under 12 regardless of where they live. If this assumption holds, we can use a combined hunger rate, that accounts for poverty distribution and household composition, from the seven CCHIP surveys to estimate the percentage of families in the United States who are hungry or at risk of hunger. This methodology affords us the capability of providing at least a credible estimate of the magnitude of the childhood hunger problem in the U.S.
compared with children from non-hungry low-income families, children from hungry families were much more likely to suffer from infection-based health problems and were two to three times more likely to show symptoms of low energy stores in the six month period prior to the survey.

In comparison to non-hungry children, hungry children are:
- more than three times as likely to suffer from unwanted weight loss;
- more than four times as likely to suffer from fatigue;
- almost three times as likely to suffer from irritability;
- more than 12 times as likely to report dizziness;
- more than twice as likely to have frequent headaches;
- almost twice as likely to have frequent ear infections;
- almost three times as likely to suffer from concentration problems; and,
- almost twice as likely to have frequent colds.

And when children become ill, they miss school. Hungry children are absent from school one and a half times as many days than children from non-hungry families (6.4 vs 4.3).

When applied to the best available national data, the seven site results indicate that roughly 12 percent of all families with children under the age of 12 in the United States are estimated to be hungry or at-risk of hunger, using these projections.

Local CCHIP Studies:

The CCHIP survey of families with incomes at or below 185 percent of poverty with at least one child under the age of 12 was pilot-tested in New Haven, Connecticut. A demonstration project was conducted in Washington state. The results from these studies were released in 1987 and 1988, respectively.

Over an 18 month period, from February 1989 to August 1990, FRAC coordinated separate CCHIP surveys in Alabama, California, Connecticut, Florida, Minnesota, Michigan and New York. A total of 2,335 families were surveyed door-to-door for the final CCHIP report. The number of low-income families sampled per site ranged from 257 in Minnesota to 434 in Michigan. The results from these seven sites are included in this report.

The first statewide CCHIP survey was conducted in Massachusetts from October 1989 to January 1990. The results of this study will be released in May 1991.

Defining Hunger:

CCHIP defines hunger as the mental and physical condition that comes from not eating enough food due to insufficient economic, family or community resources.

The measurement of hunger developed by CCHIP attempts to detect food insufficiency due to constrained resources. The CCHIP survey measures insecurity about having the resources to procure foods of choice, perceived insufficiency of food intake, actual food shortages and alteration of eating behaviors due to restricted or inadequate resources.

To measure hunger, a scale was formulated composed of eight questions — taken from the 105 questions in the survey — that indicate whether adults or children in the household experienced food shortages, perceived insufficiency of food intake or altered food intake due to resource limitations or inadequate food resources. These key questions, each pertaining to the preceding 12 months, are:

- Does your household ever run out of money to buy food to make a meal?
- Do you or adult members of your household ever cut the size of meals because there is not enough money for food?
- Do you or adult members of your household ever skip meals because there is not enough money for food?
- Do you ever cut the size of your children's meals or do they
ever skip meals because there is not enough money for food?

■ Do your children ever say they are hungry because there is not enough food in the house?

■ Do you ever rely on a limited number of foods to feed your children because you are running out of money to buy food for a meal?

■ Do any of your children ever go to bed hungry because there is not enough money to buy food?

These questions were chosen because they elicit the extent of sustained food insufficiency due to constrained resources. They are based on questions tested in previous surveys, but are more precise in language and have been tested with low-income families.

A score of five or more on the scale of zero to eight (that is, five affirmative responses out of eight) indicates a food shortage problem affecting everyone in the household. Therefore, families answering five or more of the eight hunger questions positively are classified as hungry. This is because a score of five or more:

■ indicates that five or more different signs of hunger are present in the household; and,

■ indicates that at least one of these signs of hunger directly affects the children in the household.

A score of one to four indicates that the family is “at risk” of hunger because it shows at least one sign of a food shortage problem.

Coping With Hunger:

Federal programs are already in place to address hunger in the United States. Some are specifically designed to enhance the food purchasing power of low-income families, while others help to increase the intake of nutritious food by low-income children. These programs include the Food Stamp Program; the Special Supplemental Food Program for Women, Infants and Children (WIC); the National School Lunch and School Breakfast Programs; the Summer Food Service Program for Children; and, the Child and Adult Care Food Program.

Hungry families in the CCHIP survey were significantly more likely than non-hungry families to participate in the Food Stamp Program. And, when the programs were available, many hungry families and the children within them participated in WIC and the school lunch and breakfast programs. Furthermore, households that participated in the Food Stamp Program were more likely to participate in WIC.

While hungry families were more likely than non-hungry to avail themselves of the benefits of these food assistance programs, many hungry families who were eligible for program benefits encountered barriers to participation.

The Food Stamp Program is designed to assist low-income families in purchasing a minimally adequate diet. Of the 1,922 families surveyed by CCHIP and eligible for food stamps, 708 (37%) were not participating. Of the 2,335 households interviewed in the CCHIP surveys, 406 households (17%) had never applied for food stamp benefits. The most commonly given reason for not applying was that the respondent did not believe the household was eligible (65%). An additional one-fifth (21%) were embarrassed to use food stamps. Of the 263 households that did not apply for food stamps because they did not think they were eligible, 131 (50%) were probably eligible for program benefits and 140 of them (53%) were found by CCHIP to be hungry or at-risk of hunger.

Of all the households surveyed, 676 (29%) had applied for food stamp benefits but were not receiving them at the time of the survey. The most often cited reasons for not receiving food stamps were that households said they did not qualify for food stamps at the time of application (51%), their benefits had stopped (30%), or they no longer needed benefits (24%). Of the 204 households who said their benefits had stopped, 150 (74%) were probably still eligible. Of the 158 households who said they no longer needed food stamps, 101 (64%) were probably still eligible for program benefits and, more importantly, 106 (67%) were found to be hungry or at-risk of hunger.

An analysis was conducted on households with gross incomes of less than 130 percent of the poverty line and therefore more likely to be eligible for food stamp benefits. On average,
Participants were receiving 52 percent of the maximum food stamp benefit level and approximately 11 percent of the participating households were actually receiving the maximum food stamp benefit level. The average dollar value of food stamps per household was $182 per month.

The WIC program, which has proven to be both successful in improving the health and nutritional intake of participants and cost-effective, currently serves just over half of those eligible nationwide. Of the 1,250 low-income families surveyed by CCHIP who were income and categorically eligible for WIC, 55 percent were not receiving WIC benefits. Most important from the CCHIP findings, of those eligible but not receiving WIC benefits, 31 percent were hungry, presumably at dietary risk and in need of the program benefits.

Both the school lunch and breakfast programs are federal entitlements, available to any school district wishing to participate in them. However, less than half of the schools nationwide offering lunch offer breakfast. Within the 2,129 households with school-age children interviewed by CCHIP, 875 (41%) of the children participated in the School Breakfast Program. Fifty-nine percent (1,255 households) did not receive school breakfasts. Of the 59 percent of those families interviewed by CCHIP whose children did not receive school breakfast, nearly one-third were hungry. For most of the school-age children who did not participate in the School Breakfast Program, the reason that they did not participate was because the program was not offered at their schools.

Children who were eating both school breakfast and school lunch were found to be significantly less likely to suffer from problems usually associated with low energy reserves (fatigue, irritability and inability to concentrate) in the six months prior to the survey than those who were getting school lunch only. As noted earlier, hungry children were more likely to suffer from specific health problems than children from non-hungry families; and children who had a specific health problem were more likely to be absent from school than those who did not suffer from any specific health problems. However, all children were less likely to have increased school absences if they got breakfast at school. In addition, children who were at-risk of hunger had fewer days absent when they got breakfast at school than when they did not get breakfast at school.

The Summer Food Service Program for Children is designed to fill the nutritional gap for children during the summer months when they are not receiving meals in school. Like the School Breakfast Program, it is underutilized. Of the families interviewed by CCHIP, only 22 percent had children participating in the Summer Food Program. Of those families who had never heard of the program or did not participate in it, 31 percent were hungry and 42 percent were at risk of hunger.

Relationships Between Income, Shelter Costs, Employment and Hunger:

Of the 2,335 households with children under 12 interviewed in the CCHIP survey with incomes at or below 185 percent of the federal poverty level, 32 percent were hungry. An additional 40 percent of these families were at risk of hunger, one step away from a chronic food shortage problem. Families that experienced hunger suffered from it for an average of seven days per month.

Of the families interviewed by CCHIP (with incomes at or below 185% of poverty), 65 percent had incomes below the poverty line ($12,700 for a family of four in 1990). Hungry households were much poorer than families categorized as non-hungry. The average incomes of the hungry households were nearly 25 percent below the poverty line. While hungry households spent nearly a third of their gross monthly income on food, they were able to spend an average of only 68 cents per person per meal.

Not only were their incomes low, but high shelter costs also consumed a large portion (an average of 54%) of their monthly gross income.

The share (percentage) of income spent on shelter averaged more than 60 percent for
the poorest households (those with incomes below 100 percent of the poverty level). This share was substantially larger than the typical (or median) American household, whose shelter expenses were 21 percent of their gross income in 1989. Thus, the portion of income spent on shelter was three times greater for the poor in these surveys than for the typical American family.

Post shelter income refers to the amount of income left over after shelter costs are paid, and includes the dollar value of WIC benefits and food stamp allotments, for those households receiving each program. Food share of post shelter income is the percentage of this remaining income spent on food. Food expenditures refer only to food purchases in grocery stores and do not count the cost of eating out at restaurants or other eating establishments. Poor families spent a much higher percentage of their post shelter income on food than families with higher incomes. Specifically, families with incomes below the poverty level spent, on average, 60 percent of their post shelter income on food. Nonetheless, this amounted to an average of only $277 per month for food — just 68 cents per person per meal.

The Thrifty Food Plan is a market-basket list of foods developed by the U.S. Department of Agriculture as its lowest cost food plan. The plan is used in determining Food Stamp Program benefits designed to assist low-income families in purchasing a minimally adequate diet. Yet, the average poor family (with income at or below 100% of poverty) in the CCHIP surveys was able to spend only 77 percent of the cost of the Thrifty Food Plan on food even when using food stamps and WIC benefits.

Upon examining an average monthly budget — including income minus basic expenses — for poor families (with income at or below 100% of poverty) in all CCHIP surveys, we see how this translates into dollars and cents. After paying for shelter and food, poor families were left, on average, with only $185 a month. This remainder, which amounted to $39 per person per month, had to cover all other expenses — shoes, clothing, medical bills, bus fare, the phone bill, and other basic needs.

CCHIP survey results show that living below the poverty line places the family budget in a tight squeeze, forcing untenable choices among competing needs. It is clear that being poor adversely affects a family's capacity to maintain a nutritionally adequate diet.

According to data from Pontiac, Michigan (where families with incomes above 185% of poverty were also interviewed), if all family incomes were at least twice (200% of) the poverty level, nearly 95 percent of households in this city would no longer be classified as hungry.

Hunger and employment status are strongly linked. Based on CCHIP survey results, unemployed households had three-fourths the average income of part-time employed households and just one half the income of full-time employed households. Unemployed households were one and one half times as likely to be hungry as full-time employed households.

Conclusion and Recommendations:

Hunger hurts everybody. As a society, we cannot afford millions of hungry kids, their illness or their illiteracy.

New and creative thinking is needed in our efforts to alleviate hunger and poverty. Of vital importance is the achievement of Food Security — access by all people at all times through normal channels to enough nutritionally adequate food for an active healthy life. The long term solution lies in quality education and training; jobs with living wages; affordable and available housing, child care and health care; and adequate income support for those who need it.

But, kids can't wait while adults debate.

Successful government programs are in place that, if fully implemented, can alleviate hunger in the United States. In light of the findings from CCHIP, the following immediate policy objectives are recommended:

1. Ensure that all eligible, low-income women, infants and children receive assistance through the Special Supple-
mental Food Program for Women, Infants and Children (WIC).

2. Increase the availability of the School Breakfast Program to low-income children across the country and encourage federal, state and local policies to ensure that the National School Lunch Program remains broadly accessible to all such children.

3. Expand the availability of meals for low-income children who are not in school through the Child and Adult Care Food Program and the Summer Food Service Program for Children.

4. Improve access to and benefits from the Food Stamp Program so that low-income families with children have enough to eat throughout each month.

Millions of kids are hungry in America. There are solutions.
Chapter 1

The Community Childhood Hunger Identification Project (CCHIP)

Introduction

In the early 1980s, numerous voices from disparate places began to speak of hunger. The initial response to stories of hunger was one of surprise, because only a few years earlier, researchers, policymakers and advocates had been celebrating the diminution of hunger in the United States.

Nonetheless, accounts from local feeding programs, state networks and regional coalitions spoke painfully of the re-emergence of hunger, especially among families with children. During this period of economic recession, and following severe cuts in federal food assistance programs, demand for emergency food assistance was increasing dramatically. Service providers documented this increased demand, noting that more families with children were seeking assistance.

Concern about the return of hunger to the United States escalated following a survey of city officials by the U.S. Conference of Mayors in 1982. Though no attempt was made to measure hunger directly, this report did provide data that showed an increase in demand at local food pantries, food banks and soup kitchens.

Some policymakers questioned the reliability of this information, discounting the reports as anecdotal. As a result, these policymakers were concentrating not so much on the existence of a growing hunger problem but on the reliability of the information base. The concern with credible information was highlighted by the 1984 report from the President's Task Force on Food Assistance. Although the task force concluded that hunger was a problem in the United States, the authors could not assess its extent, mentioning an inability to measure hunger.

In addition to the task force, other studies of hunger were mounted. Attempts in Massachusetts, New York, Arkansas, Utah and elsewhere were undertaken to measure hunger in order to estimate the extent of the problem at this time.

Moved both by concern about increased demand for emergency food, and by the need for reliable hunger estimates, the Community Childhood Hunger Identification Project (CCHIP) was conceptualized in 1984. CCHIP was designed as a systematic approach to studying the problem of hunger, particularly among families with children. It aimed at providing sound data upon which service providers and policymakers could base their decisions.

The Community Childhood Hunger Identification Project, better known as CCHIP, is a research project to document the extent of hunger among low-income families (incomes at or below 185% of the federal poverty level) with at least one child under the age of twelve.
How Is Hunger Defined?

CCHIP defines hunger as the mental and physical condition that comes from not eating enough food due to insufficient economic, family or community resources.

In some developing nations where famine is widespread, hunger manifests itself as severe clinical malnutrition, and the resulting physical and mental impairments are easily measured. The United States has a higher standard of living. Because food production is high and because food assistance programs are in place to help the needy, starvation seldom occurs. Instead, hunger here means chronic mild undernutrition—skipping meals, eating less and running out of food. The subtle mental or physical changes that occur in this country from the long-term, sub-clinical food intake deficit among the poor are often difficult to measure.

The measurement of hunger developed by CCHIP used an index that attempts to detect food insufficiency due to constrained resources, rather than clinical measures of undernutrition. The CCHIP survey measures insecurity about having the resources to procure foods of choice, perceived insufficiency of food intake, actual food shortages and alteration of eating behaviors due to restricted or inadequate resources.

How Is Hunger Measured?

To measure hunger, a scale was formulated, composed of eight questions that indicate whether adults or children in the household are affected by anxiety about food resources, food shortages, perceived food insufficiency or altered food intake due to resource limitations.

The hunger scale used in CCHIP surveys is constructed from the answers to eight key hunger questions, taken from the 105 questions in the survey. These questions, each pertaining to the preceding 12 months, are:

- Does your household ever run out of money to buy food to make a meal?
- Do you or adult members of your household ever eat less than you feel you should because there is not enough money for food?
- Do you or adult members of your household ever cut the size of meals or skip meals because there is not enough money for food?
- Do your children ever eat less than you feel they should because there is not enough money for food?
- Do you or adult members of your household ever cut the size of meals or skip meals because there is not enough money for food?
- Do your children ever say they are hungry because there is not enough food in the house?
- Do you ever rely on a limited number of foods to feed your children because you are running out of money to buy food for a meal?
- Do any of your children ever go to bed hungry because there is not enough money to buy food?

These questions were chosen because they ascertain the extent of sustained food insufficiency due to constrained resources. They are based on questions used and tested in previous surveys, but are more precise in language and have been tested with low-income families.

A score of five or more on the scale of zero to eight (that is, five affirmative responses out of eight) indicates a food shortage problem affecting everyone in the household. Therefore, families answering affirmatively five or more of the eight hunger questions are considered "hungry." A score of five or more:

- indicates that five or more different signs of hunger are present in the household; and,
- indicates that at least one of these signs of hunger directly affects the children in the household.

A score of one to four indicates that the family is "at risk of a hunger problem," because it shows at least one sign of a food shortage problem attributed to resource constraints.

Components of the Community Childhood Hunger Identification Project

CCHIP has two phases, which will be discussed in the next few pages. CCHIP has been guided...
by a Technical Advisory Committee (TAC) chaired by Dr. Victor Sidel, Distinguished University Professor of Social Medicine at the Montefiore Medical Center and the Albert Einstein College of Medicine in the Bronx, New York. The TAC consists of professionals with a broad range of expertise in various fields, including medicine, public health policy, nutrition and social science research. Since its inception, the project has been under the direction of Cheryl A. Wehler, former director of the Massachusetts Nutrition Survey. Corporate and private foundations have provided funding for the project.

**Phase I — Development**

Phase I was conducted under the auspices of the Connecticut Association for Human Services (CAHS), a statewide research and education organization, located in Hartford.

During Phase I, CAHS assembled the Technical Advisory Committee and project staff who developed and pretested a hunger measure and survey questionnaire, and conducted a pilot study in New Haven, Connecticut. (See Appendix A for a description of the pilot study).

**Phase II — Replication & Evaluation**

In Phase II, CCHIP was sponsored by the Food Research and Action Center, a national research, education and advocacy organization located in Washington, D.C.

During Phase II, the CCHIP staff, in conjunction with the Governor's Task Force on Hunger, conducted a demonstration project in two sites in Washington state. (See Appendix B for a description of the demonstration project.)

**CHIP Surveys Conducted In Phase II Which are Contained in this Report**

Following the demonstration project, seven separate CCHIP surveys were conducted from February 1989 to August 1990, in sites that represent seven of the nine Census Bureau divisions and all four of the Census Bureau regions of the United States. Only the West South Central division and the Mountain division are unrepresented in this group of surveys. (See Figure 1.1.)

Four urban sites, located in Connecticut, Michigan, Minnesota and New York, and three rural areas from Alabama, California and Florida were included. Each survey has been designed to be representative of low-income families (those with incomes at or below 185% of the federal poverty level) with at least one child under 12 years old in an entire county (Minnesota, Florida and Alabama sites) or group of counties (California site), a city (Michigan and Connecticut sites), or in towns within a county (New York site).

The number of low-income families sampled per site ranged from 257 at the Minnesota site to 434 at the Michigan site (See Table 1.1). A total of 2,335 families were interviewed in seven surveys, combined. (See Appendix C for a brief description and parameter table of each local survey and the individual site technical reports for details.) (See Table 1.2 for characteristics of the composite sample for the seven surveys.)

The CCHIP staff provides community organizations with expert technical assistance to conduct their survey among local residents. To accomplish this, these organizations employ community members, trained in interviewing techniques by the CCHIP staff, to conduct approximately 400 one hour, face-to-face interviews. They use the CCHIP community questionnaire which was designed and tested by survey research experts, health researchers and policy analysts. The information they gather can be used to inform the community about hunger and to assess the needs of the hungry. (See Appendix D for a description of survey methods.)

**Evaluation**

Evaluations are made on both the process and the outcome of the project. The characteristics of local organizations associated with the successful completion of a CCHIP survey have been examined in the surveys conducted in Phase II. In addition, the amount and type of technical assistance needed have been studied. This information will be used to improve the effectiveness of collaborations on future CCHIP surveys.
UNITED STATES, REGIONS, DIVISIONS, AND STATES
## Table 1.1
Characteristics of Samples at CCHIP Survey Sites

<table>
<thead>
<tr>
<th>Site/State</th>
<th># of Eligible Families</th>
<th># of Interviews Completed</th>
<th>Response Rate Among Eligible HH</th>
<th>% Hungry or At-risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hennepin County, Minnesota</td>
<td>7,788</td>
<td>257</td>
<td>65%</td>
<td>37%</td>
</tr>
<tr>
<td>Pontiac, Michigan</td>
<td>2,474</td>
<td>434</td>
<td>96%</td>
<td>29%</td>
</tr>
<tr>
<td>Suffolk County, New York</td>
<td>2,595</td>
<td>361</td>
<td>80%</td>
<td>24%</td>
</tr>
<tr>
<td>Hartford, Connecticut</td>
<td>3,833</td>
<td>315</td>
<td>92%</td>
<td>41%</td>
</tr>
<tr>
<td>Four Counties in the Central Valley, California</td>
<td>49,731</td>
<td>335</td>
<td>70%</td>
<td>36%</td>
</tr>
<tr>
<td>Polk County, Florida</td>
<td>9,901</td>
<td>274</td>
<td>59%</td>
<td>32%</td>
</tr>
<tr>
<td>Sumter County, Alabama</td>
<td>1,106</td>
<td>366</td>
<td>96%</td>
<td>28%</td>
</tr>
</tbody>
</table>

---

*a* - Number of eligible families in geographic area represented.

*b* - Nine interviews were eliminated from the multi-site analysis because of insufficient data (Composite sample = 2,335).
Table 1.2
Characteristics of Composite Sample of Households
For Seven CCHIP Surveys
Number of Households = 2,335

**SOCIODEMOGRAPHIC**
The average household had 4.6 members with 2.9 children.
43 percent of the households were headed by females.
43 percent of the families had two parents present.
14 percent of these families were either multigenerational, had a single male head, had other adult besides parents present or had more than one family present.
41 percent of the households were Black.
29 percent of the households were white.
24 percent of the households were Hispanic.
Six percent of the households were of another descent.

**ECONOMIC**
46 percent of the households had incomes below 75 percent of poverty.
34 percent of the households had incomes between 76 and 130 percent of poverty.
20 percent of the households had incomes between 131 and 185 percent of poverty.
Over half (55%) of the families in the sample had wage income and 48 percent had at least one full-time employee.
Summary

The Community Childhood Hunger Identification Project (CCHIP) is a research project employing survey techniques to document the extent of hunger among low-income families (those with incomes at or below 185% of the federal poverty level) with at least one child under the age of 12.

The CCHIP survey was developed in response to the needs of policymakers and service providers for reliable data about hunger. The need to accurately document the extent of childhood hunger followed reports in the early 1980s of increasing demand for emergency foods by families with young children.

In response to the need for sound information, the Connecticut Association for Human Services (CAHS) assembled a Technical Advisory Committee composed of prominent professionals in the areas of medicine, public health, child health policy, nutrition, survey research methodology and community advocacy to design a scientifically valid survey instrument and methods to document the extent of hunger among low-income families with children.

CAHS also sponsored a pilot study in New Haven, Connecticut.

In 1987, the Food Research and Action Center, a national, nonprofit, research, education and advocacy organization located in Washington, DC, decided to use the CCHIP questionnaire and methods to conduct a demonstration project in two sites in the state of Washington. Following the completion of the demonstration project, the questionnaire and survey sampling methodology were refined and standardized. From February 1989 to August 1990, using these standard research techniques, seven separate CCHIP surveys have been conducted in Minnesota, Michigan, Connecticut, Florida, California, Alabama and New York. This report represents a compilation of the results of these seven surveys.

In the next chapter, results from these CCHIP surveys are presented which show the effects of hunger on children and the characteristics of hungry families. In addition, these results are also used to project hunger rates for the United States.
Chapter 2
Hunger Among Low-Income Families With Children

What is the Extent of Hunger in the CCHIP Survey Sites?

As described in Chapter 1, over an 18 month period, from February 1989 to August 1990, seven separate CCHIP surveys were conducted in sites that represent seven of the nine Census Bureau divisions and all four of the Census Bureau regions of the United States.

The hunger rate (the percentage of families experiencing hunger) among low-income families ranged from 24 percent in the Long Island, New York site to 41 percent in the Hartford, Connecticut site. (See Table 2.1) We can combine the households from all seven sites to produce an overall measure of the extent of hunger among low-income families surveyed by CCHIP. (See Figure 2.1)

Of the 2,335 households interviewed in the seven sites with incomes at or below 185 percent of the poverty level and with at least one child under the age of twelve, 32 percent were hungry. An additional 40 percent of these families were at-risk of hunger. Taken together, this means that 72 percent of low-income families had experienced at least one problem with food availability due to constrained resources.

Methods of Projecting the Extent of Hunger in the United States

Each of the seven surveys was representative of the population of low-income families (at or below 185% of poverty) with at

Table 2.1
Hunger Rates for the Seven CCHIP Sites

<table>
<thead>
<tr>
<th></th>
<th>Hungry</th>
<th>At-Risk</th>
<th>Not Hungry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota</td>
<td>37%</td>
<td>43%</td>
<td>20%</td>
</tr>
<tr>
<td>Michigan</td>
<td>29%</td>
<td>38%</td>
<td>33%</td>
</tr>
<tr>
<td>New York</td>
<td>24%</td>
<td>62%</td>
<td>14%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>41%</td>
<td>36%</td>
<td>23%</td>
</tr>
<tr>
<td>California</td>
<td>36%</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>Florida</td>
<td>32%</td>
<td>37%</td>
<td>31%</td>
</tr>
<tr>
<td>Alabama</td>
<td>28%</td>
<td>31%</td>
<td>41%</td>
</tr>
<tr>
<td>Combined</td>
<td>32%</td>
<td>40%</td>
<td>28%</td>
</tr>
</tbody>
</table>
Figure 2.1
Hunger Rates of Low-Income Families Surveyed by CCHIP (All Sites)
least one child under 12 in the geographic area sampled. The results of the combined samples can be used as a basis for projecting national estimates of the percent of families with children under 12 who are hungry or at risk of hunger, even though the combined samples are not statistically representative of this population living in the entire United States.

Since the seven sites were chosen to capture national variation in geographic size, population size, proportion of the population living in urban and rural areas, economic structure and geographic location, it is not unreasonable to expect that the composite sample of 2,335 households randomly selected within their local sites may be similar to other low-income families with at least one child under 12, regardless of where they live.

Poor households (those living below the poverty line) in the CCIIIP surveys are distributed in urban, suburban and rural areas in proportions roughly comparable to relevant national distributions. CCHIP households are somewhat larger, and a higher percentage of them are minorities. Neither household size nor race, however, is significantly associated with hunger in the CCIIIP surveys. Therefore, it is reasonable to assume that there discrepancies would have little effect on the applicability of the combined CCHIP hunger rates to all low-income families with children under 12. In addition, poor households in the CCHIP samples have nearly the same percentage of single female headed households as the national average. Since having a single female head is associated with hunger, it is accounted for in the CCHIP estimations.

Assuming that the hunger rate seen in the seven CCHIP surveys applies to all low-income families (at or below 185% of poverty) with children under 12 regardless of where they live, then the overall rate from the seven surveys is our best estimate of hunger (32%) and risk of hunger (40%) among low-income families with children under 12 in the United States. Modifying this assumption, so that we assume only that the hunger rates seen in the CCHIP surveys within each of six categories defined by poverty level and household composition type hold in the United States as a whole, we can reweigh these hunger rates to account for differences between the survey sites and the entire United States in the representation of these six categories. This reweighing yields an estimate of hunger of 29 percent and risk of hunger of 42 percent among low-income families with children under 12 in the United States. From these estimates we can project the percentage of all families with children, and the total numbers of children in the United States who are hungry or at risk of hunger. (Details of the procedures are provided in Appendix E.)

These estimates, as with any estimates, should be understood in context. The extent of their accuracy and reliability is constrained by limitations in the available data sources.

Nonetheless, these are the best estimates of hunger that are available at this time.

How Many Children Suffer From Hunger in the United States?

Assuming that the combined hunger rates from the seven CCHIP surveys hold for the nation as a whole, they can be applied to the best available national data to provide an estimate of the magnitude of the childhood hunger problem. The accuracy of these projections will be greatly enhanced when national data specifying poverty distributions are available from the 1990 Census.

■ We estimate that approximately 5.5 million children under age 12 are hungry.

■ This means that approximately one out of every eight children under age 12 living in the United States is hungry.

■ In addition, approximately 6.0 million children under age 12 are at-risk of hunger because their families are experiencing food shortage problems.

■ Taken together, this means that approximately 11.5 million American children under age 12 are either hungry or at-risk of hunger. Put differently, approximately one out of every four children under 12 in the United States lives in a family that has experienced at least one food shortage problem in the past twelve months.
Thus, for children under 12 in low-income families in the United States in 1989-1990, approximately 5.5 million children were from families that were hungry at some time (in at least one month) during the 12 month period preceding the survey. Moreover, approximately 4.7 million low-income children were from families that were hungry in the month preceding the survey. Since poverty status may change from month to month, and since recall is more accurate for shorter periods, the prevalence estimate for the month prior to the survey is likely to be a good indicator of a "typical" month. Therefore, our best estimate of the number of low-income children under 12 who are hungry on a monthly basis is approximately 4.7 million.

CCHIP estimates that approximately 12 percent of families with children under age 12 living in the United States experience hunger.

In addition, approximately 28 percent of all families with children under age 12 living in the United States are hungry or at-risk of hunger.

How Many Days per Month Do Hungry Families Suffer From Various Aspects of Food Insufficiency?

Families experience various aspects of hunger. There is a sequential pattern in the way hunger manifests itself in households. When resources are tight, households begin to rely on a limited number of low-cost, emergency foods; adults then cut or skip meals, eating less than they think they should; when they run out of money to buy food to make a meal, parents begin to report that their children are also eating less than they think they should, and must then cut the size of their children’s meals or have the children skip meals. At this point, when there is little food in the house to give them, children begin telling their parents that they are hungry, and when the family no longer has any food or money for food, the children go to bed hungry.

One-third of hungry households had children who went to bed hungry, averaging nearly six nights per month.

Overall, hungry families experienced hunger an average of seven days per month and an average of six months per year in the 12 month period prior to the CCHIP survey.

What Percentage of Families in the United States Suffer from Hunger?

Assuming that the combined hunger rates from the seven CCHIP surveys reflect that of low-income families (at or below 185% poverty) with at least one child under 12 regardless of where they live, and assuming that the rate of hunger in families with incomes above 185 percent of poverty is not substantial, the rate of hunger among low-income families can be put into context for the entire population of families with young children living in the United States.

Parents and other adult members in 95 percent of hungry households cut the size of their meals or skip meals altogether, doing so for an average of one week per month.

One-third of hungry households had children who went to bed hungry, averaging nearly six nights per month.

More than one-fourth of hungry families report that their children went to bed hungry on some days of every month of the year.

Parents and other adult members in 95 percent of hungry households cut the size of their meals or skip meals altogether, doing so for an average of one week per month.

One-third of hungry households had children who went to bed hungry, averaging nearly six nights per month.

Overall, hungry families experienced hunger an average of seven days per month and an average of six months per year in the 12 month period prior to the CCHIP survey.
Table 2.2
Extent and Duration of Hunger
Among Hungry Families - All Survey Sites
Number of households (HHs) = 750

<table>
<thead>
<tr>
<th>Percent Yes</th>
<th>Avg. # days in past 30 months</th>
<th>Avg. # days per year</th>
<th>% HHs with problem all 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THINKING ABOUT THE PAST 12 MONTHS:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did your household ever run out of money to buy food to make a meal?</td>
<td>92%</td>
<td>6.0</td>
<td>6.3</td>
</tr>
<tr>
<td>Did you or adult members of your household ever eat less than you felt you should because there was not enough money for food?</td>
<td>94%</td>
<td>6.9</td>
<td>6.2</td>
</tr>
<tr>
<td>Did you or adult members of your household ever cut the size of meals or skip meals because there was not enough money for food?</td>
<td>95%</td>
<td>7.1</td>
<td>6.2</td>
</tr>
<tr>
<td>Did your children ever eat less than you felt they should because there was not enough money for food?</td>
<td>88%</td>
<td>6.7</td>
<td>5.9</td>
</tr>
<tr>
<td>Did you ever cut the size of your children's meals or did they ever skip meals because there was not enough money for food?</td>
<td>83%</td>
<td>6.6</td>
<td>6.1</td>
</tr>
<tr>
<td>Did your children ever say they were hungry because there was not enough food in the house?</td>
<td>73%</td>
<td>6.5</td>
<td>6.1</td>
</tr>
<tr>
<td>Did you ever rely on a limited number of foods to feed your children because you were running out of money to buy food for a meal?</td>
<td>98%</td>
<td>10.1</td>
<td>7.5</td>
</tr>
<tr>
<td>Did any of your children ever go to bed hungry because there was not enough money to buy food?</td>
<td>33%</td>
<td>5.5</td>
<td>5.6</td>
</tr>
</tbody>
</table>
What are the Characteristics of Hungry Families?

**Economic Characteristics**

Table 2.3 presents the characteristics of hungry households. The most striking feature of hungry households is how few economic resources they have. The average income of hungry households was well below the poverty level at 77 percent of the poverty line. Because hungry households are poor, over half (54%) received benefits from the Aid to Families with Dependent Children (AFDC) Program.

Expenses for low-income families in the CCHIP surveys were quite high in relation to their income. Hungry households spent nearly one-third of their gross monthly income on food, and yet this amounted to an average of only 68 cents per person per meal. In contrast, the average American family of four spent only 14.8 percent of its gross income on food in 1989, but this yielded an average of $1.32 per person per meal — almost twice as much as a hungry family.

As will be shown in more detail in Chapter 5, the major constraint on food expenses for all low-income households is the high cost of shelter (rent or mortgage and utilities such as gas, fuel oil, electricity, water and sewer). Hungry households spent an average of $410 per month on shelter; this is, on average, 54 percent of their gross income. Adding in food expenses, this means that hungry families spent 86 percent of their gross monthly income on these basic needs.

**Demographic Characteristics**

Nearly half (49%) of all hungry families were headed by single mothers. Fifty-three percent of hungry households had an adult member with a high school diploma and forty-six percent had wage income.

Hungry households had an average of 4.8 members, of which 3.1 were children. Seventy-six percent of hungry households are non-white.

**Program Participation and Reliance on Emergency Food Providers**

Federal food programs are already in place, designed to help low-income families acquire nutritionally adequate diets by enhancing their food purchasing power. While many hungry families availed themselves of the benefits of these food assistance programs, there are many hungry families who were eligible for program benefits but encountered barriers to participation. Of eligible households, seven in ten received food stamps, nearly half received WIC, virtually all received school lunch, only half received school breakfast, and just a quarter received meals from the Summer Food Service Program for Children. Many families who were hungry made use of available public and private food assistance programs, and still were hungry. While hungry households were very poor and therefore likely to be eligible for and participating in food assistance programs, program benefits did not fully compensate for their economic disadvantages. Although these programs alleviate the severity of the food shortage problem, they did not eliminate it or ensure food sufficiency.

One of every seven hungry families (14%) with young children had visited a soup kitchen for meals, and over half of these families (52%) had turned to food pantries or other commodity distribution centers for food assistance. The vast majority of hungry households (82%) relied on friends and relatives for money, food and meals when they ran out of personal resources for food.

**What Is the Impact of Hunger on Children?**

What do statistics like these mean for America's hungry children? Hunger hurts, even if these children do not have the distended bellies and emaciated bodies suffered by children in famine-stricken areas of the world. The impact of hunger on children in the United States usually manifests itself as health and nutrition problems and problems which affect school attendance.

More than 80 percent of children from hungry households skipped meals or had their food intake limited by having the size of their meals cut.

One child was randomly chosen to represent each household...
Table 2.3
Profile of Hungry Households

Hungry households from the seven CCHIP surveys had the following characteristics in common.

- These households had an average of 4.8 members, of whom 3.1 are children.
- Almost half (49%) of all hungry households were headed by women.
- Seventy-six percent of hungry households were non-white.
- Fifty-three percent of hungry households had at least one adult member with a high school diploma.
- Forty-six percent of hungry households had wage income.
- Fifty-four percent of hungry households received Aid to Families with Dependent Children (AFDC) benefits.
- The average income of hungry households was at 77 percent of the official poverty line.
- Hungry households spent an average of 54 percent of their gross income on shelter costs.
- Hungry households spent 32 percent of their gross income (including food stamps and WIC benefits) on food.
- Seventy percent of hungry households were eligible for and participating in the Food Stamp Program.
- Among hungry households that were categorically and income eligible for WIC benefits, 45 percent were participating.
- Ninety-five percent of hungry households with school-age children participated in the School Lunch Program, while only half (48%) participated in the School Breakfast Program.
- Twenty-six percent of hungry households got meals from the Summer Food Service Program for Children.
the child with the most recent birthday. Information on school absenteeism and health problems was collected about that child in each household. (See Appendix F)

When compared with children from non-hungry families, children from hungry families were much more likely to suffer from infection-based health problems and were much more likely to show symptoms of low energy stores in the six month period prior to the survey.

In comparison to non-hungry children, hungry children were:
- more than three times as likely to suffer from unwanted weight loss,
- more than four times as likely to suffer from fatigue,
- almost three times as likely to suffer from irritability,
- more than 11 times as likely to report dizziness,
- more than twice as likely to have frequent headaches,
- almost twice as likely to have frequent ear infections,
- almost three times as likely to suffer from concentration problems, and
- almost twice as likely to have frequent colds.

In addition, compared to children from non-hungry households, hungry children were almost twice as likely to report frequent doctor visits in the six month period prior to the survey. Overall, respondents from three quarters of the hungry families report that their children experienced health problems during the six months prior to the survey.

And when children become ill, they miss school. Children who reported any specific health problems were more likely to be absent from school than those not reporting specific health problems, missing almost twice as many school days (7.0 vs. 3.6 days). On average, children in hungry families were absent from school six and a half days in the six months prior to the study. Hungry children are absent from school one and a half times as many days as children from non-hungry families (6.4 vs 4.3).

Summary

Using a measure of hunger based on food insufficiency due to constrained resources, CCHIP estimates that approximately 5.5 million American children under age 12 are hungry. This means that approximately one out of every eight children under 12 living in the United States is hungry. In addition, approximately six million children under 12 years are at-risk of hunger because their families are experiencing food shortage problems. Taken together, CCHIP estimates that approximately 11.5 million American children under 12 years old are either hungry or at-risk of hunger. Put differently, approximately one out of every four children in the United States lives in a family that has experienced at least one food shortage problem.

Overall, hungry families experienced hunger an average of seven days per month and an average of six months per year in the 12 month period prior to the CCHIP survey.

The impact of hunger on children in the United States usually manifests itself as health and nutrition problems. When compared with children from non-hungry, low-income families, children from hungry families were almost three times as likely to suffer from unwanted loss of weight and four times as likely to suffer from fatigue during the six months prior to the survey.

And when children become ill, they miss school. Children who report any specific health problems were more likely to be absent from school than those not reporting specific health problems, missing almost twice as many school days. Hungry children are absent from school one and a half times as many days as children from non-hungry families (6.4 vs 4.3).

If the combined hunger rates from the seven CCHIP surveys hold for the nation as a whole, CCHIP estimates that approximately 12 percent of all families with children under 12 in the United States experience hunger. In addition, approximately 16 percent of all families with children under 12 are at-risk of hunger. Altogether, approximately 28 percent of these families are estimated to be hungry or at-risk of hunger.
Hungry households are quite poor, having average incomes that were about 25 percent below the poverty line. High shelter costs consumed a large portion (54%) of their monthly gross income. While hungry households spent nearly a third of their monthly gross income on food, they were able to spend an average of only 68 cents per person per meal. In contrast, the average American family of four spent only 14.8 percent of its gross income on food in 1989, but this yielded an average of $1.32 per person per meal—almost twice as much as a hungry family.

Federal food programs already in place are designed to help low-income families acquire nutritionally adequate diets by enhancing their food purchasing power. While some hungry families availed themselves of the benefits of these food assistance programs, many other hungry families who are eligible for program benefits encountered barriers to participation. In the next chapter, we draw on data from CCHIP surveys to find out who is served and, for those who are not served, what barriers impede their participation.
Chapter 3
Federal Food Assistance Programs

Introduction

The federal government administers a variety of food assistance programs that are intended to enhance access to nutritious food by low-income persons. Some of these programs directly affect school-age children, such as the National School Lunch Program, the School Breakfast Program and the Summer Food Service Program for Children. There is also a program to help infants and toddlers, along with pregnant and lactating women — the Special Supplemental Food Program for Women, Infants and Children (WIC). The Food Stamp Program is the largest federal food assistance program, and while not specifically directed to children, its benefits have a major impact on children: more than half of the persons served by the Food Stamp Program are children, and 83 percent of the benefits go to families with children.1

In this chapter we discuss these programs. Each discussion begins with a brief description of the program which is followed by a presentation of findings from the CCIIP surveys. Survey findings illuminate the following: the extent of program participation, characteristics of participants, barriers to participation and the impact of participation on hunger.

What is the Food Stamp Program?

The Food Stamp Program is designed to improve the nutrition of low-income people by providing them with government coupons they can spend on food at stores that sell groceries. The federal government pays the full cost of food stamp benefits and at least half of the program’s administrative expenses. It is administered locally by welfare or social service agencies and is available in every county in the United States.

The Food Stamp Program operates as an entitlement program — anyone who meets the eligibility requirements is entitled to receive its benefits. In order to be eligible, households generally must have gross incomes below 130 percent of the poverty line and incomes (after deductions for some basic living costs) below 100 percent of the poverty line. The application process for the program includes filing and completing an application form, being interviewed, and having verified the information provided on the application.

In fiscal year 1990, the average monthly participation was 19.9 million households. A 1988 Congressional Budget Office study estimated that only 41 to 58 percent of households that are eligible actually participate in the program.
Food stamp recipients receive coupons on a monthly basis. Program benefits, based on the U.S. Department of Agriculture's Thrifty Food Plan, provide an average of less than 70 cents per meal per person. Benefits vary according to the number of people in the household and their net income. The maximum a family of four can receive in food stamps amounts to 96 cents per person per meal. However, only about 18 percent of food stamp households receive the maximum benefit.

The CCHIP questionnaire asks whether a family has ever received food stamps and whether they are currently doing so. When respondents report that they are not, they are then asked about reasons for not participating in the program. Next, we use this information to profile the Food Stamp Program participants and to examine barriers to participation.

What were the Characteristics of Food Stamp Participants in CCHIP Surveys?

Based on face-to-face interviews with 2,335 families with incomes at or below 185 percent of the poverty level from surveys in seven sites around the United States, we present the characteristics of those families receiving program benefits. Of the 2,335 families interviewed, 1,214 (52%) were participating in the Food Stamp Program, while 708 (30%) appeared to be eligible but were not participating, and 413 (18%) appeared to be not eligible for the program. The remainder of this discussion will focus on the 1,214 families who were participating in the Food Stamp Program. (See Figure 3.1)

Table 3.1 shows household characteristics of Food Stamp Program participants. As seen in the table, participants had an average monthly gross per capita income of $173. Their incomes averaged 68 percent of the federal poverty level, well below the income eligibility requirement. This is in line with national data on the characteristics of food stamp participants among eligible. It intimates that program benefits are targeted to the poorest households.

Of the households that participated in the Food Stamp Program, 57 percent also participated in the WIC program, all families with school-age children participated in the School Lunch Program, almost half (47%) of the families with school-age children participated in the School Breakfast Program and just over a quarter (27%) get meals from the Summer Food Program.

Given that a significant number of food stamp recipients were hungry, these relatively high participation rates in other food assistance programs among current food stamp participants may reflect the resourcefulness of hungry families in trying to avail themselves of all forms of food assistance. It may also reflect that once a hungry family gains access to one food assistance program, their access to other programs is enhanced.

Perhaps the most compelling testimony of the unmet need of food stamp participants was the lengths to which they went to reduce their hunger problem. This is demonstrated by their reliance on friends, relatives and emergency food providers. Sixty-five percent of households receiving food stamp benefits relied on friends and relatives for food and money to buy food. Furthermore, over half (53%) of households receiving food stamps used emergency food programs. These findings suggest that food stamp recipients supplemented their food stamp benefits in an effort to feed their children. (We will examine this in more detail in Chapter 4.)

What were the Food Expenditures and Hunger Rates of Food Stamp Participants in CCHIP Surveys?

Food stamp participants spent an average of 33 percent of their gross income, including food stamps and WIC, on food. This amounts to merely $64 per person per month for food. Put in different terms, monthly food expenditures for food stamp participants, which includes cash, food stamp benefits and the value of WIC benefits, averaged nearly 80 percent of the cost of the Thrifty Food Plan. To set this latter finding in context, results from the U.S. Department of Agriculture's National Food Consumption Survey show that only 12 percent of individuals purchasing food valued at the equivalent of (100%) of the Thrifty Food Plan were eating diets that met the U.S. Recommended Dietary Allowances. Those spending just four-fifths of the equivalent of this plan are most likely, therefore, to be at nutritional risk.
Figure 3.1
Food Stamp Program Participation Rates (All Sites)

- 52% Participating
- 30% Eligible not Participating
- 18% Not Eligible
Table 3.1
Characteristics of Food Stamp Participants
(All Survey Sites)
Number of Households = 1,214

<table>
<thead>
<tr>
<th>ECONOMIC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Income as % of poverty level</td>
<td>68.5%</td>
</tr>
<tr>
<td>Household monthly gross per capita income</td>
<td>$172.68</td>
</tr>
<tr>
<td>Shelter share</td>
<td>55.9%</td>
</tr>
<tr>
<td>Per capita food expenditure per month</td>
<td>$64.13</td>
</tr>
<tr>
<td>Food share</td>
<td>33.0%</td>
</tr>
<tr>
<td>AFDC recipient</td>
<td>79.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIODEMOGRAPHIC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>At least one person employed full-time</td>
<td>19.6%</td>
</tr>
<tr>
<td>High school graduate - Respondent</td>
<td>46.1%</td>
</tr>
<tr>
<td>Household size</td>
<td>4.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROGRAM PARTICIPATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in WIC</td>
<td>56.9%</td>
</tr>
<tr>
<td>Participation in School Breakfast</td>
<td>47.4%</td>
</tr>
<tr>
<td>Participation in School Lunch</td>
<td>100%</td>
</tr>
<tr>
<td>Participation in Summer Food Program</td>
<td>27.3%</td>
</tr>
<tr>
<td>Rely on friends and relatives</td>
<td>64.7%</td>
</tr>
<tr>
<td>Rely on emergency food programs</td>
<td>53.2%</td>
</tr>
</tbody>
</table>

| HUNGER PROBLEM                  | 39.8  |
In fact, approximately two-fifths of households participating in the Food Stamp Program were hungry. Since food stamp participants tend to be among the poorest American households, program benefits did not, it would seem, fully compensate for the economic disadvantages of participating households. While program benefits alleviate food shortages, receiving food stamp benefits did not, in itself, eliminate hunger.

What were the Barriers to Participation in the Food Stamp Program?

Of the 2,335 households interviewed in the CCHIP surveys, 406 households (17%) had never applied for food stamp benefits. The most commonly given reason for not applying was that the respondent did not believe the household to be eligible (65%); an additional one-fifth (21%) were embarrassed to use food stamps. Of the 263 households that did not apply for food stamps because they thought they were not eligible, 131 (50%) were probably eligible for program benefits, and 140 of them (53%) were hungry or at-risk of hunger.

These findings indicate that lack of information is a key factor inhibiting household participation in the food stamp program among those who were likely to be eligible and in need of program benefits. This was probably exacerbated because the federal government eliminated the requirement that states conduct outreach activities in 1981 and banned the use of federal funds for that purpose. Although federal matching funds for outreach were restored in 1988, relatively few states currently conduct active outreach programs.

Past research on food stamp non-participation has found poor information regarding eligibility to be one of the main barriers. In fact, a 1986 Government Accounting Office review of non-participation, concluded that "...no other factor had the sweeping impact on non-participation as did poor information concerning eligibility status." 7

The CCHIP findings on barriers to participation corroborates earlier research on this matter and points to the need for adequate outreach if hunger is to be reduced by increasing participation in the Food Stamp Program.

What Changes in the Food Stamp Program Are Needed to Reduce Childhood Hunger?

We have analyzed food stamp participation among CCHIP survey households in order to better understand what changes in this program would increase the food purchasing power of participating families with children. Because of eligibility requirements, we have limited these analyses to households with gross incomes at or below 130 percent of poverty. Table 3.2 presents the hunger and food stamp participation characteristics of households with gross incomes at or below 130 percent of poverty. Among these households, 36 percent were hungry and an additional 38 percent were at-risk of hunger. Taken together, almost three-quarters of these households had experienced at least one problem with food availability due to constrained resources.

Of the 1,826 households with children under age 12 and with incomes at or below 130 percent of poverty interviewed in the CCHIP surveys, 98 percent of the households met both the gross and net income eligibility requirements for food stamps. However, there were only 62 percent of the households who were participating in the Food Stamp Program at the time of the surveys. This figure is in line with estimates on the participation rate among eligibles projected by the Congressional Budget Office (41% to 58%) and by the U.S. Department of Agriculture (58% to 60%) in 1988.8

On average, households with incomes at or below 130 percent...
Table 3.2
Hunger and Food Stamp Participation Characteristics
Among Households with Incomes Below 130% Poverty
(All Survey Sites)
Number of Households = 1,826

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>HOUSEHOLDS WITH INCOMES BETWEEN 0-130% POVERTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Hungry</td>
<td>36.4%</td>
</tr>
<tr>
<td>% At-Risk</td>
<td>38.3%</td>
</tr>
<tr>
<td>% Eligible for food stamps</td>
<td>98.1%</td>
</tr>
<tr>
<td>% Participating in the Food Stamp Program</td>
<td>62.3%</td>
</tr>
<tr>
<td>Value of current food stamp benefits per household</td>
<td>$182.28</td>
</tr>
<tr>
<td>Food expenditures as percent of Thrifty Food Plan</td>
<td>77.6%</td>
</tr>
<tr>
<td>Percent of maximum benefits received</td>
<td>52.0%</td>
</tr>
<tr>
<td>Percent receiving maximum allotment of food stamp benefits</td>
<td>11.3%</td>
</tr>
<tr>
<td>Percent with shelter costs exceeding shelter share</td>
<td>66.0%</td>
</tr>
<tr>
<td>Percent with shelter costs exceeding shelter share by more than the applicable shelter cap</td>
<td>34.9%</td>
</tr>
</tbody>
</table>
of poverty were receiving 52 percent of the maximum benefit level. Approximately 11 percent of the participating households were receiving the maximum food stamp benefit. The average dollar value of benefits per household was $182 per month.

Under current regulations, food stamp benefit levels take into account amounts spent on shelter costs in excess of 50 percent of a household’s adjusted income. Net income is decreased by the amount of the cost of shelter that exceeds 50 percent of adjusted income up to a predetermined cap. Benefit levels are determined based on net income. Of the CCHIP survey households with gross incomes at or below 130 percent of poverty, 66 percent spent more than half of their adjusted income on shelter costs. Furthermore, in over a third (35%) of these households, the amount spent on shelter exceeded 50 percent of their adjusted income by an amount greater than the applicable cap. Since the high cost of housing is one of the major factors constraining food purchases, more resources would be available for food if the shelter cap were removed.

What is the Special Supplemental Food Program for Women, Infants and Children (WIC)?

WIC is a nutrition program that provides supplemental, nutritious foods, nutrition education and access to health care for low-income women, infants and children at nutritional risk. The program’s goal is to prevent health problems by enhancing the nutritional status of its target population, who are at higher nutritional risk due to the physiological demands of pregnancy and lactation (women) or growth (infants and children). The federal government grants funds to state health departments, which in turn fund local sponsors to operate the program — usually local health clinics and hospitals.

The WIC Program is not an entitlement program. Instead, there is a “cap” on the amount of federal money allocated to WIC, which limits considerably the number of eligible people who can participate in the program. In fiscal year 1991, program funds supported the participation of only 4.7 million or about half of all eligible women, infants and children. In order to participate in the program, women must apply for themselves or their children at the local health agency that provides WIC services. Eligibility for WIC includes three components: one must be pregnant or a new mother, an infant, or a child under the age of five; household income must be below a level set by the state health department (between 100 and 185 percent of the poverty level); and the potential participant must be certified as being at nutritional risk by a health professional.

Most WIC food benefits come in the form of vouchers that can be exchanged for particular foods at the grocery store. These foods are specifically chosen to meet the dietary needs of low-income mothers, infants and children. The foods contain nutrients which have been found to be lacking in the diets of low-income families, and which are important during these critical periods of growth and development. They include infant formula, infant cereal, milk, eggs, cheese, breakfast cereal, juice, dried beans and peanut butter. The value of the package on a monthly basis averages around $30. WIC also refers mothers and their children to medical care and offers mothers nutrition education.

What were the Characteristics of WIC Participants in CCHIP Surveys?

We present a profile of some salient characteristics of families who participated in the WIC Program. Of the 2,335 low-income families interviewed in seven sites across the United States, 560 (24%) received benefits from the WIC Program, 690 (30%) were not receiving benefits even though they were income and categorically eligible (pregnant, postpartum or breast-feeding women, infants or children under age five), and 1,085 (46%) were not eligible for benefits from the WIC Program. This means that of the 1,250 families who were categorically and income eligible for the WIC Program, 45 percent were receiving its benefits. The remainder of this discussion will focus on the 560 families who were participating in the WIC Program.
Figure 3.2
WIC Program Participation Rates (All Sites)

- 46% Participating
- 24% Eligible not Participating
- 30% Not Eligible
Characteristics of WIC participants are presented in Table 3.3. As seen in this table, WIC participants had an average monthly gross per capita income of $185, which was 76 percent of the federal poverty level.

Families who receive WIC benefits spent 39 percent of their gross income including food stamps and WIC benefits on food. This amounts to approximately $70 per person per month for food.

More than three-fourths (76%) of WIC participants also participated in the Food Stamp Program. All WIC participants with school age children participated in the School Lunch Program while just over half (52%) participated in the School Breakfast Program and only a quarter (25%) participated in the Summer Food Service Program for Children.

Fifty-eight percent of WIC participants said that they must rely on friends and relatives for money for food and meals. Almost half (48%) of the families participating in the WIC Program supplemented their food resources by getting food from soup kitchens, food pantries or other commodity distribution centers.

Almost a third (31%) of families participating in WIC were hungry.

What were the Barriers to the WIC Program?

Of the 2,335 families interviewed in the seven CCHIP surveys, 436 families have never applied for WIC benefits. The most commonly cited reason for not applying for WIC benefits is that families did not think that they were eligible for program benefits (58%). Of these households who did not apply for WIC benefits because they did not think they were eligible to participate, 81 (33%) were likely to be categorically and income eligible.

Of the 2,335 families interviewed, 1,002 (43%) had applied for WIC in the past, but did not currently receive program benefits. The most common reason (76%) given for not currently receiving benefits was that their children were too old to participate in the WIC program. Of those who gave this as a reason for not currently participating in WIC, 165 (22%) had at least one child under five years of age and five (0.7%) had at least one child under one year old. The second most common reason (28%) given by parents for not participating in WIC was that their children do not need the benefits. Of those not participating because they said that they no longer needed the program 80 (29%) were hungry and 118 (43%) were at-risk of hunger. Of the persons who had applied in the past but did not currently participate (10%) because they did not think that they were eligible, 51 (53%) were probably income and categorically eligible for WIC benefits. It would appear that there is some misunderstanding among these families concerning the criteria used to determine eligibility for WIC program benefits.

As previously stated, approximately 55 percent of the categorically and income eligible families interviewed in CCHIP surveys were not receiving program benefits. This finding is similar to estimates of WIC eligibility made by the U.S. Department of Agriculture (USDA) in 1987. In its study “Estimation of Eligibility for the WIC Program,” USDA reveals that only half of those estimated to be fully eligible are being served. Funding constraints are the major barrier to serving a higher proportion of the eligible population.

Most important from the CCHIP findings, of those eligible but not receiving WIC benefits, 31 percent were hungry, and thus presumably at dietary risk and in need of the program benefits.

What is the National School Lunch Program?

What is the School Breakfast Program?

The purpose of the National School Lunch Program, according to the National School Lunch Act, is “to safeguard the health and well-being of the Nation’s children...by assisting states, through grants-in-aid and other means, in providing an adequate supply of foods and other facilities for the establishment, maintenance, operation, and expansion of nonprofit school-lunch programs.” On a voluntary basis, local school boards contract with their state...
Table 3.3
Characteristics of WIC Participants
Number of Households = 560

**ECONOMIC**
- Income as % of poverty level: 75.5%
- Household monthly gross per capita income: $184.79
- Shelter share: 51.8%
- Per capita food expenditure per month: $70.39
- Food share: 39.2%
- AFDC recipient: 59.5%

**SOCIODEMOGRAPHIC**
- At least one person employed full-time: 35.7%
- High school graduate - Respondent: 52.4%
- Household size: 5.0

**PROGRAM PARTICIPATION**
- Participation in Food Stamp Program: 76.3%
- Participation in School Breakfast: 51.6%
- Participation in School Lunch: 100%
- Participation in Summer Food Program: 25.4%
- Rely on friends and relatives: 58.4%
- Rely on emergency food programs: 48.4%

**HUNGER PROBLEM**
- 30.9%
education agencies to operate lunch programs. The federal government pays for most of the cost of operating the lunch program at the local level. In turn, the schools must meet specific nutritional requirements in the lunches they provide to participating students.

The National School Lunch Program is an entitlement program, which means that all schools that apply and meet the program's eligibility criteria may participate in the program. All public and nonprofit private schools can participate in the lunch program, and all students in participating schools are eligible for the program. Household income of the student determines whether a child will pay a substantial amount of the cost of their lunch or will receive a reduced-price or free meal. To receive a reduced-price meal, the household income must be below 185 percent of the poverty level, and for free meals, it must fall below 130 percent. In order to receive free or reduced-price meals, families must fill out an application provided by the school which includes questions about the total income of the household. About half of the 24 million students participating in the lunch program nationally receive free and reduced-price meals.

The purpose of the School Breakfast Program is to provide states with funds for the operation of nonprofit school breakfast programs, "in recognition of the demonstrated relationship between food and good nutrition and the capacity of children to develop and learn...." Like the lunch program, it is operated by school boards who voluntarily contract with their state education agencies to receive federal funds for the operation of breakfast programs. Like school lunch, the breakfasts served in this program must meet specific nutritional standards. The breakfast program is also an entitlement program, and has the same eligibility criteria as the lunch program for schools and students. Most children who participate in the breakfast program are low-income. However, less than half of the schools that participate in the lunch program also have a breakfast program, and less than one-third of the children receiving free and reduced-price lunches also receive free and reduced-price breakfasts.

What were the Characteristics of the Households Whose Children Participated in the School Lunch Program?

We present some characteristics of households whose children participated in the School Lunch Program (Table 3.4). Of the 2,129 households interviewed who had school-age children, 1,895 (89%) participated in school lunch and 234 (11%) did not receive school lunch.

Households that had children who participated in the School Lunch Program had an average gross monthly income per person of $2,080, averaging 84 percent of the federal poverty level.

Among families whose children participated in the School Lunch Program, 63 percent also participated in the Food Stamp Program and 46 percent received benefits from the WIC Program.

Less than half of the children who participated in school lunch also received school breakfast (46%). Twenty-six percent of children who received school lunch participated in the Summer Food Service Program for Children.

Thirty-six percent of families whose children received school lunch were hungry.

Every household with school-aged children had at least one child participating in the School Lunch Program. While all of the children from CCHIP survey households were eligible for free or reduced-price meals, seven percent of those receiving lunches were not receiving their meals free or at a reduced price.

What were the Characteristics of Households Whose Children Participated in the School Breakfast Program?

We present some characteristics of households whose children participated in the School Breakfast Program (Table 3.5). Of the 2,129 households with school-age children interviewed, 875 (41%) participated in school breakfast, 1,255 (59%) did not receive school breakfast.

Households that had children who participated in the School Breakfast Program had an average gross monthly income per person of $1,885, which is 76 percent of the poverty level. It
Table 3.4  
Characteristics of School Lunch Participants  
Number of Households = 1,895

**ECONOMIC**  
Income as % of poverty level  \(84.5\%\)  
Household monthly gross per capita income  \(\$208.22\)  
Shelter share  \(51.8\%\)  
Per capita food expenditure month  \(\$60.90\)  
Food share  \(31.8\%\)  
AFDC recipient  \(45.5\%\)

**SOCIODEMOGRAPHIC**  
At least one person employed full-time  \(46.9\%\)  
High school graduate - Respondent  \(53.4\%\)  
Household size  \(4.8\)

**PROGRAM PARTICIPATION**  
Participation in Food Stamp Program  \(63.4\%\)  
Participation in WIC  \(45.6\%\)  
Participation in School Breakfast  \(46.2\%\)  
Participation in Summer Food Program  \(25.6\%\)  
Rely on friends and relatives  \(56.7\%\)  
Rely on emergency food programs  \(40.4\%\)

**HUNGER PROBLEM**  
35.5\%
Table 3.5  
Characteristics of School Breakfast Participants  
Number of Households = 875

<table>
<thead>
<tr>
<th>Economic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Income as % of poverty level</td>
<td>75.5%</td>
</tr>
<tr>
<td>Household monthly gross per capita income</td>
<td>$185.22</td>
</tr>
<tr>
<td>Shelter share</td>
<td>52.5%</td>
</tr>
<tr>
<td>Per capita food expenditure per month</td>
<td>$61.41</td>
</tr>
<tr>
<td>Food share</td>
<td>36.0%</td>
</tr>
<tr>
<td>AFDC recipient</td>
<td>42.4%</td>
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</table>

<table>
<thead>
<tr>
<th>Sociodemographic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>At least one person employed full-time</td>
<td>47.7%</td>
</tr>
<tr>
<td>High school graduate - Respondent</td>
<td>49.0%</td>
</tr>
<tr>
<td>Household size</td>
<td>5.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Participation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in Food Stamp Program</td>
<td>65.0%</td>
</tr>
<tr>
<td>Participation in WIC</td>
<td>54.5%</td>
</tr>
<tr>
<td>Participation in School Lunch</td>
<td>100%</td>
</tr>
<tr>
<td>Participation in Summer Food Program</td>
<td>22.6%</td>
</tr>
<tr>
<td>Rely on friends and relatives</td>
<td>55.8%</td>
</tr>
<tr>
<td>Rely on emergency food programs</td>
<td>46.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hunger Problem</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38.9%</td>
</tr>
</tbody>
</table>
would appear, then, that many school breakfasts were served to the poorest children. In fact, virtually all of the children in the CCHIP surveys who participated in the School Breakfast Program received free or reduced-price breakfasts.

Among families whose children participated in the School Breakfast Program, 65 percent also participated in the Food Stamp Program and 55 percent received benefits from the WIC Program.

Every child in the CCHIP surveys who participated in the School Breakfast Program also participated in the Summer Lunch Program. Thirty-three percent of children who got school breakfast also participated in the Summer Food Service Program for Children.

Thirty-nine percent of families whose children received school breakfast had a hunger problem. Children who participated in the School Breakfast Program need its benefits. Unfortunately, of the 58 percent of those families who did not receive school breakfast, nearly one third (30%) were hungry.

**What were the Barriers to Participation in the School Breakfast Program Among Eligibles?**

At least 1,255 (59%) of the CCHIP households with school-aged children were not receiving school breakfast. The primary reason given for not participating was that the school did not sponsor the program (45%) and 17 percent (in states where there was a program) had not heard of the program; an additional six percent were unaware of their eligibility for free or reduced-price meals. Eight percent said their children didn’t like the food and 11 percent stated that their children arrive at school too late to participate.

When comparing participation differences in the two school meal programs, availability was the main factor. Fewer than half of the children receiving school lunches also received school breakfasts (46%). For households with school-age children not participating in the School Breakfast Program, by far the most commonly mentioned barrier was that their school did not offer the program.

**What is the Impact of School Meal Participation?**

Having access to both of the school meal programs appears to have a number of benefits for school children. The National School Lunch Program and the School Breakfast Program often provide the best meal of the day for low-income children. A U.S. Department of Agriculture study shows that these children receive one-third to one-half of their daily nutrient intake from school lunch.

Those children in the CCHIP surveys who were eating both school breakfast and lunch were significantly less likely to suffer from problems usually associated with low energy reserves (fatigue, irritability and inability to concentrate) in the six months prior to the survey than those who were getting school lunch only. As shown in Chapter 1, hungry children were more likely to suffer from specific health problems than children from non-hungry families and children who report a specific health problem were more likely to be absent from school than those not reporting specific health problems.

Participation in the School Breakfast Program, specifically, carried with it benefits for children of families in the CCHIP surveys. Children were less likely to have increased school absences if they got breakfast at school compared with those children who did not get breakfast at school. In addition, children who were at-risk of hunger had fewer days absent when they got breakfast at school versus not getting it there.

**What is the Summer Food Service Program for Children?**

The Summer Food Service Program for Children provides meals to low-income children during the summer months when school is not in session and the school meals programs are not available. Sponsors of the program at the local level contract with their state education agency or the federal government to receive federal funds for the operation of a nonprofit summer meals program for children in low-income areas. Sponsors must serve meals that meet specific nutritional requirements.

The Summer Food Program is
an entitlement program — all eligible sponsors approved by the state education agency may participate, and all children attending a Summer Food Program site are eligible to participate in the program. Eligible sponsors include public or private nonprofit schools; units of local, municipal, county or state government; and certain private nonprofit organizations, such as Boys' Clubs, churches, and YMCAs. In order to operate the Summer Food Program, sponsors must locate program sites in areas with majority representation by low-income children, or must enroll a majority of children who are low-income. All meals are free to participating children, regardless of household income. According to the U.S. Department of Agriculture, less than two million children participate in the Summer Food Program, compared to almost 12 million low-income children participating in the National School Lunch Program during the school year.

What were the Characteristics of Participants in the Summer Food Service Program for Children?

In Table 3.6, we present some characteristics of households whose children participated in the summer food program. Of the 2,335 households interviewed, 519 (22%) participated in the Summer Food Service Program for Children, and 1,816 (78%) did not participate in the program.

Households who had children participating in the summer food program had an average gross monthly income per person of $1,828. This is an average income of 74 percent of the federal poverty level.

Seventy-one percent of summer food program participants also participated in food stamps, 59 percent participated in WIC, 57 percent got school breakfast and all of them received a school lunch.

Thirty-seven percent of those who receive meals from the Summer Food Service Program for Children were hungry. Many of the children who receive these meals were needy; more distressing, however, is the unmet need. Of the 78 percent of families who did not participate in the Summer Food Service Program, nearly one-third (31%) were hungry.

What were the Barriers to Participation in the Summer Food Service Program for Children?

Of the 2,335 households interviewed in the CCHIP surveys, 1,258 (54%) had not heard of the Summer Food Service Program for Children. Of those who had heard of the program, 519 (48%) were participating in the program but this was less than a quarter (22%) of the total sample.

Lack of knowledge of the Summer Food Service Program for Children is compounded by the lack of availability of the program. In fiscal year 1990, the Summer Food Service Program for Children served meals to 1.65 million children in 18,459 sites. In comparison, the School Lunch Program served free and reduced-price meals to 11.5 million children in 91,440 schools.

Among households in the CCHIP surveys who had heard of the program but whose children were not participating, 43 percent attributed their lack of participation to no local program or difficulties accessing the program (includes site inconvenience, scheduling and transportation difficulties).

Of the 2,052 who had never heard of or did not participate in the Summer Food Program at all 1,310 (64%) were hungry or at risk of hunger, and therefore experiencing household food shortages due to constrained resources.

What is the Impact of Federal Food Assistance Program Participation on Hunger?

To explore the impact of federal food assistance program participation on hunger, we compare two sites that are similar in many respects, but that differ significantly in the rates of participation in these programs. Table 3.7 shows socio-economic and program participation results, comparing Sumter County, Alabama and Polk County, Florida. Both are Southern and predominantly rural.

As is evident in Table 3.7 they share other characteristics, as well. In both samples average household size was nearly the same (4.8 for Sumter County, 4.6 for Polk County), as was the average number of children (2.9 for Sumter County, 2.8 for Polk
Table 3.6
Characteristics of Summer Food Service Program Participants
Number of Households = 519

**ECONOMIC**
- Income as % of poverty level: 73.9%
- Household monthly gross per capita income: $181.83
- Shelter share: 49.1%
- Per capita food expenditure per month: $59.52
- Food share: 34.6%
- AFDC recipient: 53.0%

**SOCIODEMOGRAPHIC**
- At least one person employed full-time: 42.4%
- High school graduate - Respondent: 59.7%
- Household size: 4.8

**PROGRAM PARTICIPATION**
- Participation in Food Stamp Program: 70.9%
- Participation in WIC: 58.9%
- Participation in School Breakfast: 57.1%
- Participation in School Lunch: 100%
- Rely on friends and relatives: 59.2%
- Rely on emergency food programs: 54.0%

**HUNGER PROBLEM**
- 37.4%
### Table 3.7
Comparison of Program Participation and Hunger Differences at CCHIP Survey Sites in Sumter County, Alabama and Polk County, Florida

<table>
<thead>
<tr>
<th>Number of Households</th>
<th>Sumter County, Alabama</th>
<th>Polk County, Florida</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>358</td>
<td>274</td>
</tr>
</tbody>
</table>

**Socioeconomic**

<table>
<thead>
<tr>
<th></th>
<th>Sumter County</th>
<th>Polk County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income as percent of poverty</td>
<td>70%</td>
<td>87%</td>
</tr>
<tr>
<td>Female-headed households(^a)</td>
<td>43%</td>
<td>38%</td>
</tr>
<tr>
<td>Number of persons in household(^a)</td>
<td>4.8</td>
<td>4.6</td>
</tr>
<tr>
<td>Number of children(^a)</td>
<td>2.9</td>
<td>2.8</td>
</tr>
</tbody>
</table>

**Program Participation Rates**

<table>
<thead>
<tr>
<th>Program</th>
<th>Sumter County</th>
<th>Polk County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Stamp Program</td>
<td>67%</td>
<td>39%</td>
</tr>
<tr>
<td>WIC Program</td>
<td>77%</td>
<td>34%</td>
</tr>
<tr>
<td>School Lunch Program</td>
<td>100%</td>
<td>94%</td>
</tr>
<tr>
<td>School Breakfast Program</td>
<td>91%</td>
<td>44%</td>
</tr>
</tbody>
</table>

**Hunger Rates**

<table>
<thead>
<tr>
<th></th>
<th>Sumter County</th>
<th>Polk County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent hungry</td>
<td>28%</td>
<td>32%</td>
</tr>
<tr>
<td>Percent at-risk of hunger(^a)</td>
<td>31%</td>
<td>37%</td>
</tr>
<tr>
<td>Days per month hungry</td>
<td>10.7</td>
<td>19.3</td>
</tr>
<tr>
<td>Days per month hungry or at risk</td>
<td>8.4</td>
<td>16.5</td>
</tr>
</tbody>
</table>

Note: All comparisons are statistically significant at the p < 0.01 level unless otherwise indicated by \(^a\).

These findings indicate that lack of information is a key factor inhibiting household participation in the Food Stamp Program among those who were likely to be eligible and in need of program benefits.

The high cost of housing was one of the major factors constraining food purchases: 66 percent spent more than half of their adjusted income on shelter costs. Furthermore, in over a third of these households, the amount spent on shelter exceeded the amount taken into account when food stamp benefits were determined. Since the high cost of housing is the major factor constraining resources for food, more resources would, therefore, be available if the shelter cap were removed.
County. Household composition is also similar; about 40 percent of the families in each site’s sample were headed by single-mothers. The main socioeconomic difference is that the Alabama families were significantly poorer, on average, than their Florida counterparts (incomes averaged 70% of the poverty level in Sumter County, Alabama and 87% of the poverty level in Polk County, Florida).

From Table 3.7 it is evident that participation rates for federal food assistance programs were significantly higher in the Alabama site than in the Florida site. Indeed, participation rates were twice as high in Sumter County, Alabama than in Polk County, Florida for WIC (77% versus 34%), school breakfast (91% versus 44%), and nearly twice as high for food stamps (67% versus 39%).

Did the higher participation rates in Alabama affect hunger? The Alabama families experienced nearly half as many days per month hungry (10.7) than did the Florida families (19.3), and almost half as many days per month hungry or at risk of hunger (8.4 days) than did the Florida families (16.5 days). Both of these differences are statistically significant.

The hunger and at-risk of hunger rates in Sumter County, Alabama are slightly lower than Polk County, Florida, but the difference is not statistically significant. Apparently, the higher participation levels in the Alabama sample are not accompanied by a significantly lower extent of hunger there, which is not surprising given the greater level of poverty in the Alabama sample. However, the average monthly duration of hunger or the risk of hunger is just half as long for those experiencing it in the Alabama sample than in the Florida sample.

**Summary**

**The Food Stamp Program**

Findings from CChIP surveys show that among 1,922 households that were income eligible for the Food Stamp Program, 1,214 (63%) were receiving program benefits. The average income of participating households was at 68 percent of the federal poverty level. Monthly food expenditures of Food Stamp Program participants, including cash, food stamps and the value of WIC benefits averaged just under 80 percent of the value of the Thrifty Food Plan.

Results from the U.S. Department of Agriculture’s National Food Consumption Survey showed that only 12 percent of individuals purchasing food valued at the equivalent of [100% of] the Thrifty Food Plan were eating diets that met the U.S. Recommended Dietary Allowances. Since food stamp participants in the CChIP surveys spent less than that — only 80 percent of the value of this plan — they are most likely at nutritional risk. In fact, approximately 40 percent of households participating in the Food Stamp Program were hungry. Since food stamp participants tend to be among the poorest households, program benefits did not fully compensate for the economic shortfalls of these participating households. While program benefits alleviate food shortages, receiving food stamp benefits did not, in itself, eliminate hunger.

Among the 1,922 households that appeared to be income eligible, 708 (37%) were not receiving food stamp benefits. Of the 2,335 households interviewed in the CChIP surveys, 406 households (17%) had never applied for food stamp benefits. The most commonly given reason for not applying was that the respondent did not believe the household to be eligible (65%). Of the 263 households that did not apply for food stamps because they thought they were not eligible, 131 (50%) were probably eligible for program benefits, and 140 of them (53%) were hungry or at-risk of hunger.

Of all the households surveyed, 676 (29%) had applied for food stamp benefits but were not currently receiving them. The most frequently cited reasons for not receiving were that households said they did not qualify for food stamps at the time of application (51%), their benefits had stopped (30%) or they no longer needed benefits (24%). Of the 204 households who said their benefits had stopped, 150 (74%) were probably still eligible. Of the 158 households who said that they no longer needed food stamps, 101 (64%) were probably still eligible for program benefits and more important, 106 (67%) were hungry or at-risk of hunger.
The Special Supplemental Food Program for Women, Infants and Children (WIC)

Of the 1,250 families that were categorically and income eligible for the Special Supplemental Food Program for Women, Infants and Children (WIC), 560 (45%) were receiving program benefits. WIC Program participants had incomes that averaged 76 percent of the federal poverty level.

Almost a third (31%) of families participating in WIC were hungry.

Approximately 55 percent of the categorically and income eligible families interviewed in CCHIP surveys were not receiving program benefits. This finding is similar to estimates of WIC eligibility made by the U.S. Department of Agriculture (USDA) in 1987. In its study “Estimation of Eligibility for the WIC Program,” USDA reveals that only half of those estimated to be fully eligible are being served.

Most important from the CCHIP findings, of those eligible but not receiving WIC benefits, 31 percent were hungry, and thus presumably at dietary risk and in need of the program benefits.

The WIC Program is not an entitlement program. Instead, there is a “cap” on the amount of federal money allocated to WIC, which limits considerably the number of eligible people who can participate in the Program. For WIC to function as a preventive nutrition program, it would have to be funded at levels where all those who need program benefits can receive them.

The National School Lunch and School Breakfast Programs

Of the 2,129 households interviewed who had school-age children, 1,895 (89%) participated in school lunch, and 234 (11%) did not receive school lunch.

Households that had children who participated in the National School Lunch Program had incomes averaging 85 percent of the federal poverty level.

Thirty-six percent of families whose children receive school lunch were hungry.

Of the 2,129 households with school-age children interviewed, 875 (41%) participated in school breakfast, and 1,055 (59%) did not receive school breakfast.

Households that had children who participated in the School Breakfast Program had incomes that averaged 76 percent of poverty. It would appear, then, that many school breakfasts are served to the poorest children. In fact, virtually all of the children in the CCHIP surveys who participated in the School Breakfast Program received free or reduced-price breakfasts.

Thirty-nine percent of families whose children received school breakfast had a hunger problem, indicating that children who participated in the School Breakfast Program need its benefits.

Less than half of the children who participated in school lunch also received school breakfast (46%). Studies show that participation in the School Breakfast Program results in significantly higher achievement test scores compared to low-income children who are not participating in school breakfast. Yet today, less than half of the schools offering lunch also operate a breakfast program.

The CCHIP data on program availability parallel national study findings. While there is broad coverage of the School Lunch Program, the majority of households (59%) did not participate in the School Breakfast Program. The overwhelming majority of those who did not participate in the School Breakfast Program attributed their non-participation to the fact their children’s school did not sponsor the School Breakfast Program.

Approximately one-third of those families who did not participate in the School Breakfast Program were hungry; presumably, their children would benefit from eating breakfast at school.

Indeed, since children who were eating both school breakfast and lunch were significantly less likely to suffer from problems usually associated with low energy reserves (fatigue, irritability and inability to concentrate) in the six months prior to the survey than those who were getting school lunch only, we can confidently conclude that the hungry children who did not have access to the program would benefit from it as well. Society may also benefit from the provision of school
breakfast since school attendance was improved where school breakfast was provided.

**The Summer Food Service Program for Children**

Of the 2,335 households interviewed in the CCHIP surveys, 1,258 (54%) had not heard of the Summer Food Service Program for Children. Of those who had heard of the program, 519 (48%) were participating in the program, which was less than a quarter (22%) of the total sample.

Of the 2,052 who had never heard of or did not participate in the Summer Food Program at all, 1,310 (64%) were hungry or at risk of hunger and therefore experiencing household food shortages due to constrained resources.

Lack of knowledge of the Summer Food Service Program for Children is compounded by the lack of availability of the program. In fiscal year 1990, the Summer Food Service Program for Children served meals to 1.65 million children in 18,459 sites. In comparison, the School Lunch Program served free and reduced-price meals to 11.5 million children in 91,440 schools.

A comparison of two sites that were similar in many respects, but differed significantly in rates of food assistance program participation, provided an indication of the impact of these programs. Respondents in the CCHIP survey of Sumter County, Alabama were twice as likely to participate in WIC, food stamps and school breakfast than were their counterparts in the Polk County, Florida sample. The Alabama families experienced almost half as many days per month hungry or at-risk of hunger than did the Florida families.
Chapter 4
Emergency Food Programs

Introduction

In the early 1980s, as the economy slipped into a recession and the federal government retreated from its support of federal food assistance programs, the private sector came forward to assist those neighbors who were not able to adequately feed themselves and their families. Two forms of feeding programs, already in existence in very small numbers, expanded exponentially in response to the need — soup kitchens and food pantries.

Soup kitchens generally serve meals to persons who seek their assistance. Food pantries give out packages of donated food. Because all of the families in the CCHIP surveys had a home and presumably had facilities to prepare meals, they were much more likely to seek assistance from food pantries than soup kitchens.

Drawing on information from the CCHIP surveys, in this chapter we depict characteristics of those who get meals at soup kitchens and those who get food from food pantries. We also compare rates of reliance on emergency food programs to rates of federal food assistance program participation. We conclude by discussing the relationship between usage of emergency food programs and hunger.

What were the Characteristics of Soup Kitchen Users?

First, in Table 4.1 we present some characteristics of households who relied on soup kitchens for meals. Of the 2,335 households interviewed, 162 (7%) went to soup kitchens for meals, while 2,173 (93%) did not use soup kitchens.

Families who go to soup kitchens for meals had an average gross monthly income per person of $186. This puts their average incomes at 75 percent of the federal poverty level.

These very low-income households spent an average of 84 percent of their gross incomes (including food stamps and WIC) on food and shelter costs, with shelter costs alone consuming over half of their income.

Forty-three percent of respondents from households who visit soup kitchens had a high school degree. One-fourth of soup kitchen users had at least one full-time employee, while two-thirds received AFDC benefits.

Soup kitchen users had an average family size of 4.7 persons. Slightly more than three-fourths (76%) of households going to soup kitchens received food stamps, while just over half (51%) participated in the WIC program. Ninety-six
<table>
<thead>
<tr>
<th>Economic Factors</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income as % of poverty level</td>
<td>75.3%</td>
</tr>
<tr>
<td>Household monthly gross per capita income</td>
<td>$185.65</td>
</tr>
<tr>
<td>Shelter share</td>
<td>53.4%</td>
</tr>
<tr>
<td>Per capita food expenditure per month</td>
<td>$60.13</td>
</tr>
<tr>
<td>Food share</td>
<td>30.3%</td>
</tr>
<tr>
<td>AFDC recipient</td>
<td>65.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Socio demographic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least one person employed full time</td>
<td>25.3%</td>
</tr>
<tr>
<td>High school graduate - Respondent</td>
<td>43.2%</td>
</tr>
<tr>
<td>Household size</td>
<td>4.7</td>
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</table>

<table>
<thead>
<tr>
<th>Program participation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in Food Stamp Program</td>
<td>76.2%</td>
</tr>
<tr>
<td>Participation in WIC</td>
<td>51.1%</td>
</tr>
<tr>
<td>Receive Free or Reduced-Price School Breakfast</td>
<td>40.7%</td>
</tr>
<tr>
<td>Receive Free or Reduced-Price School Lunch</td>
<td>96.3%</td>
</tr>
<tr>
<td>Participation in Summer Food Program</td>
<td>27.8%</td>
</tr>
<tr>
<td>Rely on friends and relatives</td>
<td>77.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hunger problem</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>66.7%</td>
</tr>
</tbody>
</table>
percent of families who use
soup kitchens received free or
reduced-price school lunch for
their school-age children. Far
fewer, just 41 percent, received
free or reduced-price school
breakfast and fewer yet, only 28
percent, received meals from the
Summer Food Service
Program for Children.

More than three-fourths
(77%) of households who avail
themselves of meals at soup
kitchens relied on friends and
relatives to increase their food
resources.

Of those households who go
to soup kitchens, 67 percent
were hungry.

What were the
Characteristics of Food
Pantry Users?

Next we present some charac-
teristics of households who
relied on food pantries to
increase their food resources.
These are displayed in Table 4.2.
Of the 2,335 households inter-
viewed, 877 (38%) used food
pantries and 1,458 (62%) did not
use food pantries.

Households going to food
pantries had a monthly gross
income per person of 8186.
Expressed in terms of poverty,
their incomes were at 74 per-
cent of the poverty level, on
average.

Households using food
pantries spent over half (55%) of
their income (including food
stamps and WIC) on food expen-
ditures.

Approximately half of all
respondents from households
who visit food pantries had a
high school degree. Thirty-one
percent of food pantry users had
at least one full-time employee,
and 62 percent received AFDC
benefits.

The average household size of
food pantry users was 4.6 mem-
bers. Slightly more than three-
fourths (76%) of families that
got food from food pantries par-
ticipated in the Food Stamp
Program; 55 percent partici-
pated in the WIC Program; 98
percent got free or reduced-
price school lunch, 49 percent
received free or reduced-price
school breakfast and only 31
percent received summer food
program meals. These findings
suggest that they supplemented
the benefits of public assistance
programs with private emer-
gency services in an attempt to
balance the dietary require-
ments of their families with the
scant resources they had to pur-
chase food.

Sixty-seven percent of fami-
lies using food pantries relied on
friends and relatives for food
and money for food. However,
after turning to all available
sources, nearly half of the food
pantry users still suffered from
food insufficiency. Forty-five
percent of households getting
food at food pantries were hun-
gry.

How Does Participation in
Food Stamps Compare with
Reliance on Emergency
Food Programs?

Programs such as soup
kitchens and food pantries were
devised as short-term strategies
to meet emergency food needs of
people in crisis. The programs
were not designed to meet the
on-going food needs of low-
income families. Nonetheless,
during the past five to ten years,
demand for emergency food has
been so great that these emer-
gency food distribution measures
have become virtually institu-
tionalized. In the process, many
emergency food providers have
become overwhelmed by the
demand for their services.

Inundated by increased need,
some service providers have
expressed concern that low-
income families may be relying
on food pantries and soup
kitchens for assistance instead of
using federal food assistance pro-
grams for which they are eligible.

To examine whether low-income
families have been substituting
federal assistance with reliance
on private charity or whether
they have been supplementing
their food resources by turning
to federal programs as well as
emergency food providers, we
use information from the
California CCIIIP survey con-
ducted in four counties of the
Central Valley.

Table 4.3 compares urban
respondents (126 households)
with rural respondents (203
households) from the four-
county California survey. Both
Table 4.2
Characteristics of Food Pantry Users
Number of Households = 877

**ECONOMIC FACTORS**
- Income as % of poverty level: 74.2%
- Household monthly gross per capita income: $185.61
- Shelter share: 55.3%
- Per capita food expenditure per month: $61.81
- Food share: 32.5%
- AFDC recipient: 61.5%

**SOCIODEMOGRAPHIC FACTORS**
- At least one person employed full-time: 30.6%
- High school graduate - Respondent: 49.5%
- Household size: 4.6

**PROGRAM PARTICIPATION**
- Participation in Food Stamp Program: 76.5%
- Participation in WIC: 55.2%
- Receive Free or Reduced-Price School Breakfast: 48.7%
- Receive Free or Reduced-Price School Lunch: 98.4%
- Participation in Summer Food Program: 30.7%
- Rely on friends and relatives: 66.9%

**HUNGER PROBLEM**: 44.7%
Table 4.3
Comparison of Rural with Urban Respondants in the California CCHIP Site

<table>
<thead>
<tr>
<th></th>
<th>Urban Respondents (126 households)</th>
<th>Rural Respondents (203 households)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SOCIOECONOMIC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income as percent of poverty*</td>
<td>86%</td>
<td>83%</td>
</tr>
<tr>
<td>Female head of household*</td>
<td>21%</td>
<td>18%</td>
</tr>
<tr>
<td>Number of persons in household*</td>
<td>5.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Number of children*</td>
<td>3.5</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>PROGRAM USAGE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food stamp participants</td>
<td>72%</td>
<td>43%</td>
</tr>
<tr>
<td>Emergency food programs</td>
<td>19%</td>
<td>46%</td>
</tr>
</tbody>
</table>

Note: All comparisons are statistically significant at the \( p < 0.01 \) level unless otherwise indicated by *. 
subsamples are quite similar in terms of socioeconomic characteristics. Urban and rural respondents had similar income levels (incomes were 86% and 83% of poverty), household compositions (21% and 18% of households were headed by single-mothers), household sizes (5.5 persons in each) and number of children in the family (3.5 and 3.3).

The main differences between the urban and rural subsamples from the California CCHIP survey are in program usage. Compared with urban respondents, rural respondents were significantly less likely to participate in the Food Stamp Program and significantly more likely to rely on emergency food providers (soup kitchens, food pantries or other commodity distribution centers).

Figures 4.1 and 4.2 graphically display the differences in program usage. Figure 4.1 depicts rates of participation in the Food Stamp Program and rates of reliance on emergency food providers by various poverty levels for the 126 urban respondents from the California CCHIP survey; Figure 4.2 does the same for the 203 rural respondents.

Looking at Figure 4.1, it appears that urban respondents were not relying on emergency food providers instead of food stamps. Rather, they were supplementing their food resources by going to emergency food centers. Participation in food stamps, as would be expected, is closely associated with income level — food stamp participation rates were smaller when family income was higher. However, rates of reliance on emergency food providers, while lower than food stamp participation rates, changed very little with levels of income.

Figure 4.2 demonstrates a different pattern for the rural subsample. In the rural areas of the four-county Central Valley CCHIP site in California, rates of reliance on emergency food distribution centers were higher than food stamp program participation rates for all levels of income. Rural respondents do appear to be using private assistance rather than public assistance.

It is striking that in rural areas, where families were using private rather than public assistance, 77 percent of households were either hungry or at-risk of hunger, while in urban areas, where families were supplementing public with private assistance, a much smaller percentage of households — 57 percent — were either hungry or at-risk of hunger. This strongly statistically significant difference in food insufficiency rates between rural and urban respondents cannot be due to differences in poverty rates, since the level of poverty was nearly the same for both subsamples.

Problem Among Low-Income Families?

An examination of the relationship between emergency food provider usage and the extent of hunger among low-income families with at least one child under the age of 12 from the CCHIP sites provides some insights. According to standard techniques of specificity and sensitivity analysis applied to CCHIP survey results, reliance on food pantries and soup kitchens are strong indicators of hunger in a community. Indeed, emergency food program usage is a very specific indicator of the extent of hunger in families. In particular, 94 percent of soup kitchen users and 95 percent of food pantry users were hungry or at-risk of hunger. Among those who had no hunger problem (neither hungry or at-risk of hunger) only three percent were food pantry users and only 1.5 percent were soup kitchen users. Thus, virtually every CCHIP family using a soup kitchen or a food pantry was hungry or at-risk of hunger. This means that high demand for emergency food from food pantries or soup kitchens by low-income families with children in a given community is a reliable indicator that there is hunger in that community.

Is Demand for Emergency Food from Soup Kitchens and Food Pantries a Reliable Indicator of a Community Hunger?

Summary

Of the 2,335 households interviewed in CCHIP, 162 (7%) went to soup kitchens for meals and 877 (38%) went to food pantries.
Figure 4.1
Program Usage Rates by Income Level for Urban Respondents
(Central Valley, California; Number of Households = 126)

Figure 4.2
Program Usage Rates by Income Level for Rural Respondents
(Central Valley, California; Number of Households = 203)
for food. Families using either of these emergency programs had incomes that were approximately 25 percent below the poverty line. In addition, shelter costs consumed, on average, over half of these very low-income households’ monthly incomes. These households spent approximately one-third of their meager incomes (including food stamps and the value of WIC benefits) on food.

Slightly more than three-fourths of households going to soup kitchens or food pantries received food stamps, and just over half of these families participated in the WIC Program. Ninety-six percent of families who went to soup kitchens, and 98 percent of families who went to food pantries received free or reduced-price school lunch for their school-age children. Forty-one percent of soup kitchen users and forty-nine percent of food pantry users received free or reduced-price school breakfast. Twenty-eight percent of those getting meals at soup kitchens and 31 percent of the families getting food at food pantries received meals from the Summer Food Service Program for Children. This suggests that they were supplementing the benefits of these public assistance programs with private emergency services in an attempt to balance the dietary requirements of their families with the scant resources they had to purchase food.

More than three-fourths (77%) of households who avail themselves of meals at soup kitchens, and 67 percent of food pantry users, relied on friends and relatives for food and money for food. However, after turning to all available sources, many of these families still came up short and suffered from food insufficiency. Forty-five percent of households getting food at food pantries were hungry. Sixty-seven percent of households who go to soup kitchens were hungry.

While emergency food programs were founded as a short-term approach to meeting the emergency food needs of persons in crisis, the crisis continues and these emergency measures have become nearly institutionalized.

A comparison of rural with urban respondents from the four county CCIIIP survey conducted in the Central Valley of California showed that urban respondents were supplementing public assistance with private charity, while rural respondents were substituting public assistance with private charity. The rural respondents had a much higher rate of hunger or risk of hunger than the urban respondents.

Reliance on food pantries and soup kitchens, according to standard techniques of specificity and sensitivity analysis applied to CCIIIP survey results, are strong indicators of hunger in a community. Not all communities have emergency feeding programs available to low-income families. In general, the availability of services is affected by the voluntary nature of many of these programs. Soup kitchens may be open only a few days a week for a limited time period. Food pantries, because they are frequently staffed by persons donating their time, may not be accessible to potential users when volunteer staffers are in short supply.

While emergency feeding programs serve a valuable function, soup kitchens and food pantries have not been designed to meet the ongoing food needs of low-income families. If we seek to ensure food security, which refers to the access by all people at all times through normal food channels to enough nutritionally adequate food for an active, healthy life for all of our citizens, then we must take steps to ensure adequate food resources for low-income families. This would restore soup kitchens and food pantries to their original role as short-term emergency food providers.

If we seek to ensure food security, then long-term policies must address the context of hunger in the United States, namely, poverty and unemployment. In the next two chapters we examine the association between hunger and poverty and between employment status and hunger.
Chapter 5

Hunger and Poverty: The Relationships Between Income and Expenses

How is Poverty Defined?

Hunger is a condition of poverty. Recognition of this connection has been built into the official poverty level, developed by the Social Security Administration in 1964. The basis for the first poverty index was the U.S. Department of Agriculture's (USDA) "Economy Food Plan". This food plan (now revised as the "Thrifty Food Plan") was the least expensive of four food plans developed by USDA. When first instituted, the poverty line was drawn at three times the cost of the Economy Food Plan for a family of three or more. The poverty level is adjusted for family size, and each year is modified according to the Consumer Price Index. For a family of four in 1990, the poverty line was $12,700.

What are the Trends in the Poverty Rate?

Certain historical trends can be observed since the U.S. Commerce Department's Census Bureau began formally providing poverty information (tracing back to 1959). These trends, presented in Table 5.1, are helpful in evaluating recent developments in the poverty rate.

In 1964, when President Lyndon Johnson declared "unconditional war on poverty," 36.1 million or 19 percent of all Americans lived below the poverty line. During the early 1970s, the number of people in poverty declined; in 1973, the percentage of Americans living below poverty hit an all-time low of 11.1 percent. The poverty rate remained stable at 11 to 12 percent through much of that decade.

In 1979, the poverty rate began a five year increase, peaking at 15.2 percent in 1983. While poverty has decreased since that time, its decline slowed considerably in the late 1980s. Despite a seven-year economic recovery, the poverty rate, at 12.8 percent in 1989, remained higher than at any time during the 1970s. There were 5.4 million more Americans living in poverty in 1989 than in any year during the previous decade. The economic recession of 1990-1991 has increased the possibility that the poverty rate will continue to rise in the early years of this decade.

Perhaps the most tragic story behind poverty figures concerns children. Poverty is concentrated most heavily among children, who represented 40 percent of all Americans living in poverty in 1989. One child in five was poor in 1989, and for minority children the percentage was much higher. The 1989 data show that:

- 12.6 million children under 18 (19.6 percent) were poor.
Table 5.1
Persons Below the Poverty Level 1959-1989

<table>
<thead>
<tr>
<th>Year</th>
<th>Number Persons Below Poverty Line (millions)</th>
<th>Percent of Persons Below Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>31.5</td>
<td>12.8</td>
</tr>
<tr>
<td>1988</td>
<td>31.9</td>
<td>13.1</td>
</tr>
<tr>
<td>1987</td>
<td>32.3</td>
<td>13.4</td>
</tr>
<tr>
<td>1986</td>
<td>32.4</td>
<td>13.6</td>
</tr>
<tr>
<td>1985</td>
<td>33.1</td>
<td>14.0</td>
</tr>
<tr>
<td>1984</td>
<td>33.7</td>
<td>14.4</td>
</tr>
<tr>
<td>1983</td>
<td>35.3</td>
<td>15.2</td>
</tr>
<tr>
<td>1982</td>
<td>34.4</td>
<td>15.0</td>
</tr>
<tr>
<td>1981</td>
<td>31.8</td>
<td>14.0</td>
</tr>
<tr>
<td>1980</td>
<td>29.3</td>
<td>13.0</td>
</tr>
<tr>
<td>1979</td>
<td>26.1</td>
<td>11.7</td>
</tr>
<tr>
<td>1978</td>
<td>24.5</td>
<td>11.4</td>
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<tr>
<td>1977</td>
<td>24.7</td>
<td>11.6</td>
</tr>
<tr>
<td>1976</td>
<td>25.0</td>
<td>11.8</td>
</tr>
<tr>
<td>1975</td>
<td>25.9</td>
<td>12.3</td>
</tr>
<tr>
<td>1974</td>
<td>23.4</td>
<td>11.2</td>
</tr>
<tr>
<td>1973</td>
<td>23.0</td>
<td>11.1</td>
</tr>
<tr>
<td>1972</td>
<td>24.5</td>
<td>11.9</td>
</tr>
<tr>
<td>1971</td>
<td>25.6</td>
<td>12.5</td>
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<tr>
<td>1970</td>
<td>25.4</td>
<td>12.6</td>
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<td>1969</td>
<td>24.1</td>
<td>12.1</td>
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<td>1968</td>
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<td>1966</td>
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<td>14.7</td>
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<td>1965</td>
<td>33.2</td>
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<td>36.4</td>
<td>19.5</td>
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<td>1962</td>
<td>38.6</td>
<td>21.0</td>
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<tr>
<td>1961</td>
<td>39.6</td>
<td>21.9</td>
</tr>
<tr>
<td>1960</td>
<td>39.9</td>
<td>22.9</td>
</tr>
<tr>
<td>1959</td>
<td>39.5</td>
<td>22.4</td>
</tr>
</tbody>
</table>

*Source: U.S. Census Bureau*
5.1 million children under age six (22.5 percent) lived in poverty.

43.7 percent of all Black children under age 18 were poor.

50.1 percent of all Black children under age six lived in poverty.

36.2 percent of all Hispanic children under age 18 were poor.

**How Do Rates of Poverty and Hunger Relate?**

Findings from CCHIP surveys reveal how poverty and hunger are linked for low-income families with children. What these findings show is that living below the poverty line puts a tremendous strain on a household's budget, adversely affecting the ability to purchase a nutritionally adequate diet. Even families whose incomes are somewhat above the poverty level experience food insufficiency.

Figure 5.1 depicts the hunger rate (percentage of hungry families) at different levels of poverty. This figure presents information for all seven CCHIP sites, and separately for rural and urban sites.

The hunger rate differs little, when households below 50 percent of poverty are compared to those with incomes between 50-99 percent of poverty. The hunger rate, however, is considerably lower for households with incomes between 100-149 percent of the poverty level and is lower yet for households whose incomes are between 150-185 percent of poverty. In general, the pattern of lowered hunger rates for each higher income level is similar for rural and urban sites. What these results indicate is that hunger is a condition of lack of income, regardless of rural or urban location.

It is important to point out that food insufficiency exists for families with incomes even at the 185 percent poverty level. The question then arises: "At what income level is hunger due to constrained resources no longer a problem for families?"

To answer this question, it is necessary to modify the usual CCHIP methodology of sampling from only a low-income population. In Pontiac, Michigan, an additional sample was drawn of families with children under 12 whose incomes were above 185 percent of poverty. (See Appendix G for description of the Michigan sample above 185% of poverty.)

Figure 5.2 depicts the relationship between hunger rates and poverty level for both Pontiac samples, combined. Looking at Figure 5.2, we see once again the substantially lower hunger rates for families whose incomes are between 100-149 percent of poverty compared with those whose incomes are below 100 percent of poverty. When households with higher incomes are included, we find no hunger in families whose incomes are at or above 300 percent of poverty.

Pontiac, Michigan, does not necessarily have the same characteristics as the rest of the United States, and the results from this one survey cannot be statistically generalized to the entire country. Lacking any better information at present, however, we can use these results to ask what effect raising income levels might have on hunger rates.

Based on the Pontiac data, if household incomes were no lower than the poverty level (100% of poverty), nearly 85 percent of families with children would not be hungry; and if household incomes were no less than 150 percent of poverty, almost 89 percent of families with children would not be hungry. If all family incomes were at least twice (200% of) the poverty level, few families with children would be hungry. In fact, nearly 95 percent of households at this income level would no longer be hungry. Although these particular numbers cannot be applied to other places in the United States, the important point here is that increased incomes mean reduced levels of hunger.

**The Hunger Equation: What is the Relationship Between Income and Expenses?**

Despite the strong association between hunger and income, the problem of hunger is not simply a matter of income; rather, it is more complex. The difficulty families face stems from the relationship between income and expenses. When shelter costs (rent or mortgage plus utilities...
Figure 5.1
Hunger Rates in Relation to Income Level
(All Survey Sites)

Figure 5.2
Hunger in Relation to Income Level
(Pontiac, Michigan)
such as gas, fuel oil, electricity, water and sewer) represent a large proportion of total family income, there is little left over for other expenses such as food. Figure 5.3, displaying average monthly income and expenses for households at each survey site, makes plain the regional variation in financial resources for low-income families.

We can examine this by focusing on three of the urban CCHIP survey sites — Hartford, Connecticut; Hennepin County, Minnesota; and, Long Island, New York. Average family incomes vary substantially across all three survey sites. Average gross monthly income was $919 in the Hartford sample, $1,032 in the Hennepin County sample (which includes Minneapolis) and $1,348 in the Long Island sample. Although these average incomes were quite different, shelter costs also varied. Shelter costs averaged $436 a month in the Connecticut site, $459 in the Minnesota site, and $696 for the survey site on Long Island.

So after taking the cost of shelter into account, the amount of money left for food and other needs is similar from one place to the next. Indeed, because variation in income is accompanied by a similar variation in the cost of living, the budget pinch from housing was tight for all the survey sites.

The squeeze that housing costs puts on income can be seen in Figure 5.4, which presents information from all the CCHIP surveys. This figure shows that shelter share, or the percentage of gross income spent on housing and utilities, was higher for families having lower incomes. This chart not only reflects the huge portion of income spent on shelter by families with very low incomes (shelter share is more than 50% for those with incomes at or below 75% of the poverty level), but it also points to the lack of affordable housing, even for those with incomes above the poverty level.

The federal government deems housing affordable if it costs no more than 30 percent of the household’s income. It is striking to see that shelter share was higher than 30 percent, on average, for households at all levels of income up to the 185 percent level of poverty in the CCHIP surveys.

Furthermore, for poor households (those with incomes below 100% of poverty) shelter share averaged more than 60 percent. This amount stands in sharp contrast to the typical (or median) American household, whose shelter expenses were 21 percent of their gross income in 1989. This means that the portion of income spent on shelter was three times greater for the poor in these surveys than for the typical American family.

At what level of income, then, does shelter become affordable? Using the federal government’s definition of affordability (spending 30 percent or less of income on shelter), we can examine this for one CCHIP location by looking at the information for all households from both Pontiac, Michigan, samples (which include all income levels) shown in Figure 5.5. Given the cost of living in Pontiac (median housing costs were $514 for a two bedroom apartment in 1989), it was not until incomes reached 150-199 percent of poverty that households spent, on average, 30 percent or less of their gross income on shelter costs.

It is clear, then, that housing costs consume a large portion of the low-income family budget. What effect does this constraint have on their ability to purchase food? Figure 5.6 depicts the food share of post shelter income for households in all the CCHIP surveys. Post shelter income refers to the amount of income left over after shelter costs are paid, and includes the dollar value of WIC benefits and Food Stamp Program allotments, for those households receiving each program. Food share of post shelter income is the percentage of this remaining income spent on food. Food expenditures refer only to food purchases in grocery stores; they do not count the cost of eating out at restaurants or other eating establishments.

It is readily apparent from Figure 5.6 that the poorest families spent a much higher percentage of their post shelter income on food than families with higher incomes. In fact, families whose incomes were below the poverty level spent an average of 60 percent of their post shelter income on food. Even so, this amounted to an average of only $277 per month spent on food — just 68 cents per person per meal.

The contrast in the percentage of post shelter income spent on
Figure 5.3
Monthly Income and Expenses (Each Survey Site)

Alabama
Florida
California
Connecticut
New York
Michigan
Minnesota

0 1000 2000
Dollars per month

Figure 5.4
Shelter Costs in Relation to Income (All Survey Sites)

Shelter cost as percent of income

25-50 50-75 75-100 100-125 125-150 >150
Income as percent of poverty level
Figure 5.5
Shelter Costs in Relation to Income 19
(Pontiac, Michigan)

Figure 5.6
Food Share of Post Shelter Income by Income Level 21
(All Survey Sites)
food between poor and nonpoor households is more pronounced in the expanded income range of households from the two Pontiac samples, seen in Figure 5.7. The average percentage of post shelter income spent on food was much lower among households whose incomes were more like that of average American households (those with incomes slightly above 300% of the poverty line); these families spent only about 10 percent of this post shelter income on food. On the other hand, after paying housing and utility costs, the poorest families spent 70 percent of their remaining income on food — and this remaining income included food stamps and WIC benefits.

Even though families with higher incomes spent a smaller percentage of that money on food, they spent a significantly greater number of dollars on food. Families with incomes that were three to six times greater than the poverty level spent $74.15 per capita on food per month, while families with incomes below the poverty level spent less: only $56.62 per capita per month, based on the Pontiac results.

How Much Do Low-Income Families Spend on Food and Shelter?

The point of all this is simple. After shelter costs were paid, very little money remained for food. In all CCHIP surveys for hungry households, specifically, food expenditures represented 62 percent of post shelter income (the resources remaining after shelter is paid, even including the cash equivalent of food stamps and WIC). And for hungry households below 100 percent of poverty, food costs were 72 percent of the post shelter income.

When shelter and food costs were added, so as to total up expenses for these two basic needs, the resulting share of gross income that goes to pay for food and shelter was exorbitant. As can be seen in Figure 5.8, the poorest of the poor drawn from all the CCHIP surveys spent nearly all of their income (97%) on these basic needs (food and shelter costs combined). Comparatively, households with higher incomes spent a smaller percentage of their resources on food and shelter costs (amounting to just over one-half). What happened to the percentage of income that remained after these basic needs were met? The percentage of remaining income was substantially larger for families at higher levels of income.

If we examine the broader income spread for all the households from the two Pontiac samples, the disparity in economic resources that remained after basic needs (food and shelter) were paid is more readily evident, as shown in Figure 5.9. Families with incomes below poverty expended 87 percent on these basic needs, leaving a mere 13 percent to pay for all of their other goods and services each month. For families with incomes at 300 percent of poverty or above, the portion spent on basic needs was far less, 24 percent; much more income remained (76%) for all other needs and wants.

What is the Monthly Budget for Households Below the Poverty Level?

For poor households, the income-expense ledger resulted in a paltry bottom line. For poor families, the cost of basic needs left them basically needy. Here’s what this means in dollars and cents. Table 5.2 presents a monthly budget of average income and basic expenses for poor families in all CCHIP surveys. Income from all sources amounted to $675 a month, which changed little after adjusting for Social Security Taxes and Earned Income Tax Credits. Shelter expenditures (rent or mortgage plus utilities) took up over three-fifths of income, costing about $364 per month. This left $314.

Adding in the dollar value of food stamp allotments and WIC vouchers ($148) made a total of $462 available for food and all other expenses. Food expenses averaged $277 a month, about 60 percent of the post shelter income. (Food expenses amounted to merely $58 per person per month.) Poor families were then left with $185 a month, which must cover all other expenses — taxes, medi-
Figure 5.7
Food Share of Post Shelter Income by Income Level
(Pontiac, Michigan)

Figure 5.8
Percent of Income Spent on Basic Needs by Income Level
(All Survey Sites)
Table 5.2
Monthly Budget for Households Below the Poverty Level
(All Survey Sites; Number of Households = 1448)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Monthly Wage Income</td>
<td>$245.45</td>
</tr>
<tr>
<td>Gross Monthly Income from all other sources</td>
<td>+ $429.50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$674.95</strong></td>
</tr>
<tr>
<td>Less Social Security</td>
<td>- $17.55</td>
</tr>
<tr>
<td>Plus Earned Income Tax Credit</td>
<td>+ $20.59</td>
</tr>
<tr>
<td><strong>Adjusted Monthly Income</strong></td>
<td><strong>$677.99</strong></td>
</tr>
<tr>
<td>Less Shelter</td>
<td>- $363.68</td>
</tr>
<tr>
<td></td>
<td>$314.31</td>
</tr>
<tr>
<td>Plus Food Stamps and WIC</td>
<td>+ $148.01</td>
</tr>
<tr>
<td><strong>Adjusted Post Shelter Income</strong></td>
<td><strong>$462.32</strong></td>
</tr>
<tr>
<td>Less Food</td>
<td>- $276.85</td>
</tr>
<tr>
<td><strong>Remainder</strong></td>
<td><strong>$185.47</strong></td>
</tr>
</tbody>
</table>
Summary

Findings from CCHIP surveys presented in this chapter have shown how poverty and hunger are related for low-income families with children. Of the families interviewed by CCHIP, who have known income levels, 65 percent have incomes below the poverty line ($12,700 for a family of four in 1990). Hungry households, with average incomes nearly 25 percent below the poverty line, are much poorer than non-hungry households.

The share (percentage) of income spent on shelter averaged more than 60 percent for poor households (those with incomes below 100% of poverty). This fraction is substantially larger in comparison with the typical (or median) American household, whose shelter expenses were 21 percent of their gross income in 1989. The portion of income spent on shelter was three times greater for the poor in these surveys than for the typical American family.

Post shelter income refers to the amount of income left over after shelter costs are paid, and includes the dollar value of WIC benefits and food stamp allotments, for those households receiving each program. Food share of post shelter income is the percentage of this remaining income spent on food. Food expenditures refer only to food purchases in grocery stores and do not count the cost of eating out at restaurants or other eating establishments. Poor families spent a much higher percentage of their post shelter income on food than families with higher incomes. Specifically, families with incomes below the poverty level spent, on average, 60 percent of their post shelter income on food. Nonetheless, this amounted to an average of only $277 per month for food — just 68 cents per person per meal.

Upon examining an average monthly budget of income and basic expenses for poor families in all CCHIP surveys, we see how this translates to dollars and cents. After paying for shelter and food, poor families were left with $185 a month. This remaining amount, which comes to $39 per person per month, must cover all other expenses — taxes, medical, transportation, clothing, telephone, and so on.

If all family incomes were at least twice (200% of) the poverty level, few families with children would be hungry. CCHIP estimates that nearly 95 percent of households at this income level would no longer be hungry, based on data from the Pontiac, Michigan survey.

In the next chapter, the connection between income level and employment status is examined. Specifically, data from CCHIP surveys are used to analyze the effects of employment status on household income and on the likelihood of experiencing hunger.
Chapter 6
Employment Status and Hunger

Introduction

Common wisdom has it that one of the most telling indicators of a nation's economic health is the unemployment rate. High rates of joblessness can point to economic recession and increased impoverishment, as well as hunger. Consider Table 6.1, which shows unemployment and poverty rates from 1979 to 1989.

When reports of the return of hunger in America began arising in the early 1980s, bolstered by studies in Texas, Oklahoma, New York, Massachusetts, Arkansas, Florida, Utah and elsewhere, they pointed to hunger's connection with increased joblessness, poverty, and use of emergency food providers. Official estimates of unemployment and poverty registered the economic downturn at that time. The unemployment rate jumped to 9.7 percent by 1982, and the percentage of persons below poverty peaked at 15.2 percent in 1983. Moreover, poverty had deepened—the poorest of the poor had lost ground.

Most indicators thereafter began pointing to a reversal, signaling economic growth. Economic recovery was evident by 1984, and poverty rates have dropped since, but not by nearly as much as unemployment rates have lessened. In fact, in 1989 for the third straight year, the poverty rate failed to respond to the nation's economic expansion. Despite continued decreases in the unemployment rate (which was 5.3 percent in 1989), the poverty rate did not change significantly from 1987-1988, and from 1988-1989. The 1989 poverty rate of 12.8 percent, or 31.5 million Americans, remained higher than at any time during the 1970s, including periods of recession. It would seem, then, that the tie between these rates has loosened somewhat. A careful examination of the recent economic recovery reveals why.

Economic Recovery and Low Wage Jobs

Economic recovery has meant the growth of jobs. The jobs that were created, however, have brought with them little in wage gains. Between 1960 and 1969 (when poverty was declining fastest—see Table 5.1 in Chapter 5), paid compensation to labor per hour of work rose 2.7 percent per year, but it fell by 0.4 percent from 1979-1985. Of the 10.7 million jobs added to the United States economy between 1979-1985, 48.6 percent were paid less than $10,000 (in 1985 dollars). In other words, almost half of the new jobs available during this period would not have paid enough to a year-round, full-time worker for a family of four to be above the poverty level (in 1985, the poverty line for a family of four was nearly $11,000).
Table 6.1

<table>
<thead>
<tr>
<th>Year</th>
<th>Unemployment Rate</th>
<th># of Persons Below Poverty Line (millions)</th>
<th>Percent Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>5.3</td>
<td>31.5</td>
<td>12.8</td>
</tr>
<tr>
<td>1988</td>
<td>5.5</td>
<td>31.9</td>
<td>13.1</td>
</tr>
<tr>
<td>1987</td>
<td>6.2</td>
<td>32.3</td>
<td>13.4</td>
</tr>
<tr>
<td>1986</td>
<td>7.0</td>
<td>32.4</td>
<td>13.6</td>
</tr>
<tr>
<td>1985</td>
<td>7.2</td>
<td>33.1</td>
<td>14.0</td>
</tr>
<tr>
<td>1984</td>
<td>7.5</td>
<td>33.7</td>
<td>14.4</td>
</tr>
<tr>
<td>1983</td>
<td>9.6</td>
<td>35.3</td>
<td>15.2</td>
</tr>
<tr>
<td>1982</td>
<td>9.7</td>
<td>34.4</td>
<td>15.0</td>
</tr>
<tr>
<td>1981</td>
<td>7.6</td>
<td>31.8</td>
<td>14.0</td>
</tr>
<tr>
<td>1980</td>
<td>7.1</td>
<td>29.3</td>
<td>13.0</td>
</tr>
<tr>
<td>1979</td>
<td>5.8</td>
<td>26.1</td>
<td>11.7</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Census and Bureau of Labor Statistics
It is evident that the economy did not recover for everyone. Consider two pieces of supporting information about income distributions and about the working poor. In 1989, the gap between the rich and the poor reached its widest point since the late 1940s, showing a continuation of the pattern of the rich growing richer throughout the 1980s. Poverty data from the U.S. Census Bureau show that the aggregate income of the poorest 20 percent of American families remained at only 4.6 percent of the nation's total income (the same as in 1988). The wealthiest 20 percent of families received 46.8 percent of the national total, up from 44.0 percent in 1988.

For the working poor, the most recent census data indicate that their plight is worsening. Roughly 16.2 percent of all household heads living in poverty worked year-round and full-time in 1989, compared to 14.6 percent in 1987. Among poor household heads, 48.9 percent worked for some period of time in 1989, up slightly from 1988. So, despite the fact that the unemployment rate was decreasing and the number of poor household heads who were working for some period of time was increasing, wages were inadequate to lift them out of poverty.

There is growing consensus among researchers that poverty is partly a consequence of unemployment or underemployment (defined as too few hours of work or as low wages). We would expect, then, that if the lack of well-paid work is the parent of poverty, hunger is its grandchild.

What are the Characteristics of Employment Status Differences Among CCHIP Households

Using data from surveys at all CCHIP sites, we can examine the effects of employment problems. Table 6.2 presents information about socioeconomic characteristics of households interviewed for the CCHIP surveys, based on an employment distinction. The full-time employed category refers to a family with one adult or more working full-time; the part-time category refers to households with one adult or more working part-time, and the unemployed category refers to households in which no one was receiving wage income.

The table shows that unemployed households were more likely than part-time employed households to be headed by a female (65% vs. 39%), and almost three times as likely as full-time employed households (65% vs. 23%). The size of unemployed families was smaller than the size of full-time employed families. Many more unemployed households (57%) had no respondent with a high school diploma than did part-time employed households (40%) who, in turn, were more likely to have no respondent with a high school degree than full-time employed households (34%). Racial differences in employment were not statistically significant.

Looking at a household's financial resources, monthly income for unemployed households was significantly less than for part-time employed households, and income for part-time households was significantly less than for full-time employed households, no matter how income is measured. For gross income from all sources, including AFDC, unemployed households averaged $656 a month, part-time employed households averaged $902 a month, and full-time employed households averaged $1,225 a month. This means that the unemployed had three-fourths of the income of part-time employed households, and just a little over half of the income of full-time employed households. These income differences amounted to more than $850 less per person per month for unemployed households, compared with part-time employed households, and more than $100 less per person per month for unemployed households compared with the full-time employed. It is important to note that full-time employed households had average incomes that are above the official poverty line, but not by much.

Monthly expenses for shelter (rent or mortgage plus utilities) and food, represented a substantially larger fraction of income for unemployed households compared with full-time employed households. Households without an employee spent nearly three-
Table 6.2
Comparison of Socioeconomic Characteristics Among Unemployed Households, Part-Time Employed Households, and Full-Time Employed Households; All Survey Sites (Total Number of Households = 2,335)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Unemployed Households</th>
<th>Households Employed Part-time</th>
<th>Households Employed Full-time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SOCIODEMOGRAPHIC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Householder</td>
<td>65%</td>
<td>39%</td>
<td>23%</td>
</tr>
<tr>
<td>Household Size</td>
<td>4.5</td>
<td>4.6</td>
<td>4.8</td>
</tr>
<tr>
<td>Non-white</td>
<td>58%</td>
<td>66%</td>
<td>59%</td>
</tr>
<tr>
<td>Not High School Grad.-Resp.</td>
<td>57%</td>
<td>40%</td>
<td>34%</td>
</tr>
<tr>
<td><strong>ECONOMIC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross</td>
<td>$686</td>
<td>$8902</td>
<td>$1225</td>
</tr>
<tr>
<td>Gross per capita</td>
<td>$165</td>
<td>$219</td>
<td>$272</td>
</tr>
<tr>
<td>Income as percent of poverty</td>
<td>65%</td>
<td>86%</td>
<td>110%</td>
</tr>
<tr>
<td><strong>Monthly Expenses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelter Share</td>
<td>58%</td>
<td>62%</td>
<td>46%</td>
</tr>
<tr>
<td>Food Share of Post-Shelter Income</td>
<td>73%</td>
<td>69%</td>
<td>44%</td>
</tr>
<tr>
<td><strong>HEALTH INSURANCE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>5%</td>
<td>22%</td>
<td>57%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>87%</td>
<td>57%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Note: All comparisons of differences are statistically significant at the p <0.01 level, except where indicated. The table can be read as follows: 65% of the unemployed households were headed by females, 39% of the households with at least one part-time employee were headed by females, and 23% of the households with at least one full-time employee were headed by females.

a) Part-time employed households are not significantly different than either unemployed households or full-time employed households.

b) Differences are not statistically significant.

c) Unemployed households are not significantly different than either part-time employed households or full-time employed households.

d) Food expenses divided by gross income plus food stamps and WIC minus shelter costs; unemployed households are not significantly different than part-time employed households; both, however, are significantly different than full-time employed households.
fifths (58%) of their gross income on shelter, compared to just under one-half (46%) for full-time employed households. Of the income that remained after paying shelter costs, and adding to it the dollar value of WIC and food stamps, unemployed families expended almost three-fourths (73%) of this post-shelter income on food, much more than full-time employed households spent (44%). (See figure 6.1)

One of the main benefits of working full-time is private health insurance. Almost three-fifths (57%) of full-time employed families had private medical insurance to cover their children, while only one-fifth (22%) of part-time employed households had this coverage. Just five percent of unemployed families had private health insurance for their children. Due to the income eligibility requirements for Medicaid benefits, the unemployed were more likely to have Medicaid coverage for their children than households with any employment.

Table 6.3 shows information on program usage and hunger rates, comparing the three categories of employment. Since unemployed households have less income than households with any employment, the unemployed were more likely to be eligible for and participate in nearly all the major food assistance programs available to them, and to receive AFDC, compared with the part-time employed and the full-time employed.

Moreover, relative to the full-time employed, a significantly higher percentage of unemployed and part-time employed households made use of emergency food providers (soup kitchens, food pantries, or other commodity distribution centers) and counted on help from friends and relatives (borrowing food or food money, or sending their children to eat at others' homes). Despite all of this, hunger was more prevalent among the unemployed — more than one and a half times as much as among the full-time employed (40% vs 24%). (See figure 6.2)

How Are Family Budgets Affected by Unemployment?

The largest portion of the unemployed was made up of single-parent households, 99 percent of which were headed by women. Table 6.4 presents the average monthly budget for single-parent households with no one employed from all CCHIP survey sites. The average household size was about four persons, and nearly all were comprised of a mother and three children.

The primary source of income for single-parent households, with no one employed, was Aid to Families with Dependent Children (AFDC). Total income from AFDC and other non-wage sources amounted to an average of $591 a month. These families spent $327 a month on shelter, on average, which was 60 percent of their income. This left $264. Adding in the average dollar value of WIC and food stamps ($177) produced a total of $441 a month to cover food and all other expenses. Food expenditures averaged $256 a month, which was 70 percent of their post shelter income. This left an average of merely $185 a month, approximately $48 per person, available for all remaining expenses.

Of unemployed single-parent households, 42 percent were hungry, and 79 percent were either hungry or at-risk of hunger.

What are the Barriers to Employment for Single Parents?

Single parents in the CCHIP surveys reported three main barriers to full-time employment. The most commonly given reason for not working full-time was staying home to care for the children (49%). The other two main barriers that these mothers reported were that the wages they would earn would be too low to support their families (46%) and that a lack of day care kept them from working full-time (40%).

Put another way, women in single parent families must play a dual role — that of nurturer as well as that of provider for their children. In the main, single mothers in the CCHIP surveys stressed child care responsibility. A shortage of jobs that paid well, along with a lack of day care, represented key obstacles to
Figure 6.1
Percent of Monthly Post Shelter Income Spent on Food by Employment Category

Figure 6.2
Hunger Rates by Employment Status
Table 6.3
Comparison of Program Usage and Hunger Rates Among Unemployed Households, Part-Time Employed Households and Full-Time Employed Households; All Survey Sites (Total Number of Households = 2,335)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Unemployed Households</th>
<th>Households Employed Part-time</th>
<th>Households Employed Full-time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Assistance Program Participation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Stamps</td>
<td>87%</td>
<td>62%</td>
<td>32%</td>
</tr>
<tr>
<td>WIC</td>
<td>54%</td>
<td>48%</td>
<td>35%</td>
</tr>
<tr>
<td>Free or Reduced Price School Lunch</td>
<td>98%</td>
<td>97%</td>
<td>89%</td>
</tr>
<tr>
<td>Summer Food</td>
<td>26%</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>AFDC</td>
<td>81%</td>
<td>39%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Food Acquisition Strategies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliance on Friends and Relatives</td>
<td>65%</td>
<td>62%</td>
<td>47%</td>
</tr>
<tr>
<td>Reliance on Emergency Food Providers</td>
<td>53%</td>
<td>45%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>HUNGER</strong></td>
<td>40%</td>
<td>37%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Note: All comparisons of differences are statistically significant at the p <0.01 level, except where indicated. The table can be read as follows: 87% of the unemployed households received food stamps, 62% of the households with at least one part-time employee received food stamps, and 32% of the households with at least one full-time employee received food stamps.
Table 6.4
Monthly Budget for Single-Parent Households with No One Employed
(All Survey Sites; Number of Households = 635)

<table>
<thead>
<tr>
<th>Income Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Monthly Wage Income</td>
<td>$ 0.00</td>
</tr>
<tr>
<td>Gross Monthly Income from all other sources including AFDC</td>
<td>+ $ 591.09</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 591.09</td>
</tr>
<tr>
<td>Less Social Security</td>
<td>$ 0.00</td>
</tr>
<tr>
<td>Plus Earned Income Tax Credit</td>
<td>+ $ 0.00</td>
</tr>
<tr>
<td><strong>Adjusted Monthly Income</strong></td>
<td>$ 591.09</td>
</tr>
<tr>
<td>Less Shelter</td>
<td>- $ 326.87</td>
</tr>
<tr>
<td></td>
<td>$ 264.22</td>
</tr>
<tr>
<td>Plus Food Stamps and WIC</td>
<td>+ $ 176.79</td>
</tr>
<tr>
<td><strong>Adjusted Post Shelter Income</strong></td>
<td>$ 441.01</td>
</tr>
<tr>
<td>Less Food</td>
<td>- $ 255.84</td>
</tr>
<tr>
<td><strong>Remainder</strong></td>
<td>$ 185.17</td>
</tr>
</tbody>
</table>
their labor market participation.

Without wage income, single mothers relied heavily on AFDC, food stamps, and WIC. Despite this federal assistance, few financial resources remained after purchasing shelter and food. Many of these families must rely on emergency food providers, such as soup kitchens, food pantries and other commodity distribution centers (56%) and friends and relatives (68%) to supplement food resources. Still, more than two-fifths (42%) of these mothers and their children were found to suffer from hunger.

How are Family Budgets Affected by Full-Time Employment?

Among the full-time employed, the largest percentage is comprised of two-parent families. Table 6.5 shows the average monthly budget for two-parent households with one full-time employee from all CCHIP survey sites. The average household size was about five persons, and nearly all consist of two parents and three children.

Wage income for two-parent households with one full-time employee averaged $1,141 a month. All other sources of income added up to $157 a month, on average. Total income from all sources, then, amounted to an average of approximately $1,300 a month, which dropped to $1,250 a month after adjusting for Social Security taxes and Earned Income Tax Credits. Shelter costs represented 45 percent of their income, averaging $569 a month. This left $685. Adding in the dollar value of WIC and food stamps ($50) made a total of $735 a month available for food and all other expenses. Food expenditures averaged $308 a month, which was 42 percent of their post shelter income. This left $426 a month, which was about $83 per person, available for all the rest of their expenses.

Of these two-parent families with one full-time employee, 22 percent were hungry, and 70 percent were either hungry or at-risk of hunger.

How Do These Families Compare?

When comparing these two family budgets, it is easy to see why the hunger rate of single parent households with no one employed was twice that of two-parent households with a full-time employee. Two-parent families with a full-time employee had more than twice the average monthly financial resources of unemployed single-parent families ($1,299 vs $591).

Moreover, two-parent families have another advantage. They are able, if they wish, to divide the child care responsibilities from the financial provision responsibilities. Indeed, nearly all mothers in two-parent families with one full-time employee stressed child care responsibility, as did their single mother counterparts. In two-parent families where her spouse works full-time, the most often cited reason by mothers for not working full-time was staying home to care for their children (72%). The second most common reason for not working full-time was lack of day care (51%), followed by wages being too low to support their families (26%). These are the same three reasons for not working full-time that single mothers mentioned.

While it is evident that barriers to employment were quite similar for women in the CCHIP surveys regardless of whether they were in single-parent or two-parent households, the financial concerns were less devastating for two-parent families, as would be expected. In fact, working poor, two-parent families, were much less likely to receive AFDC, food stamps or WIC, and were less apt to rely on emergency food providers (26%) or on friends and relatives (46%) to supplement food resources. And a far smaller percentage of them experienced sustained food insufficiency.

With all that said, however, one more point deserves highlighting. Despite the difference in available financial resources, it is striking that 22 percent of two-parent households with a full-time employee were hungry. Although having full-time work is an important factor in reducing hunger, the wage rate for these working poor two-parent families is equally important. For all two-parent families with one full-
Table 6.5  
Monthly Budget for Two-Parent Households with One Full-Time Employee  
(All Survey Sites; Number of Households = 435)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Monthly Wage Income</td>
<td>$1,141.49</td>
</tr>
<tr>
<td>Gross Monthly Income from all other sources</td>
<td>+ $157.36</td>
</tr>
<tr>
<td>Total</td>
<td>$1,298.85</td>
</tr>
<tr>
<td>Less Social Security</td>
<td>- $81.62</td>
</tr>
<tr>
<td>Plus Earned Income Tax Credit</td>
<td>+ $36.67</td>
</tr>
<tr>
<td>Adjusted Monthly Income</td>
<td>$1,253.90</td>
</tr>
<tr>
<td>Less Shelter</td>
<td>- $569.16</td>
</tr>
<tr>
<td>Plus Food Stamps and WIC</td>
<td>+ $50.20</td>
</tr>
<tr>
<td>Adjusted Post Shelter Income</td>
<td>$734.94</td>
</tr>
<tr>
<td>Less Food</td>
<td>- $308.46</td>
</tr>
<tr>
<td>Remainder</td>
<td>$426.48</td>
</tr>
</tbody>
</table>
time employee in the CCHIP surveys, the average wage rate, calculated for year-round work, was $6.85 an hour. At this wage, these families earned barely enough to be above the official poverty level, and more than one-fifth of them were hungry. Even though they worked full-time, apparently they earned too little to be secure.

Summary

Using information gathered from all CCHIP survey sites, it is evident that employment status was strongly associated with the degree of constraint on a household’s resources which affected the likelihood of experiencing hunger. Unemployed households had three-fourths of the average income of part-time employed households and just one-half of the income of full-time employed households. Unemployed households were one and one-half times more likely to be hungry than full-time employed households.

Unemployed households relied primarily on AFDC for income, and they were more likely to participate in federal food assistance programs than part-time and full-time employed households. Unemployed and part-time employed households were more likely to have Medicaid to cover their children; full-time employed households were more likely to have private medical insurance for their children. Moreover, relative to the full-time employed households, a higher percentage of unemployed and part-time employed households relied on emergency food providers and on friends and relatives to help supplement their food stores.

Shelter costs took up a much larger fraction of monthly income for unemployed households than for full-time employed households. From the income that remained after paying for shelter, and adding to it the value of WIC and food stamps, food costs consumed a substantially larger portion of this post-shelter income for unemployed households than for full-time employed households.

In the CCHIP survey, the typical unemployed household was made up of a single mother and three children, while the typical full-time employed household was comprised of two parents and three children. Single-mothers who are unemployed listed three main reasons for not working full-time: staying home to care for their children, available jobs had wages too low to support their families and a lack of day care facilities. In two-parent families where her spouse worked full-time, unemployed mothers reported the same three reasons for not working full-time.

Even though mothers in the CCHIP surveys cited the same barriers to full-time employment, irrespective of whether they live in a single-parent or two-parent household, it is not surprising that these employment barriers yield a financial outcome that fell much harder on single-parent families; the latter had half of the monthly income, on average, than did two-parent families with a full-time worker. Unemployed single-parent families also experienced twice the hunger of two-parent full-time employed households.

Despite having twice the financial resources and half the hunger rate of single-parent unemployed households, more than 20 percent of two-parent families with a full-time worker suffered from hunger. Apparently, for many of these working poor families, wages were so low that they could achieve neither financial stability nor food sufficiency.

If programs were to be enacted that aimed at promoting financial stability and food sufficiency, such programs would, in all likelihood, require the passage of a number of years to realize their aim. But children cannot wait. Children’s normal growth and healthy development require immediate intervention, while longer term solutions for financial stability are enacted.
Key Findings

In seven sites nationwide, using the best methodology currently available, a distressing level of hunger among low-income families with young children has been documented by the Community Childhood Hunger Identification Project (CCHIP). Approximately 5.5 million children under 12 are estimated to be hungry and 11.5 million are estimated to be either hungry or at risk of hunger.

CCHIP also has documented that hunger is detrimental to children's health.

- When compared with children from non-hungry families, children from hungry families were much more likely to suffer from infection-based health problems and were much more likely to show symptoms of low energy stores in the six month period prior to the survey. Concentration problems, fatigue, irritability, dizziness, and frequent headaches were much more common among hungry children, as were unwanted weight loss, frequent ear infections, and frequent colds.

- And when children became ill, they missed school. Children whose families reported any individual health problems were more likely to be absent from school than those not reporting problems, missing about twice as many days. Hungry children were absent from school one and a half more days in the six months prior to the survey than children from non-hungry families.

- One of the most important and hopeful of all the CCHIP findings about the relationship between hunger and children's health was that children who were eating both school breakfast and school lunch were significantly less likely to suffer from problems associated with low energy reserves (fatigue, irritability and inability to concentrate) than those who were getting school lunch only.

- In addition, children were less likely to have increased school absences if they got breakfast at school.

Participation in the federal food assistance programs by families interviewed was surprisingly low — surprising when one considers the high level of hunger found among these families. Moreover, even among the families who participated in food assistance programs, hunger was often still a problem.

When they ran out of food, hungry families frequently depended on friends and relatives to feed their children and went to food pantries and soup kitchens to obtain food. Yet all of these strategies for getting more food or money to purchase food were still not enough to keep families from becoming hungry.

Questions about employment status, income, and expenses revealed that unemployed households were one and one half times as likely to be hungry
as full-time employed households. However, full-time employment did not protect families from hunger. One-fifth of two parent families with a full-time worker still suffered from hunger.

Incomes were very low among the families interviewed, and hungry families were much poorer than non-hungry households.

In addition to the burden of poverty, high shelter costs consumed a large portion (on average, over half, and for poor families, more than 60%) of monthly gross income.

Moreover, families with incomes below the poverty level spent, on average, 60 percent of their income that remained after paying for shelter, on food. This left very little money for all other basic needs.
Most people wish for a world in which not even one child goes hungry. CCHIP's findings concerning the impact of hunger on health problems underscore the gravity of the problem of childhood hunger. Surely in a country with the bountiful resources of the United States, over five million hungry children under the age of 12 is unacceptable, as is an additional six million children only a few steps away from being hungry.

Anyone who cares about the quality of children's lives in the United States and is concerned about the nation's future will be disturbed by the problems CCHIP has documented among low-income families. In the long run, to fully solve these problems, families must be assisted in their efforts to attain self-sufficiency by making available to them quality education and training, income from work that lifts them out of poverty, and adequate and affordable housing, child care and health care. However, these long-term changes will take a long time and a great deal of effort and resources to implement.

Short-Term Steps to Ending Childhood Hunger

The good news is that there are several effective short-term steps that can be taken to help solve the problem of childhood hunger in the United States. These steps have to do with federal food assistance programs that are already in place.

If fully utilized, these programs could make an enormous dent in the number of hungry children in the United States through the increased access they provide to nutritious food. Yet, many of the families surveyed, although eligible for a number of food programs, and clearly in need of food assistance, were not participating in them. A close review of CCHIP's findings, along with an examination of available information on food program operations at the local level, lead to the following short-term policy recommendations.

Increase Funding for the Special Supplemental Food Program for Women, Infants and Children (WIC).

CCHIP's findings show that only 45 percent of those who were income and categorically eligible for WIC were participating in the program. These findings are consistent with national figures on participation in WIC. The Congressional Budget Office estimates that, nationally, 54 percent of those eligible for WIC are participating. (This is based on a fiscal year 1991 participation level of 4.7 million women, infants and children.)

This low participation rate is due to inadequate funding for
the WIC Program. Current funding does not allow for full participation by all who are eligible and desire to participate.

Yet WIC has been documented repeatedly to be one of the most cost-effective federal programs. In fact, a recently released U.S. Department of Agriculture study demonstrated that every dollar invested in WIC for pregnant women produced Medicaid savings of $1.77 to $3.13. WIC is particularly important in fighting infant mortality (where the United States' standing in the world has slipped in recent years).

A combination of efforts, including increased federal funding, supplemental state funding, and innovative efforts at the state level to reduce food package costs, can allow WIC to serve more people. However, the most effective route to full participation of every eligible woman, infant, and child is a dramatic increase in federal funding for the program.

The National Association of WIC Directors has presented a five year funding plan to Congress recommending increases which would permit participation by all women, infants and children eligible and wishing to participate. The plan, which is based on Congressional Budget Office estimates, calls for a fiscal year 1992 funding level of $2.7 billion ($256 million over the cost of current services), and similar increments in future years.

**Benefits in the Food Stamp Program**

The national CCHIP study points to two major problems in the operation of the Food Stamp Program: (1) many families who are probably eligible for the program and in need, do not participate; and (2) benefits to those who get them are insufficient.

Over one-third of the families estimated to be eligible for food stamps did not participate. According to CCHIP, lack of information about program eligibility is a key factor inhibiting participation in the Food Stamp Program. This finding points to a vital need for improved program outreach.

Additional barriers to Food Stamp Program participation, according to other research on Food Stamp Program operations, include limited office hours, confusing and overwhelming paperwork requirements, and improper determinations of ineligibility.

Finally, it is widely agreed that certain factors used in the determination of program eligibility are likely to make many people ineligible who could benefit greatly from the program. For example, the current definition of a food stamp household requires families to apply together for the program even if they do not share resources or buy and cook together. This penalizes many families who are forced to double-up due to lack of affordable housing, often making them ineligible for food stamps. Also, many working families are made ineligible for food stamps because the cars they depend on to get to work are worth more than $4500, the legal limit allowed for Food Stamp Program eligibility.

It is also clear from the CCHIP findings that many families who receive food stamps are still hungry. National data from the U.S. Department of Agriculture reveal that over half of the people receiving benefits from this program are children and 83 percent of total benefits go to households with children. Benefit levels in the Food Stamp Program will have to be increased in order to ensure that children from low-income families have enough to eat throughout each month.

In addition, several calculations used in determining food stamp benefits contribute to their insufficiency. For example, food stamp benefits of families with children do not fully take into account high shelter costs, as is allowed for elderly and disabled households. Also, legally-obligated child support payments that go out of the household are still included as income to the household making the payment. This reduces the amount of food available to children living with parents or stepparents who have support obligations to other households.

The following concrete steps are recommended to improve the ability of the Food Stamp Program to meet the needs of hungry families:
Improve and expand outreach about the Food Stamp Program so that all applicants receive accurate information on eligibility and participation requirements.

Lower "administrative" barriers to participation in the Food Stamp Program.

Change both the definition of a food stamp household for families that double-up, and the low limit allowed for the value of a car.

Increase food stamp benefits so that families can afford to eat a nutritionally adequate diet throughout each month.

Change the calculation of food stamp benefits so that high shelter costs are fully accounted for, and child support payments paid out by a household are not counted as income.

Expand the Availability of the School Breakfast Program and Maintain the Broad Accessibility of the School Lunch Program.

CCHIP's findings show a serious underutilization of the School Breakfast Program. Most of the families interviewed had children who participated in the School Lunch Program, but less than half participated in the breakfast program. The primary reason given for not participating in the program was that the local school did not sponsor a School Breakfast Program.

A significant number of families who were not participating in breakfast appeared to be in need. Of those families who did not participate in the breakfast program, one-third were hungry. Moreover, according to CCHIP's findings, participation in the school lunch and breakfast programs lessened significantly the likelihood that children would suffer from fatigue, irritability, and inability to concentrate. CCHIP also revealed that participation in the breakfast program reduced school absences.

Based on the findings in this report, expansion of the School Breakfast Program, so that it is available to all low-income children, appears to be imperative in the effort to end childhood hunger and its consequences.

Schools across the country that do not currently offer the School Breakfast Program would be wise to implement this program as soon as possible. School Breakfast Program funding is available to all public and private non-profit schools. In addition, the U.S. Department of Agriculture currently offers $5 million in School Breakfast Program start-up funds to assist schools with needy children.

In addition, because of the large proportion of low-income children who participate in the National School Lunch Program, it is important to ensure that this program remains broadly accessible, and provides the most nutritious and healthful meals possible. Concern about the healthfulness of meals served in schools was highlighted in the Surgeon General's health objectives for the year 2000, and will be raised again in the National Academy of Sciences Diet and Health Recommendations Implementation Report in the middle of 1991, and in new dietary guidance for the child nutrition programs which will be released by the Departments of Agriculture and Health and Human Services in late 1991.

Expand the Availability of the Summer Food Service Program for Children.

Participation in the Summer Food Service Program for Children was very low among the families interviewed. In fact, only 22 percent had children who participated in the Program. Moreover, of those families who had never heard of the program or did not participate in it, 31 percent were hungry and 42 percent were at-risk of hunger.

These data lead to the conclusion that the families of the millions of low-income children who lose access to school meals during the summer months are probably hard-pressed to find an adequate replacement for these meals.

In order to increase low-income children's access to nutritious meals during the summer, schools, governmental entities, and non-profit agencies must be encouraged to sponsor Summer Food Program sites in low-income communities. Once Summer Food Program sites are in place, strong outreach is needed to let families know about the existence of the programs and what they offer.

Expand the Availability of the Child and Adult Care Food Program.
Information on participation in the Child and Adult Care Food Program was not collected in the CCHIP survey. However, because this program subsidizes the provision of nutritious meals to preschool children in child care centers and family day care homes, it is important to recognize its potential for playing a significant role in ameliorating the childhood hunger problem.

Preschool children often receive 75 to 80 percent of their nutritional intake from their day care providers, and the Child and Adult Care Food Program, according to a government study, does a superior job of ensuring the meals preschool children receive are nutritionally adequate. In addition, the payments made to child care centers and family day care homes to subsidize children's meals can play an important role in reducing families' food costs and/or the cost of child care.

Unfortunately, many of the low-income children who are cared for in family day care homes do not benefit from participation by their care-givers in the Child and Adult Care Food Program. Program sponsors need to renew efforts to raise participation levels among low-income children in the family day care portion of the Child and Adult Care Food Program. This is essential if hunger problems are to be reduced among preschool children whose parents work. The U.S. Department of Agriculture is funding four pilot projects to determine innovative techniques for enrolling more low-income children in the program. The findings of these pilot projects should be very useful in launching an active campaign to recruit family day care homes that take care of low-income children.

Longer Term Vision

The short-term steps discussed so far will make an enormous contribution to ending childhood hunger in the United States. However, a longer term vision and plan must be developed and implemented if this detrimental and shameful national problem is to be ended.

The longer-term solutions suggested here are directly related to the deeper problems uncovered in surveying poor families in the United States.

Hungry families are much poorer than non-hungry families. In fact, level of income plays a major role in determining whether families are hungry.

- In one CCHIP site, where data were collected for families with incomes both below and above 185 percent of the poverty level, nearly 95 percent of families with incomes at least 200 percent of the poverty level were not hungry.
- Families headed by a single mother were more likely to be hungry.
- Full-time employment does not ensure an income level that will protect a family from hunger. One-fifth of two parent families with a full-time worker still suffered from hunger.

Jobs with living wages, and more adequate financial support for those who cannot work, are essential in the long run if hunger is to be eradicated.

Employment plays a significant role in determining whether a family is hungry. Unemployed households surveyed by CCHIP were one and one half times more likely to be hungry than full-time employed households. For those who can work, more jobs, and effective, carefully targeted job training, are essential to solve the problem of childhood hunger.

One of the main barriers to full-time employment reported by the single mothers interviewed in the CCHIP survey was lack of child care. Affordable, quality child care is indispensable for those desiring to enter the workforce.

The basic costs of survival use up most of the budgets of families surveyed by CCHIP. The high shelter costs of the families interviewed consumed a large portion of their monthly gross income. Moreover, after food and shelter were paid for, very little money was left over for any other needs. The need for affordable housing has been raised numerous times in recent public policy debates. CCHIP confirms this need, especially as it relates to hungry families.

In addition, access to affordable health care could make an important contribution to ending the income shortfalls.
low-income families suffer in relation to their basic living expenses.

Adult members of the hungry households surveyed by CCHIP were less likely to have a high school diploma. Clearly access to quality education is vital to ending childhood hunger.

This is not an exhaustive list of all CCHIP's findings, nor of all the possible solutions to the problem of childhood hunger in the United States. However, this concluding segment has set out the major policy recommendations that emerge from a careful review of the data collected by CCHIP, in light of what is known about local food program operations. This report, both its findings and its recommendations, is intended to stir a national debate and help create a strong commitment to ending the problem of childhood hunger.


Massachusetts Nutrition Survey. Division of Family Health Services, Massachusetts Department of Public Health. 1983.


Profile of “At Risk” Populations and Service Agencies. Hunger Watch, February 1984. Montefiore Medical Center, Department of Social Medicine.


<table>
<thead>
<tr>
<th></th>
<th>CCHIP Sample</th>
<th>National Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean household size for families</td>
<td>4.7</td>
<td>3.9</td>
</tr>
<tr>
<td>Female-headed households</td>
<td>53%</td>
<td>60%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>29%</td>
<td>62%</td>
</tr>
<tr>
<td>Black</td>
<td>41%</td>
<td>34%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>24%</td>
<td>19%</td>
</tr>
<tr>
<td>Population Type</td>
<td>City Population</td>
<td>Suburban Population</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
<td>21%</td>
</tr>
<tr>
<td>City population</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td>Suburban population</td>
<td>21%</td>
<td>21%</td>
</tr>
</tbody>
</table>


6. Data from the 1977-78 Nationwide Food Consumption Survey (NFCS) showed that food stamps boosted the average household's annual food expenditures by $293 per person, and that despite the relative economic advantage of eligible non-participants (eligible non-participants tend to be at the higher end of the income eligibility requirement), the latter spent less on food and had poorer nutrition than did participants. Moreover, food stamp participants spent less per person on food but got more nutrients per dollar than did non-participants. The latter finding is from "Food Shopping Skills of the Rich and the Poor." Betty Peterkin and Mary Hama. *Family Economics Review*. 1983. No. 3 pp. 8-12.


   One should note that since CCHIP is a targeted study, the rate of participation among the CCHIP sample is not an accurate participation rate for the general population.


12. Ibid.

13. The following are data corresponding to Figure 4.1:

<table>
<thead>
<tr>
<th>Income</th>
<th>Food Stamps</th>
<th>Emergency Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;50</td>
<td>54%</td>
<td>23%</td>
</tr>
<tr>
<td>50-74</td>
<td>83%</td>
<td>25%</td>
</tr>
<tr>
<td>75-99</td>
<td>83%</td>
<td>21%</td>
</tr>
<tr>
<td>100-124</td>
<td>61%</td>
<td>11%</td>
</tr>
<tr>
<td>125-149</td>
<td>45%</td>
<td>9%</td>
</tr>
<tr>
<td>150-185</td>
<td>0%</td>
<td>13%</td>
</tr>
</tbody>
</table>

14. The following are data corresponding to Figure 4.2:

<table>
<thead>
<tr>
<th>Income</th>
<th>Food Stamps</th>
<th>Emergency Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;50</td>
<td>44%</td>
<td>44%</td>
</tr>
<tr>
<td>50-74</td>
<td>50%</td>
<td>65%</td>
</tr>
<tr>
<td>75-99</td>
<td>47%</td>
<td>51%</td>
</tr>
<tr>
<td>100-124</td>
<td>29%</td>
<td>32%</td>
</tr>
<tr>
<td>125-149</td>
<td>17%</td>
<td>28%</td>
</tr>
<tr>
<td>150-185</td>
<td>0%</td>
<td>27%</td>
</tr>
</tbody>
</table>


The following are data corresponding to Figure 5.1:

<table>
<thead>
<tr>
<th>Income</th>
<th>Seven sites</th>
<th>Urban sites</th>
<th>Rural sites</th>
<th>Hungry</th>
<th>At-risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 50</td>
<td>40%</td>
<td>43%</td>
<td>39%</td>
<td>40.4%</td>
<td>33.4%</td>
</tr>
<tr>
<td>50-99</td>
<td>39%</td>
<td>40%</td>
<td>37%</td>
<td>38.8%</td>
<td>39.6%</td>
</tr>
<tr>
<td>100-149</td>
<td>24%</td>
<td>24%</td>
<td>24%</td>
<td>23.7%</td>
<td>43.3%</td>
</tr>
<tr>
<td>150-185</td>
<td>15%</td>
<td>16%</td>
<td>11%</td>
<td>14.6%</td>
<td>47.4%</td>
</tr>
</tbody>
</table>

16. The following are data corresponding to Figure 5.2:

<table>
<thead>
<tr>
<th>% Poverty</th>
<th>Pontiac</th>
<th>Hungry</th>
<th>Hungry+At risk</th>
<th>At-risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;100</td>
<td>36%</td>
<td>35.2%</td>
<td>78.4%</td>
<td>43.2%</td>
</tr>
<tr>
<td>100-149</td>
<td>20%</td>
<td>18.4%</td>
<td>52.5%</td>
<td>34.1%</td>
</tr>
<tr>
<td>150-199</td>
<td>14%</td>
<td>13.3%</td>
<td>48.0%</td>
<td>34.7%</td>
</tr>
<tr>
<td>200-299</td>
<td>7%</td>
<td>7.0%</td>
<td>31.7%</td>
<td>24.7%</td>
</tr>
<tr>
<td>300-600</td>
<td>0%</td>
<td>0.0%</td>
<td>24.4%</td>
<td>24.4%</td>
</tr>
</tbody>
</table>

17. The following are data corresponding to Figure 5.3 (total income and food & shelter include the value of food stamps and WIC):

<table>
<thead>
<tr>
<th>Survey Site</th>
<th>Shelter</th>
<th>Food &amp; Shelter</th>
<th>Total Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota</td>
<td>$459</td>
<td>$701</td>
<td>$1,032</td>
</tr>
<tr>
<td>Michigan</td>
<td>$399</td>
<td>$641</td>
<td>$1,029</td>
</tr>
<tr>
<td>New York</td>
<td>$696</td>
<td>$1,016</td>
<td>$1,348</td>
</tr>
<tr>
<td>Connecticut</td>
<td>$436</td>
<td>$713</td>
<td>$919</td>
</tr>
<tr>
<td>California</td>
<td>$394</td>
<td>$704</td>
<td>$1,123</td>
</tr>
<tr>
<td>Florida</td>
<td>$407</td>
<td>$682</td>
<td>$1,023</td>
</tr>
<tr>
<td>Alabama</td>
<td>$240</td>
<td>$524</td>
<td>$956</td>
</tr>
</tbody>
</table>
18. The following are data corresponding to Figure 5.4:

<table>
<thead>
<tr>
<th>Income</th>
<th>Shelter Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-49</td>
<td>64%</td>
</tr>
<tr>
<td>50-74</td>
<td>53%</td>
</tr>
<tr>
<td>75-99</td>
<td>46%</td>
</tr>
<tr>
<td>100-124</td>
<td>37%</td>
</tr>
<tr>
<td>125-149</td>
<td>37%</td>
</tr>
<tr>
<td>150-185</td>
<td>39%</td>
</tr>
</tbody>
</table>

19. The following are data corresponding to Figure 5.5:

<table>
<thead>
<tr>
<th>% Poverty</th>
<th>Shelter Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;100</td>
<td>53%</td>
</tr>
<tr>
<td>100-149</td>
<td>34%</td>
</tr>
<tr>
<td>150-199</td>
<td>27%</td>
</tr>
<tr>
<td>200-299</td>
<td>20%</td>
</tr>
<tr>
<td>300-600</td>
<td>16%</td>
</tr>
</tbody>
</table>

20. If all food expenditures had been totaled, including costs of eating out at restaurants, differences in food expenditures would likely have been far greater between higher and lower income families. This is because the frequency and amount of out-of-home spending on eating is much greater for families with higher incomes.

21. The following are data corresponding to Figure 5.6 (food share includes the value of food stamps and WIC):

<table>
<thead>
<tr>
<th>Income</th>
<th>Food Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-49</td>
<td>94%</td>
</tr>
<tr>
<td>50-74</td>
<td>56%</td>
</tr>
<tr>
<td>75-99</td>
<td>41%</td>
</tr>
<tr>
<td>100-124</td>
<td>33%</td>
</tr>
<tr>
<td>125-149</td>
<td>28%</td>
</tr>
<tr>
<td>150-185</td>
<td>26%</td>
</tr>
</tbody>
</table>

22. The following are data corresponding to Figure 5.7: (food share includes the value of food stamps and WIC):

<table>
<thead>
<tr>
<th>% Poverty</th>
<th>Food Share of Post Shelter</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;100</td>
<td>70%</td>
</tr>
<tr>
<td>100-149</td>
<td>27%</td>
</tr>
<tr>
<td>150-199</td>
<td>19%</td>
</tr>
<tr>
<td>200-299</td>
<td>15%</td>
</tr>
<tr>
<td>300-600</td>
<td>10%</td>
</tr>
</tbody>
</table>

23. The following are data corresponding to Figure 5.8 (percent of income spent of food and basic needs includes the value of food stamps and WIC):

<table>
<thead>
<tr>
<th>Income</th>
<th>Basics</th>
<th>Food share</th>
<th>Shelter Share</th>
<th>Remainder</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-49</td>
<td>97%</td>
<td>48%</td>
<td>49%</td>
<td>3%</td>
</tr>
</tbody>
</table>
24. The following are data corresponding to Figure 5.9 (percent of income spent of food and basic needs includes the value of food-stamps and WIC):

<table>
<thead>
<tr>
<th>Income</th>
<th>Basics</th>
<th>Food share</th>
<th>Shelter Share</th>
<th>Remainder</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;100</td>
<td>86%</td>
<td>33%</td>
<td>53%</td>
<td>14%</td>
</tr>
<tr>
<td>100-149</td>
<td>53%</td>
<td>18%</td>
<td>34%</td>
<td>48%</td>
</tr>
<tr>
<td>150-199</td>
<td>41%</td>
<td>14%</td>
<td>27%</td>
<td>59%</td>
</tr>
<tr>
<td>200-299</td>
<td>31%</td>
<td>12%</td>
<td>20%</td>
<td>68%</td>
</tr>
<tr>
<td>300-600</td>
<td>24%</td>
<td>8%</td>
<td>16%</td>
<td>76%</td>
</tr>
</tbody>
</table>

25. The budget items shown are composite averages for all 1,488 families from all survey sites with incomes below the poverty line. Compared to Figure 5.8, the budget shown in Table 5.2 averages results from all families in the lowest three income ranges in Figure 5.8 (25%-49%, 50%-74% and 75%-99%). For anyone doing research on households with very low incomes (for example, below 25% of poverty), it is often difficult to be certain that all income sources are accounted for. In the CCHIP surveys, many of these very poor households appeared to have expenses that exceeded their income. This is not an uncommon finding in studies of the very poor. However, to reduce our doubt about having missed some income sources for the poorest of the poor, we have excluded from analysis those households with incomes below 25 percent of the poverty level. In addition, in any household where shelter costs exceeded income, the assumption was made that income had been undercounted and therefore, the net post shelter income was set to zero.


28. Ibid.


Description of the Pilot Project

New Haven, Connecticut

The CCHIP pilot study was a targeted, cross-sectional survey, designed to estimate the prevalence of reported food shortages due to insufficient resources (hunger) among families with at least one child under 12 years old. The pilot survey, conducted in New Haven, Connecticut, was confined to a low-income neighborhood (The Hill), encompassing three census tracts.

The sampling frame consisted of the list of addresses of all children under 12 years of age attending schools in the school district serving the Hill and residing in the neighborhood. Each household was screened to determine whether there was at least one child under age 12 and whether the household income was at or below 185 percent of the federal poverty level. It was determined that the pool of households eligible for the study included 2,171 households. A systematic sample was drawn using a random digit start and a predetermined interval.

Interviews were conducted with 403 families; 83 percent of the eligible families in the initial sample were interviewed. Sociodemographic information and information about participation in publicly-funded supplemental food and income programs was collected through face-to-face interviews. In the pilot project, 82 percent of respondents also agreed to have heights and weights of the children measured.

Of the households surveyed, 66 percent were headed by a single parent and 24 percent had two parents. Fifty-five percent of the households were Hispanic, 42 percent were Black, and three percent were white. Fifty-seven percent of the respondents had not completed high school, 18 percent of respondents were employed full-time and 66 percent of households had no one employed. The incomes of all households averaged 75 percent of the federal poverty level. Seventy-five percent had incomes at or below the poverty line. The hunger rate among these families was 18 percent and an additional 47 percent were at-risk of hunger.
Appendix B

Description of the Demonstation Project

Following refinement of the hunger scale, standardized versions of the hunger questions were incorporated into a demonstration project in two survey sites. These surveys were conducted in the city of Seattle and in Yakima County, Washington, from November 1987 to January 1988. Two census tracts in Yakima County (one in the city of Yakima and one containing the entire city of Wapato) and four census tracts in Seattle (two in the Central Area, one in Rainier Beach and one in West Seattle) were selected by identifying tracts in which more than 33 percent of the households were families with children and more than 33 percent of those families lived below the poverty level, according to the 1980 Census. The sampling frames used were constructed from the list of addresses of all children, who were eligible for free and reduced-price lunches (maximum income of 185% of poverty), attending public schools in the district serving each area. The addresses were provided after confidentiality agreements were developed with the school districts. Duplicate addresses as well as addresses that were not in the census tracts to be surveyed were deleted from the sampling frame. A systematic sample was drawn using a random digit start and a predetermined interval.

Seattle, Washington

There were 993 families with incomes at or below 185 percent of poverty having at least one child under 12 years old living in the selected census tracts. Interviews were conducted with 377 families; 93 percent of the eligible families in the initial sample were interviewed.

Fifty-eight percent were single parent households and 28 percent had two parents. Forty-three of the households were Black, 23 percent were Asian, 18 percent were white, 12 percent were Hispanic and four percent were American Indian. Fifty-eight percent of the households had at least one adult member with a high school diploma, 29 percent had at least one full-time employee and 63 percent had no one employed. The incomes of these households averaged 79 percent of the federal poverty level. The hunger rate among these families was 42 percent and an additional 37 percent were at-risk of hunger.

Participation rates in federal food assistance programs are noteworthy: 78 percent of the eligible households received benefits from the Food Stamp Program, 78 percent received free or reduced-priced school breakfasts and 91 percent received free or reduced-priced school lunches.

Yakima County, Washington

The CCHIP survey was conducted in Yakima County. There were 675 families with incomes at or below 185 percent of poverty and having at least one child under 12 years old living in the county. Interviews were conducted with 310 families; 91 percent of the eligible families in the initial sample were interviewed.

Twenty-eight percent were single parent households and 54 percent had two parents. Fifty-three percent of the households were Hispanic, 26 percent were white and 18 percent were American Indian and three percent were of another race. Thirty-two percent of the households had at least one adult member with a high school diploma, 19 percent had one full-time employee and 54 percent had no one employed. The incomes of these households averaged 69 percent of the federal poverty level. The hunger rate among these families was 39 percent and an additional 42 percent were at-risk of hunger.
Appendix C

Description of Seven CCHIP Survey Sites

Alabama
The CCHIP survey was conducted in rural Sumter County by the Alabama Coalition Against Hunger. There were 1,106 families with incomes at or below 185 percent of poverty having at least one child under 12 years old living in the county. Interviews were conducted with 366 families; 96 percent of the eligible families in the initial sample were interviewed.

The average household had about five members; 43 percent of the households were headed by females and 37 percent had two parents. Nearly all households (99%) were Black. While 75 percent of the households had at least one adult member with a high school diploma, only 59 percent had at least one full-time employee and 34 percent had no one employed. Incomes of these households averaged 70 percent of the federal poverty level. The hunger rate among these families was 28 percent and an additional 31 percent were at-risk of hunger.

California
The CCHIP survey was centered in four counties in the Central Valley: Fresno, Kern, Stanislaus and Tulare. It was conducted by the California Rural Legal Assistance Foundation. There were 49,731 families with incomes at or below 185 percent of poverty having at least one child under 12 years old living in these counties. Interviews were conducted with 335 families; 70 percent of the eligible families in the initial sample were interviewed.

The average household had about five members; 19 percent of the households were headed by females and 68 percent had two parents. The majority of the households (76%) were of Mexican American descent. Only 29 percent of the households had at least one adult member with a high school diploma, 45 percent had at least one full-time employee and 47 percent had no one employed. Households' incomes averaged 84 percent of the federal poverty level. Thirty-eight percent of the households had incomes at or below 75 percent of the poverty line. The hunger rate among these families was 36 percent and an additional 32 percent are at-risk of hunger.

Connecticut
The CCHIP survey was conducted in Hartford by the Hispanic Health Council. There were 3,833 families with incomes at or below 185 percent of poverty having at least one child under 12 years old living in the city. Interviews were conducted with 315 families; 92 percent of the eligible families in the initial sample were interviewed.

The average household had about four members; 71 percent of the households were headed by females and 13 percent had two parents. Fifty-six percent of the households were Hispanic (Puerto Rican) and 39 percent were Black. Forty-seven percent of the households had at least one adult member with a high school diploma, only 24 percent had at least one full-time employee and 70 percent had no one employed. The incomes of these households averaged 77 percent of the federal poverty level. The hunger rate among these families was 41 percent and an additional 35 percent are at-risk of hunger.

Florida
The CCHIP survey was conducted in Polk County by Florida Impact. There were 9,901 families with incomes at or below 185 percent of poverty having at least one child under 12 years old living in the county.
Interviews were conducted with 274 families; 59 percent of the eligible families in the initial sample were interviewed.

The average household had about five members; 38 percent of the households were headed by females and 49 percent had two parents. Forty-seven percent of the households were white and 44 percent were Black. Sixty-six percent of the households had at least one adult member with a high school diploma, 70 percent had at least one full-time employee and 49 percent had no one employed. Incomes of these households averaged 87 percent of the federal poverty level. Forty-six percent of the households had incomes at or below 75 percent of the poverty line. The hunger rate among these families was 32 percent and an additional 37 percent were at-risk of hunger.

The average household had between four and five members; 50 percent of the households were headed by females and 40 percent had two parents. Forty-seven percent of the households were Black, 35 percent were white and 13 percent were Hispanic. Sixty-five percent of the households had at least one adult member with a high school diploma, 42 percent had at least one full-time employee and 50 percent had no one employed. The incomes of these households averaged 91 percent of the federal poverty level. Forty-nine percent of the households were at or below 75 percent of the poverty line. The hunger rate among these families was 29 percent, and an additional 39 percent were at-risk of hunger. Of the households with at least one school-age child, 95 percent were participating in the National School Lunch Program. Furthermore, 88 percent were eligible for and receiving free or reduced-price lunches. Since there was no School Breakfast Program in Pontiac, no one was participating, although 88 percent of the families surveyed would be eligible to receive breakfasts free or at a reduced price. Pontiac had the highest rate of participation in the Summer Food Service Program for Children among all the survey sites; 37 percent of the families participated.

Minnesota

The CCHIP survey was conducted in Hennepin County (which includes Minneapolis) by the Minnesota Food Education and Resource Center. There were 7,788 families with incomes at or below 185 percent of poverty having at least one child under 12 years old living in the county. Interviews were conducted with 257 families; 65 percent of the eligible families in the initial sample were interviewed.

The average household had about four members; 46 percent of the households were headed by females and 36 percent had two parents. Forty-five percent of the households were white and 34 percent were Black. Seventy-six percent of the households had at least one adult member with a high school diploma, 42 percent had at least one full-time employee and 51 percent had no one employed. The incomes of these households averaged 88 percent of the federal poverty level. The hunger rate among these families was 37 percent, and an additional 43 percent were at-risk of hunger. Fifty-two percent reported that they got food at food pantries. It is noteworthy that households spent 53 percent of their income on shelter costs.

New York

The CCHIP survey was conducted in two Long Island towns, Riverhead and Brookhaven, by the Nutrition Consortium of New York State. There were 2,595 families with incomes at or below 185 percent of poverty having at least one child under 12 years old living in these towns. Interviews were conducted with 361 families; 80 percent of the eligible families in the initial sample were interviewed.
The initial sample were interviewed.

The average household had about four members; 32 percent of the households were headed by females and 54 percent had two parents. The majority of the households were white (67%), 17 percent were Black and 11 percent were Hispanic. Seventy-nine percent of the households had at least one adult member with a high school diploma, 57 percent had at least one full-time employee and 30 percent had no one employed.

The incomes of these households averaged 122 percent of the federal poverty level. The hunger rate among these families was 24 percent, and an additional 62 percent were at-risk of hunger. Low-income families living in these towns spent a striking 64 percent of their income on shelter costs. It is noteworthy that 61 percent of those who were eligible for free or reduced-price breakfasts did not receive them. They have the lowest participation rate for school breakfast among those eligible of the six survey sites that have a breakfast program.

The First Statewide CCHIP Survey: Massachusetts

The first statewide CCHIP survey was a joint undertaking between Project Bread, the Massachusetts Anti-Hunger Coalition, the Massachusetts Department of Public Health and the national CCHIP project. The survey analyses are being completed and the report will be released in May 1991.
### Parameter Tables for all Survey Sites

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<td>Central Valley</td>
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<td>825,200</td>
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<td>2-stage probability</td>
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<td>Completion Rate among eligibles</td>
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<td>80%</td>
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<td>0%</td>
<td>6%</td>
<td>4%</td>
<td>3%</td>
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</table>

* Number interviewed that were eligible/eligibles
**CCHIP Survey Methods**

*What Methods Are Used In Conducting A CCHIP Survey?*

**The CCHIP Questionnaire**

The core CCHIP Questionnaire contains 105 questions on the following topics: household composition, socioeconomic information, shopping and eating patterns, food emergencies, participation in various publicly-funded programs, household financial information and the health status of children.

**The Survey Population**

The objective of the project's sampling design is to sample low-income families (income at or below 185% of the Federal Poverty Level) with at least one child under 12 years old living within a specified geographic area. Either a simple random sample or a two-stage, area probability sampling strategy with a standard cluster design is employed. If the latter were to be used, primary sampling units (PSUs) would be selected, with probability proportionate to estimated size, following domain formation, using available demographic information. Door-to-door screening is conducted to build a sampling frame in each PSU consisting of all households with incomes at or below 185 percent of the poverty level and having at least one child under 12. Finally, qualifying households are randomly selected into the sample for each PSU, with a probability in each PSU determined so as to achieve an overall, equal probability of selection.

**Sample Size**

The required sample size was determined using standard techniques. In a large population, a sample of at least 400 is necessary to allow for the detection of the prevalence of hunger, with a margin of error (95% confidence interval) of no more than ± 5 percent. We drew an initial sample size of 500, 25 percent more than the 400 interviews needed to ensure an appropriate confidence interval for the estimated hunger prevalence.

**Data Collection**

Community residents with no prior research experience are employed for interviewing positions. National CCHIP staff provide extensive training for the field supervisors and the interviewers. Interviewers directly contact households in the sample. Four call-backs to an address are required on two different days, including at least one evening or weekend day, before a household is classified as non-responsive.

**Data Analysis**

All of the analyses described in this report were performed using the SAS Statistical Software Package. Univariate summaries and bivariate analyses were conducted.

**Quality Control**

There are three levels of quality control of the data. First, field supervisors review the questionnaires for completeness and correct skip patterns. A second edit of each questionnaire is conducted by the central staff who post-code specific questions and follow a series of procedures to detect invalid and nonsensical codes. Second, a double-entry inputting process with field-by-field verification is employed. Third, a computerized cleaning routine that includes skip pattern and consistency checks, as well as recode assignments, is performed.

**Weighted Analyses**

Univariate frequency percentages and means are weighted to take nonresponse into account where necessary.

**Calculation of Standard Error**

Standard errors for prevalence estimates are calculated using the collapsed stratum estimation method when the survey employs a two-stage cluster design. To use this collapsed stratum method, domains (strata) are paired before analysis according to demographic characteristics of the selected PSU.

Standard errors are calculated using standard methods including a sampling fraction adjustment when needed when a simple random sample design is used.
Appendix E

Methods for Estimating National Hunger Rates

From CCHIP surveys carried out in seven sites during 1989-1990 we have overall hunger rates for low-income families (at or below 185% of poverty). Rates are also defined for households in each of six categories defined by income category (< 75% poverty, 75-124% poverty, and 125-185% poverty) and household structure (female-headed and other).

We derive estimates of hunger in low-income families in the United States as weighted combinations of these rates, where the weights are estimated proportion of households in each of the six categories in the nation as a whole. These proportions are obtained from March 1990 Current Population Survey data (published in Current Population Reports P-60 #168 'Money Income and Poverty Status in the United States 1989' Table 23) which yields the number of households of each type (female-headed and other) in each of the poverty categories of interest.

Once national hunger rates were determined using national population estimates by age and poverty status (from Current Population Reports P-60 #168 and P-25 #1058 'State Population and Household estimates'). For these estimates it is assumed, conservatively, that there is no hunger or risk of hunger among families or children in families with incomes at or above 185 percent of the poverty level.

Each of the seven surveys was representative of the population of low-income families (at or below 185% of poverty) with at least one child under 12 in the geographic area sampled. The results of the combined samples can be used as a basis for projecting national estimates of the percent of families with children under 12 who are hungry or at risk of hunger, even though the combined samples are not statistically representative of this population living in the entire United States.

Since the seven sites were chosen to capture national variation of geographic size, population size, proportion of the population living in urban and rural areas, economic structure and geographic location, it is not unreasonable to expect that the sample of 2,335 households randomly selected within their local sites may be similar to other low-income families with at least one child under 12 regardless of where they live.

Poor households (those living below the poverty line) in the CCHIP surveys are distributed in urban, suburban and rural areas in proportions roughly comparable to relevant national distributions. CCHIP households are somewhat larger and a higher percentage of them are minorities. Neither race nor size of the household, however, is significantly associated with hunger in the CCHIP surveys. Therefore, it is not unreasonable to assume that these discrepancies would have little effect on the applicability of the combined CCHIP hunger rates to all low-income families with children under 12. In addition, poor households in the CCHIP samples have nearly the same percentage of single female-headed households as the national average. Since having a single female-head is associated with hunger, it is accounted for in the CCHIP estimations.

These estimates, as with any estimates, should be understood in context. The extent of their accuracy and reliability is constrained by limitations in the available data sources. Nonetheless, these are the best estimates of hunger that are available at this time.
## Health and School Absenteeism: Characteristics of Hungry Families Compared to Non-Hungry Families

<table>
<thead>
<tr>
<th>Variable</th>
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<th>Non-Hungry</th>
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<tbody>
<tr>
<td>In six months prior to survey:</td>
<td></td>
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<tr>
<td>Child Experienced</td>
<td></td>
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<tr>
<td>Unwanted Weight Loss</td>
<td>14%</td>
<td>5%</td>
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<tr>
<td>Any Symptoms of Low Energy Stores *</td>
<td>45%</td>
<td>20%</td>
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<tr>
<td>Any Infection-Based Health Problems b</td>
<td>62%</td>
<td>42%</td>
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<tr>
<td>Any Health Problems - Excl. School Absences c</td>
<td>73%</td>
<td>50%</td>
</tr>
<tr>
<td># of Days Absent From School</td>
<td>6.4</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Note: All comparisons of differences are statistically significant at the p < 0.01 level.

*Low energy stores refer to fatigue, irritability and inability to concentrate.*

*Infection-based health problems refer to dizziness, frequent headaches, frequent ear infections, frequent colds, other infections and frequent visits to the doctor.*

*Any health problem refers to unwanted loss of weight, fatigue, irritability, dizziness, frequent headaches, frequent ear infections, inability to concentrate, frequent colds, other infections and frequent visits to the doctor.*
Appendix G

Sample Design for the Pontiac, Michigan CCHIP Survey

A Simple Random Sample of Two Populations

In order to examine the relationship between income level and the rate of hunger, a simple random sample of households with at least one school-aged child was drawn after stratifying by income. Households with at least one child under 12 who lived and attended school in Pontiac, Michigan were divided into two groups: those with incomes at or below 185 percent of poverty and those with incomes above 185 percent of poverty.

Of the 2,474 households with incomes at or below 185 percent of poverty and at least one school-aged child under 12, an initial sample of 497 households was drawn and 436 interviews were completed. Two interviews were later rejected due to missing data, thus the analyses of low-income families consisted of 434 households.

In addition to this sample drawn from the population of low-income families (at or below 185% of poverty), Pontiac families with at least one child under age 12, whose incomes were greater than 185 percent of poverty were also sampled. The principal objective of sampling this population was to determine the income at which resources were no longer constrained enough to result in food shortages. Because this objective is met by combining the low-income and non-low-income samples, and because the non-low-income sample does not share the constraints of a sample size required to give acceptable margins of error for an estimated sample prevalence, an initial sample size of 300 was deemed sufficient for the non-low-income sample.

Of the 2,553 non-low-income households in the population, a simple random sample of 300 households was drawn. These households had incomes between 186 percent of poverty and 600 percent of poverty (incomes averaged 286% of the poverty level). One hundred and seventy-two households were interviewed and these analyses are based on the results of 169 complete household interviews.

Analyses combining the two samples in Pontiac (e.g., Figure 5.2 and 5.9) are weighted according to the inverse of the selection probabilities for the two strata.
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Appendix I

CCHIP Site

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Aida Galarza

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Nancy Martinez

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Lani Davison
Adelina Diaz
Candida Flores

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Ensworth Foundation
Methodist Church, Board of Global Ministries
Presbyterian Hunger Project

Florida
Florida Impact

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Sophia Davis
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Lt. Governor Buddy McKay
Dorothy Monterio

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Presbyterian Church (USA)
Mazon: A Jewish Response to Hunger

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Massachusetts Department of Public Health
Massachusetts Anti-Hunger Coalition

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Ruth Palumbo
Nathaniel Winship

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The Hyams Foundation
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Michigan Department of Public Health
Pontiac-Area Urban League

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Denise Devaan
Paula Donnelly
Lerae Finn

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General Mills, Inc.
Land O'Lakes, Inc.

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Ilana Samets
Sherry Brandsema
Joan Ward

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US WEST Communications
Washington Water Power Company
Security Pacific Bank
Washington State Food Dealers' Association
Appendix J

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ABOUT FRAC

The Food Research and Action Center (FRAC), a 501(c)(3) nonprofit organization, is widely recognized as the leading national group working for more effective public policies to eradicate domestic hunger and undernutrition. Established in 1970, FRAC today uses a variety of strategies at the national, state, and local levels to bring about an end to hunger in the United States.

- FRAC provides information, training and leadership to a network of hundreds of local groups across the country, and is coordinating the Campaign to End Childhood Hunger in partnership with those groups.
- FRAC engages in ground-breaking research to measure the extent of hunger and its impact on low-income families with children.
- FRAC analyzes federal food assistance policy and serves as a watchdog of regulations and programs affecting the poor.
- FRAC is an authoritative source of information on hunger for the news media, public officials and the American public.

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