Improving the Nutrition Status of Homeless Children: Guidelines for Homeless Family Shelters

A report from The Children's Health Fund

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Table of Contents

Introduction 1

Data Analysis 3

Homeless Families 13

Food Insecurity 17

Homeless Family Shelters 29

Guidelines Overview 40

Literature Review 54

Recommendations 76

Endnotes 77

Appendices
- Guidelines
- Survey Methods
- Advisory Panel
- Best Practices
- Internet Based Resources
- Nutrition Resources
- Screening Tools

Introduction

Considerable pressures on homeless families, limited funding for those who serve them and recent reductions in food assistance programs have made the issue of food and nutrition even more critical in the lives of homeless families. Parents and expectant mothers in family shelters often have difficulty providing adequate food resources for their families. The resulting lack of sufficient nutrition adversely affects the present and future health and development of these children. Homeless parents' efforts to adequately feed their children are frequently hindered by strict shelter practices, such as restrictions or prohibitions on food storage and/or meal preparation. Meals served by shelters sometimes contain substandard nutritional content which may not be suited to the needs of young children. In light of homeless families' often complete dependence on shelters for their meals, restrictions and nutritionally inadequate food may have a considerable effect on a child's physical and psychological health.

The current study is a direct outgrowth of concerns expressed by Health Care for Homeless Children (HCHC) grantees regarding this issue during the previous nutrition initiative. A crucial lesson learned from the 1998 Nutrition Technical Assistance Initiative (TAI) was that health care providers often try to address these deficiencies by advocating for the nutrition needs of their patients but frequently lack the necessary resources to do so effectively. Efforts to change long standing practices of partner institutions are often met with considerable resistance and defensiveness. When these issues were initially raised by the HCHC programs participating in the 1998 TAI, an attempt was made to identify existing resources that could assist programs in their advocacy efforts, but few relevant materials were found. The lack of recognized national recommendations or guidelines for the nutrition policies, procedures and resources in family shelters has been a major impediment for those concerned with this issue and its impact on the health and development of homeless children.

To address this concern, The Division of Community Pediatrics (DCP), Children's Hospital at Montefiore and The Children's Health Fund (CHF) developed "model" nutrition policies and procedures for family homeless shelters as well as practical recommendations and materials to assist health care providers.

The initiative has sought to fulfill four key tasks:

- An assessment of family shelter nutrition policies and procedures using mailed and telephone surveys, a review of relevant literature and

consultation with nutrition and health experts. Surveys were directed to three groups: HCH programs, family shelters and HUD Continuum of Care Coordinators. This assessment includes a description of current shelter nutrition practices and an analysis of their potential impact on the health status of homeless children.

- The development and dissemination of "Homeless Family Facility Nutrition Guidelines" based on survey information, a review of relevant literature and consultation with nutrition and health experts.

- The development of a detailed report including a summary of relevant literature, current family shelter nutrition practices, guidelines and recommendations for shelter nutrition practices and selected examples of "Best Practices" shelters which optimize the nutrition status of children living in family shelters.

- The issuance of nutrition policy recommendations to federal and state governments, homeless family shelters and health care providers.

Data Analysis

Survey of Homeless Shelter Providers

Shelter Description

Two hundred fifty-nine respondents, identifying their facility as a family shelter, provided detailed information about food related shelter policies and general shelter operations. All questions were not answered by all respondents, resulting in varying "denominators" for the percentage calculation of individual items (generally between 240 and 250).

The small number of responses from the roughly 1000 questionnaires distributed (see methodology section) indicates information is provided by a self-selected sub-sample of family shelter facilities. The amount of time necessary to complete the lengthy and detailed questionnaire promotes the impression that responding shelters are among the more motivated and sophisticated in the national homeless shelter network.

The resulting sampling bias should be noted while reviewing survey findings. It suggests there may be a greater degree of problems among shelters nationally than is represented in our small sample. This assertion is supported by the most recent US Conference of Mayors report on hunger and homelessness. For example, the percentage of shelters which do not allow residents to remain in the facility during the day is quite high in the US Conference of Mayors report; only two shelters in our sample report require families to leave during the day, one of which makes exceptions during winter months.

Based on survey response, this subgroup of family shelters can be characterized as small and independently operated, with an average per shelter capacity of 22 families. Although the range of family capacity is 1 to 400, only 8% have greater than a 50 family capacity. The average length of stay per family is 5.2 months; the average allowable maximum length of stay is 8.3 months, with a range of 1 night to no limit. Several transitional housing facilities also offer short-term emergency shelter. Thirty-six percent of the responding shelter facilities consider themselves part of a larger shelter network such as the Salvation Army or Homes for the Homeless.

Sixty-five percent of shelters surveyed accept all two-parent families, although three specified they accept only married couples. Seventy-four percent accept all single parent families and 96% accept single mothers with children. Only 71% of

shelters accept all children regardless of age. The most common age restrictions affect adolescent males. Most shelters with age restrictions accept female children to 18 years of age, but male children only to 12 years of age.

Eighteen shelters (8%) require residents to contribute public benefits (cash, food stamps) to the shelter. Thirty-four percent ask families to meet workfare requirements while in the homeless shelter. A temporary exemption from workfare, reported by 66% of respondents, can be considered important in assisting families to address immediate problems before undergoing job training.

Of the 40 shelters which specified family activity during the day, nearly half (45%) report a significant number of residents going to work. The remaining 55% report that residents are usually engaged in job and housing search. Working parents more often reside in transitional housing for the homeless, both in rural and urban areas.

Cooking Facilities and Food Storage

Survey results show that a majority of shelters participating in this study attempt to meet the nutritional needs of families by providing meals or access to cooking and refrigeration facilities. Again, it must be emphasized that survey respondents represent a self-selected sub-sample of family shelter facilities, resulting in a sampling bias. Among shelters surveyed:

- Twenty-nine percent do not provide families with access to kitchen facilities. Of the remaining shelters, 24% provide private kitchens in individual apartments while 46% provide communal kitchens shared, on average, by ten families. Although communal kitchen facilities are certainly preferable to no kitchen facilities at all, ten families sharing one kitchen poses considerable access difficulties.

- Twenty percent of shelters do not provide any meals to families. At 37% of these shelters, resident families rely on local soup kitchens. The remaining families either have access to cooking facilities within the shelter or utilize restaurants or other sources of food.

- Fifty percent of the shelters surveyed provide three meals per day to residents, 30% provide one or two meals per day, and 20% do not provide any meals. Just over half (51%) also provide two or more snacks per day. Thirty-two percent do not provide any snacks at all.
- Among those facilities that provide meals, 79% attempt to meet special dietary needs, although 6% require a note from a doctor prior to doing so.

- Twelve percent of shelters surveyed do not provide private or shared refrigeration to store food or formula. Twenty-seven percent provide a refrigerator in individual family rooms, while 61% have communal refrigerators. On average, each communal refrigerator is shared by seven families.

- Only three facilities report that the security of stored items is a problem.

- Most shelters rely on the "honor system," although some have staff oversight of refrigerator use. Several rely on labels with the resident's name and the date the item was first stored. One shelter restricts the hours that residents have access to the refrigerator for security reasons. One shelter only allows WIC items to be stored in the communal refrigerator; another only allows milk and infant formula

- Sixty percent of shelters surveyed do not allow residents to store food in their rooms.

- Infant formula is less often restricted; only one in five homeless family shelters surveyed prohibit keeping infant formula in the family room. This restriction poses a serious problem for the health and nutrition of homeless infants

- More than 3/4 of the shelters surveyed provide some form of nutrition education. These include nutrition workshops and basic cooking classes often integrated into other "life skills" programs offered at the shelters.

Despite generally positive findings, it is troubling that a majority of shelters do not allow residents to store food in rooms, a prohibition which extends to infant formula in 20% of facilities. This issue, coupled with a reliance on soup kitchens by nearly 40% of families residing at shelters which do not provide meals, raises a number of concerns regarding the ability of young children to obtain a sufficient amount of nutritious food required for healthy development. Survey results clearly show that the absence of uniform standards regarding nutrition assistance and cooking facilities in homeless shelters has resulted in services of widely divergent resources and quality.

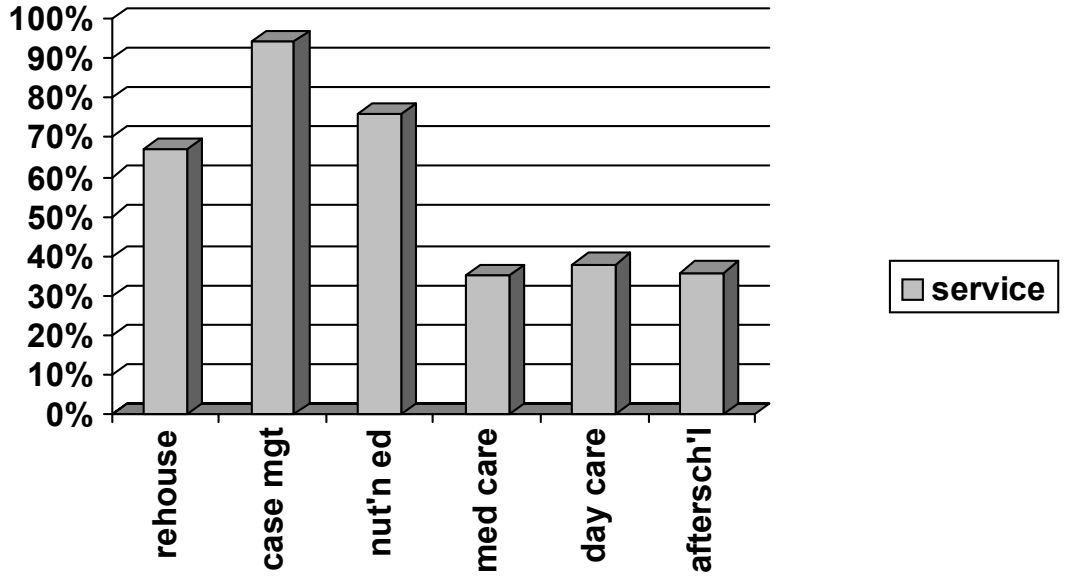
Health care providers can play an important role in identifying shelter practices which are detrimental to the nutrition status and overall health of homeless children. Eighty seven percent of shelters surveyed reported a willingness to

integrate recommendations from medical providers and nutritionists into meal planning, thus providing an opportunity for collaboration. Interestingly, HCH providers had sharply contrasting views regarding the degree of food insecurity among homeless families and their access to food resources. HCH data are outlined in a subsequent section.

Shelter Services

The most frequently provided service is case management, offered by 94% of shelters, followed by assistance with rehousing, offered by 67%. More than half provide some kind of shelter-based education program, such as high school equivalency, and half (50%) provide job training and/or job placement services. More than one third of shelters (35%) provide medical care.

Services for children are notably more scarce. Only 38% of shelters have on-site day care and 36% provide after school programs. This is a considerable source of concern due to the high prevalence of both developmental delay among younger homeless children, and of behavior and academic problems among school-age homeless children (see health status of homeless children). Shelter-based child care resources are also a significant support for homeless parents, providing respite and a safe space for children while parents search for housing and attempt to address other immediate needs.



Nutrition Status And Support

Our respondents generally described nutritional needs and resources as not substantially changed from1999 to 2000. One fourth of shelters reported that the nutritional status of shelter residents was improving; 69% that it was stable from last year; and only 6% that it had worsened. Regarding local food and nutrition resources, 21% reported that these seem more available, 64% that they remain roughly the same as last year and 12% that resources are more scarce.

Few shelters place restrictions on the residents' access to support services: 97% do not restrict WIC applications; only six shelters do not allow application. Two shelters (1%) restrict residents' application to public assistance and Medicaid entitlements. These shelters also restrict WIC application. This restriction is extremely problematic. As discussed in the section on the nutrition status of homeless children, a study found that, holding receipt of cash "welfare" benefits and food stamps constant, whether or not a family receives WIC potentially determines whether the homeless child will have nutritional deficiencies.

More than 3/4 of the shelters (76%) provide nutrition education programs. These include ongoing nutrition education courses and workshops, home economics curricula, a "culinary arts" program, special courses in microwave cooking and the provision of nutrition information packets. Some shelters integrate nutrition information into other programs, such as parenting skills, a "young mom" program, and "life skills" programs. Participation in nutrition education programs is required at several shelters.

Many of the shelters surveyed seek to improve the nutritional status of residents, using a wide variety of strategies. Some nutrition practices reported by individual shelters are: an on-site vegetable garden, a vegetable gardening course for children, involving local farmers in the shelter, adopting the Child and Adult Care Food Program guidelines for meal preparation, having a nutritionist on staff and providing breast pumps on request. Several shelters rely on volunteers to conduct nutrition education sessions or make use of community resources local to the shelter. Many take residents to markets to teach food purchasing skills (such as buying nutritious items and keeping within a budget).

Many shelters address nutritional concerns by serving healthy foods such as whole grain snacks, fresh fruits and fruit juice, and using low-sodium food preparation. Some shelters also try to accommodate ethnic-culturally sensitive food choices, or restrict access to less healthy alternatives by limiting sweets and fried or processed foods. Several shelters emphasized their integration of a pediatrician or other health provider in the shelter operation to address nutrition

concerns. Again, the health care providers responding to the survey presented a contrasting impression about these issues.

Shelters Which Do Not Provide Meals or Snacks

Of the 259 shelter facilities which responded to our questionnaire, 42 (16%) reported they do not provide either meals or snacks. Other responses of these shelters were examined in detail. Facilities range in size from a maximum occupancy of 4 to 189 families, with an average maximum occupancy of 31 families. The typical family has two children. These shelters have an average length of stay of 9.2 months and an average maximum length of stay of 9.6 months, implying families are efficiently rehoused within the time frame typical for a family shelter.

All but one shelter not supplying meals or snacks provide case management services, 62% provide assistance with rehousing and almost half (48%) help parents with job training and placement. Only one third have day care services and roughly the same number (36%) have after school programs. One third are linked with a health provider. These findings are representative of the availability of services among our 259 respondents. Eighty five percent of shelters which do not provide meals or snacks report that at least some of the families need help obtaining food when they first enter the shelter. Nearly three fourths of the staff (73%) report that both the nutritional status of their residents and the availability of food in the community is unchanged from last year.

Over three fourths (83%) of shelters which do not supply meals or snacks provide either an apartment with a kitchen or a single room with kitchen to shelter residents. When a kitchen or refrigerator is shared (12%), it is with no more than five other families. Nearly half (48%) provide nutrition education either at the shelter or by referral.

Only two shelters do not provide meals, snacks or cooking facilities. One is a small facility (four families who stay for an average of three months) which provides a refrigerator. The other shelter, however, does not provide any refrigeration. This shelter has a capacity of 60 families staying an average of nine months. Families use a local soup kitchen for meals. This shelter does not provide medical services, day care or after school programs.

Two facilities require that families contribute some of their WIC and food stamp benefits to the shelter. Both provide shared kitchens for food preparation and shared refrigerators for food storage.

Overall, few facilities surveyed made no effort to assist families with nutrition. Of greater concern is the quality of food provided by shelters, local soup kitchens and pantries. Often this food is high in fat, cholesterol and carbohydrates, with little protein and few fresh fruits or vegetables. A lack of flexibility exhibited in shelters is also problematic. Shelters frequently had difficulty meeting the special nutrition needs of infants and young children and resisted modifying meals and snacks for individuals with special dietary needs, such those with as diabetes.

Knowledge of Federal Programs

In light of the small self-selected sample responding to our survey, it is especially notable that so few shelters were well-informed, or even aware, of federal nutrition programs and funding opportunities. Only 18% reported themselves to be knowledgeable concerning US Department of Agriculture (USDA) nutrition programs directed at homeless children; 24% reported a slight awareness; and 58% had no knowledge of relevant USDA activities at all. Of the 210 respondents answering a question which asked whether they had previously applied for funding from the USDA's Homeless Children Nutrition Program (HCNP), 49% did not know whether they had applied, 41% had not applied and 10% had applied. Only one applicant which applied for an HCNP grant was denied.

Similarly, only 20 respondents (9%) reported having applied for a Child and Adult Care Food Program (CACFP) grant. Eighteen of these 20 received funding, with the remaining two shelters neglecting to note application outcome information. This low level of participation may be due in part to the recent amendment of the CACFP program to allow funding of child nutrition services in homeless shelters. The William F. Goodling Child Nutrition Reauthorization Act of 1998 eliminated the Homeless Children Nutrition Program as a separate program and transferred it to the Child and Adult Care Food Program, effective July 1, 1999. Under the Act, emergency shelters may be reimbursed for meals and snacks which are provided to child residents under the age of 12. Migrant children age 15 or under and children with disabilities, regardless of age, are also eligible for CACFP funded meals.

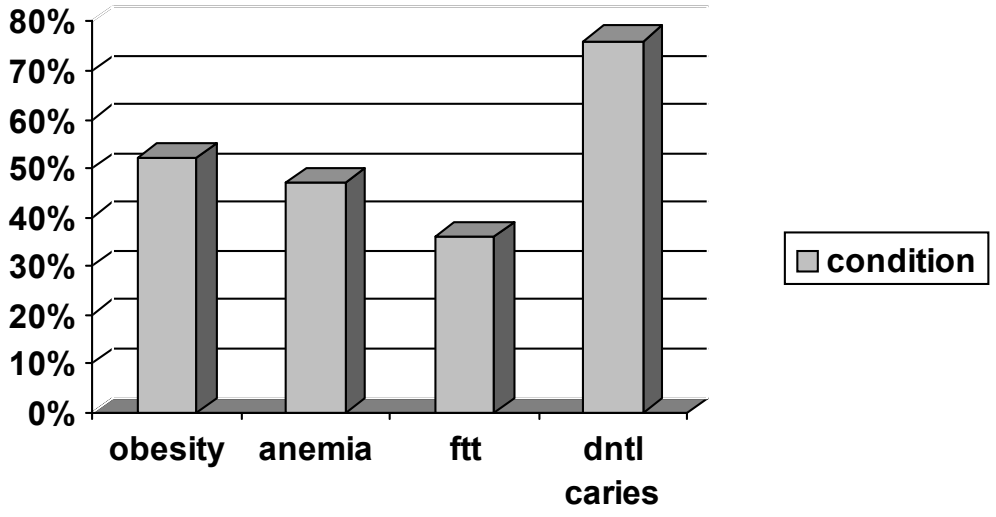
These data clearly show more outreach is necessary to ensure that shelter providers are aware of federal resources intended to improve the nutritional status of homeless children and families.

Survey of Health Care for the Homeless Providers

Roughly 130 surveys were mailed to Health Care for the Homeless (HCH) grantees. A substantial effort was made to obtain a high response rate from BPHC funded providers, sending out three waves of surveys three weeks apart. Sixty-seven responses were received, a response rate of just over 50%.

Nutrition Status of Homeless Children

Diet and nutrition-related morbidities are considered a serious problem by health care providers to the homeless. Seventy percent of our respondents report that shelter residents have insufficient food and 92% report concerns about their eating habits. Specific concerns include prolonged bottle feeding (reported by 59% of our respondents), obesity (reported by 52%), anemia (reported by 45%) and failure to thrive (reported by 36%). More than three-fourths (76%) of health providers report that the homeless individuals they treat have significant dental caries.



Impressions of Shelter Nutrition Services

When asked to describe the shelters with which they work, health care for the homeless providers cited the following issues:

Often no exceptions are made for special nutritional needs (29%). Respondents specified residents with diabetes and/or the special nutritional needs of young children as primary areas of concern. Two providers noted they can get special diet modifications for diabetes but only with formal medical documentation. This contrasts reports from shelter staff responding to our survey.

While the data do not allow direct comparison of the responses of shelter staff and health providers for specific shelters, the impression is one of problematic integration of the two service providers. This impression is reinforced by health care providers' concerns regarding shelter food. One fourth of health care provider respondents reported the nutritional content of shelter food to be a major problem. One health provider even specified that shelter meals set a "poor example" for the residents.

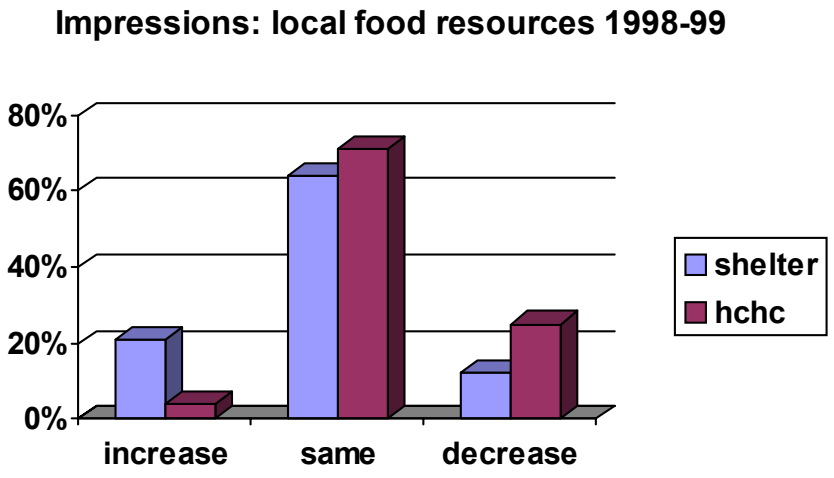
Health providers were more positive about nutrition education provided at shelters. Nearly all providers revealed an understanding that what occurs at the shelter has implications for the way that the family will manage nutrition issues in the future. They reported that 46% of the shelters they serve help families access WIC, food stamps and food pantries.

Food Insecurity

Health Care for the Homeless (HCH) providers report that homeless families have considerable difficulty accessing nutrition assistance services: 35% reported their patients encountered barriers to receiving supplemental nutrition through WIC; 56% report problems receiving food stamps and 67% report problems accessing emergency food services. There was a considerable contrast between the views of HCH providers and shelter providers regarding the availability of local food resources. Twenty-five percent of HCH providers felt that local food resources had declined considerably in the past year, compared to only 12% of shelters surveyed. Similarly, 21% of shelter providers felt that food resources had actually improved, while only 4% of HCH providers felt this to be the case.

Among the specific problems cited by HCH providers were: reports that homeless families have difficulty obtaining food stamps because they lack a permanent address; inadequate public transportation which often acts as a barrier to accessing community nutrition resources; lack of food storage and cooking

facilities which limited their ability to fully utilize food assistance resources.



Continuum of Care Coordinator Surveys

The response rate for the HUD Continuum of Care Coordinators survey was unexpectedly low, with an uneven geographic distribution of responses. Twenty states were not represented and states with large urban centers account for only 20% of the responses. Those responding did not consistently answer the same set of questions, further reducing the number of responses for specific items. These problems raise the strong possibility that the results are not representative of the group being surveyed. An analysis of the Coordinators of Care survey is therefore not included in this report.

Homeless Families

Persistence of Family Homelessness

Despite nearly a decade of record economic growth and prosperity in the United States, the number of homeless families has remained persistently high. The most recent US Conference of Mayors Study on Hunger and Homelessness in American Cities found that homelessness among families continues to rise. In 1999, requests for shelter by homeless families increased by 17%, with 68% of the 26 cities surveyed reporting an increase.[1] For many families homelessness is not simply a short term crisis. It often involves long periods of residential and personal instability resulting in prolonged cycles of homelessness. In a 1999 Department of Housing and Urban Development study, half of homeless families surveyed had been in the shelter system previously: at least twice (27%) or three or more times (23%).[2] As a result, for close to a decade, the US Conference of Mayors has reported that families constitute the fastest growing portion of the homeless population. Homeless families currently comprise close to 40% of the nation's homeless population with children accounting for two thirds of this number.[3]

A recent study by the Better Homes Fund estimated that there are approximately 800,000 homeless children in the United States. This figure is based upon US Department of Education data which show that the nation's public schools served 400,000 homeless children in 1998. Since more than half of all homeless children are under the age of six and not yet in school, we can presume that there are a minimum of 800,000 children who are homeless.[4] Another recent study conducted by the Institute for Children and Poverty estimated that as many as 400,000 families with 1.1 million children are homeless during a given year.[5]

Characteristics of Homeless Families

The Institute for Children and Poverty developed the following list of characteristics shared by typical homeless parents in the United States:[6]

- **Is a young, unmarried mother with two or more children averaging five years of age:** The problem of family homelessness is inextricably linked to the dramatic rise in the number of young, single mothers living in poverty. The vast majority of homeless families, close to 85%, are headed by single women in their mid-twenties with two to three children

averaging five years of age. Young children are over-represented among homeless children. In fact, 42% of all children in shelter are under the age of five compared to 34% of all children nationally.[7]

- **Has not completed high school, in many cases dropping out due to pregnancy:** Most homeless mothers begin their families when they are quite young. Specifically, 52% of homeless mothers interviewed in a recent 10 city study had their first child when they were nineteen or younger. As a consequence, many young homeless mothers fail to obtain an adequate education. Forty seven percent of those interviewed cited pregnancy as the primary reason for dropping out of school.[8] This pattern was not limited to large urban centers. The Department of Housing and Urban Development's (HUD's) recent National Survey of Homeless Assistance Providers and Clients (NSHAPC) found that 53% of homeless parents nationwide have less than a high school education and cited pregnancy as the primary reason for not completing school.[9]

- **Is unemployed:** Given their relative lack of education and the difficulties that many young homeless mothers face in obtaining child care, it is not surprising that a recent national study found that only 29% of homeless clients in families reported working.[10] As a result of welfare reform, homeless mothers are increasingly being required to find work despite their lack of education and job skills. These jobs are often minimum wage, entry level, service sector jobs that do not pay a livable wage or offer adequate benefits.

- **Is dependent on public assistance**: A recent study involving close to eight hundred homeless parents in ten cities, found that the majority (84%) of homeless families received some form of public assistance. More than half (51%) of homeless parents cited public assistance - including Temporary Assistance to Needy Families (TANF); Food Stamps; Supplemental Nutrition Program for Woman, Infants and Children (WIC) and Medicaid - as their only source of income. Close to 60% of those interviewed were currently receiving TANF, while a majority (81%) had previously received TANF or AFDC benefits.[11]

- **Lives in poverty:** Homeless families are among the poorest families in the nation. The NSHAPC study found that homeless families reported a mean income of $475 during the 30 days prior to their being interviewed. This is less than 50% of the poverty level for a family of three.[12]

- **Has children who suffer from chronic health problems:** Homeless children experience increased levels of acute and chronic health problems. For example, 38% of homeless children in New York city present symptoms of asthma - almost six times the rate of all children nationally (7%).[13] Compared with housed poor children, homeless children often experience increased developmental delays, anxiety, depression and behavioral problems along with markedly lower educational achievement.[14]

- **Has been the victim of domestic violence:** Incredibly high rates of domestic violence in homeless families are among the most disturbing recent findings. According to a study by the Better Homes Fund, 63% of homeless mothers have been violently abused by an intimate male partner and an additional 25% have been physically or sexually assaulted by someone other than an intimate partner.[15] Domestic violence is often a primary cause of family homelessness. Abusive male partners are frequently the primary wage earner and women fleeing abuse are usually unable to afford independent housing. Documentation necessary to sustain eligibility in entitlement programs such as Medicaid, food stamps, and WIC are often left behind, interrupting health care and nutrition for the family.

- **Has lived doubled up with family or friends prior to becoming homeless:** Many families who become homeless have experienced long, often repeated periods of residential instability. Their entry into the homeless shelter system is often the last stop following repeated stays with extended family members and friends. Close to 45% of homeless families were doubled or tripled up with family and friends prior to entering the shelter system. Almost half (48%) of those interviewed had been in their last residence for under six months prior to becoming homeless.[16] Few families (2%) resort to living on the streets or abandoned buildings before entering an emergency shelter. Unlike single homeless individuals, families often avoid the streets at all costs for fear of their children being harmed or of losing them to the foster care system.[17]

- **Was evicted from her last residence or left due to overcrowding or domestic violence:** When asked to identify the primary reasons for leaving their last residence, 34% of those participating in the NSHAPC study cited inability to pay rent and eventual eviction as the main causes of their homelessness. Domestic violence was the second most common reason, cited by 13% of those interviewed.[18] Among those who had lived doubled or tripled up with family or friends, a majority cited disagreement

with a member of the household (50%), overcrowding (33%) or domestic violence (13%) as their primary reasons for entering the shelter system.[19] Often, this cycle is repeated several times before a family achieves sufficient personal and financial stability to obtain permanent housing. Twenty three percent of homeless families have been homeless three or more times.[20]

- **May not get enough to eat.** In the 30 days prior to the NSHAPC interview, 24% of homeless clients in families reported that they were hungry but did not eat because they could not afford enough food.[21] Considering the growing number of children under five in the homeless shelter system, it is clear that undernutrition places the health and development of these vulnerable children at extreme risk.

Numerous research studies have confirmed homeless families, and particularly young children, to be at high nutritional risk. Usually a period of substandard living circumstances, long-term transience, stress and food insecurity precede their entrance into the shelter system. By the time a family reaches a shelter, it is likely that their nutrition status has already deteriorated as a result of often precarious living conditions, the considerable stressors to which they are subjected and their limited education regarding nutrition. Once they are accepted into the shelter system, the nutrition status of many families may often decrease further due to their continued limited access to food and restrictive shelter rules for food storage and preparation.

Some shelter residents are at particular risk for malnutrition: these include infants and young children, breast-feeding mothers and anyone with special dietary needs due to problems such as food allergies and diabetes. The effects of malnutrition can be profound and lasting. Growth delays and anemia in young children have been shown to have a long-term effect on cognitive capacities, even after the problem is corrected. Their impact on these children's overall development and school performance, especially in poor families with less resources to help their children compensate for these early deficiencies, may be substantial. Further, hunger in pre-school and school-age children may interfere with concentration and attention, further placing the child at risk of school failure.

The literature on the health and developmental status of homeless children, which will be reviewed in detail in a subsequent chapter, consistently shows that sheltered homeless children have a far higher than typical rate of developmental, behavioral, emotional and school problems. There is every reason to believe that adequately addressing their nutritional needs will have both health and

developmental benefits for the children, and may reduce long-term public expenditures for special education and rehabilitation services.

Food Insecurity

Diminishing Food Resources for the Homeless

The nutrition needs of homeless families and the ability to effectively address these needs cannot be examined in isolation. Instead, they must be examined in the broader context of food insecurity affecting families nationally and the diminishing level of resources that are devoted to addressing the nutrition needs of the poor. Recent reports from the General Accounting Office (GAO) have outlined the increasing obstacles homeless families face in enrolling in the Food Stamp Program. This decreased food stamp usage, due in part to changes initiated under welfare reform, has put an increasing strain on the private non-profit food assistance system that has served as a primary support for homeless families. These factors, coupled with restrictive shelter practices regarding the availability of cooking and food storage facilities, have contributed to increasing food insecurity among the homeless.

Persistent Food Insecurity

Despite the strength of the US economy in recent years and the existence of a broad array of federal and state programs directed at the nutritional needs of families, a considerable portion of the nation's families are unable to obtain a sufficient amount of food to meet their most basic needs. According to a recent USDA study, rates of US food insecurity between 1995 and 1998 have remained virtually unchanged during this period despite the strong gains in employment and the unprecedented growth of the economy.[1]

In 1998, roughly 10.5 million US households (10.2 % of all households) were food insecure, meaning that "at some time during the previous year they were uncertain of having, or unable to acquire, adequate food sufficient to meet basic needs at all times due to inadequate household resources for food". Approximately 36 million persons lived in these food insecure households, with children accounting for nearly 40% of this group. The study also determined that the highest levels of food insecurity existed in households comprised of single women with children. Households headed by single women experienced food insecurity at three times the rate (31.9% vs 10.2%) of all US households. [2]

While preliminary USDA figures for 1999 have shown a slight decrease in the levels of food insecurity in all US households, they have also highlighted a disturbing increase in the levels of food insecurity among the poor. Despite the overall decline in the number of US households living below the poverty line, the

percentage of poor households experiencing food insecurity increased from 35.4% in 1998 to 36.7% in 1999.[3]

Fraying Food Safety Net

For those families who remain in poverty, access to adequate amounts of food, either from governmental or private sources has markedly declined in the past four years and has resulted in persistent and increasing food insecurity among the poor. According to the US Conference of Mayors 1999 Status Report on Hunger and Homelessness, requests for emergency food assistance by families increased in 80% of cities surveyed by an average of 15%.[4]

The escalating demand for emergency food assistance is increasingly being met by overburdened community based food programs rather than by traditional governmental sources of support such as food stamps. Catholic Charities USA recently reported that the number of people receiving emergency food assistance at its soup kitchens, food banks and other food services surged 32% in 1999.[5] Reports by Second Harvest and other hunger relief organizations showed similarly dramatic increases in requests for emergency food assistance along with a diminished capacity to meet this need. The U.S Conference of Mayor's study found that in 73% of the cities surveyed, emergency food assistance facilities have had to decrease the number of bags of food provided and/or the number of times families can receive food due to their diminished level of resources. On average, 19% of requests for food assistance by families have gone unmet. [6]

Hunger and Homelessness

Homeless families are at considerably higher risk of food insecurity and hunger than the general population due to their tenuous living conditions, their extremely limited resources and the difficulties often faced in meeting the administrative requirements of mainstream, government funded food programs. The Housing and Urban Development Department's 1999 National Survey of Homeless Assistance Providers and Clients found that a large proportion of homeless families encounter considerable difficulties in obtaining a sufficient amount of food to meet their basic needs. The study found that:

- Fifty percent of homeless families report they usually eat two or less meals a day and 17% report they usually only eat once a day.

- Forty percent of homeless families reported that in the last 30 days they had gone one whole day without anything to eat at all.
- In the 30 days prior to the NSHAPC interview, 24% of homeless clients in families reported that they were hungry but did not eat

because they could not afford enough food.[7]

Two studies, conducted over a decade apart, show the intractable nature of this problem and the inadequacy of our efforts to address hunger among homeless children. The first study, conducted in 1990, compared the dietary intake and episodes of hunger among 192 homeless and 194 housed poor children in Los Angeles. Homeless children were significantly more likely to have gone hungry during the prior month (23% vs. 4%); more than one fifth (21% vs. 7% respectively) did not have enough to eat because of lack of money.[8] The persistent vulnerability of homeless children to hunger and malnutrition was recently reaffirmed in a 1999 study conducted by the Institute for Children and Poverty that found homeless children experiencing hunger at a rate nearly five times that of all children nationwide. [9]

The severity of hunger and the risks associated with malnutrition are also dependent, in part, on the age of the child. For school age children, the school breakfast and school lunch programs offer some measure of relief. Unfortunately, more than half of homeless children are of pre-school age. Young, pre-school age children are almost entirely dependent on their families' ability to obtain a sufficient amount of food to meet their needs. Meals may be available to children participating in pre-school or day care through the Child and Adult Food Care Program, yet slightly over half (52 %) of pre-school age children (3 to 5 years old) in homeless families do not attend any form of pre-school regularly. Infants and toddlers in homeless families (0 to 2 years old) are even less likely to do so with only 19% participating in day care.[10] Instead, most young children spend their day with their parent, often outside the shelter facility in which they reside. The US Conference of Mayors Study found that in 62% of the cities surveyed homeless families may have to spend their daytime hours outside the shelter they use at night.[11]

This greatly increases the likelihood that families, often consisting of a single mother with her pre-school age children, will not have an appropriate place to feed their children and will, in most cases, resort to a combination of soup kitchens, convenience stores and fast food restaurants. The lack of food storage ultimately puts a greater burden on homeless families very limited resources by necessitating reliance on fast and convenience type foods which are more expensive and less nutritious.

The Consequences of Restrictive Shelter Policies

Despite the obvious health and nutritional benefits which could be achieved by allowing food to be stored in shelter rooms and by making basic food storage and preparation facilities available to families, a considerable number of shelter facilities refuse to implement even the most rudimentary changes to their shelter rules and policies. A HUD study examining where homeless families obtain their food determined that only 17% of homeless families reported eating food they cooked at the shelter in which they were residing.[12] These policies create considerable difficulties for families trying to provide a healthy, nutritious and palatable diet to their children. These difficulties are further exacerbated in shelters which do not provide on site meals.

Even shelter facilities providing three daily meals often do not adequately meet the unique nutritional needs of infants and young children. Highly regimented meal times combined with a lack of access to alternative food resources severely limit a parent's ability to provide the frequent feedings required for the healthy development of young children, particularly those children with special dietary needs. The inability to provide nutritious snacks between meals often results in recurrent bouts of hunger for children and a feeling of helplessness among parents. Faced with rigid rules that do not take into account the needs of young children, homeless mothers often risk expulsion by challenging rules which they feel undermine their parental authority. A recent study found that women in shelters are rarely involved in meal planning, selection and preparation. Many women described their children as fussy eaters and spoke about their inability to be responsive to them in terms of food choices and availability of food outside of stipulated meal times. In addition, the studies' authors noted that a number of mothers admitted taking food back to their rooms despite the fact that this was a clear violation of shelter rules. Often this was done in order to provide snacks for their children.[13]

In addition to the obstacles posed by restrictive shelter policies, homeless families also face increasing barriers to accessing mainstream food programs. One recent development that is particularly troubling is the decreasing level of participation in the Food Stamp and WIC program over the past four years. For example, WIC enrollment has increased every year, from its inception in 1974 up to 1997. From 1997 to 2000 the program experienced three straight years of declining participation.[14] The decline in Food Stamp enrollment will be discussed in detail below.

Any serious attempt to address the nutritional needs of homeless children, and of poor children in general, must propose some remedy for the increasing difficulties

poor families face in accessing and utilizing mainstream nutrition assistance programs.

Food Stamp Program

"We've been fortunate during the last several years to experience economic growth virtually unprecedented in our lifetimes. Expanded job opportunities have allowed many people to go off the food stamp rolls and enjoy the satisfaction of feeding their families out of their own living wages. On its face, a drop in food stamp participation should be a good thing. Food stamps were designed -- and have always been used -- as a short-term solution...a transitional tool, not a lifestyle.

But that's only part of the story. If you look closely at the numbers, you'll see that the food stamp rolls are actually declining five times faster than the poverty rate. Which means that there are many people out there who qualify for food stamps...but, for one reason or another, are going undernourished rather than take advantage of the program. What's more, many of those people are among our most vulnerable, the elderly, children and legal immigrants.

The question is why? Certainly, there are some bureaucratic and administrative barriers. But we think that one of the biggest factors is information or lack of it. A lot of people simply don't know they're eligible for food stamps...or don't know how or where to apply. A lot of them don't know that you can be working and still receive food stamps. Many were confused by the recent changes in the welfare system, mistakenly believing, sometimes even led to believe that being ineligible for welfare meant you were ineligible for food stamps."

August 17, 1999 Secretary of Agriculture Dan Glickman
Baltimore Food Stamp Education Campaign Roll Out

The Food Stamp Program is the cornerstone of the US Department of Agriculture's domestic food assistance programs. The program serves as the nation's primary means of combating hunger and malnutrition. Food stamps are available either in the form of coupons or electronic benefits transfer cards. Food stamps enable low income families and individuals to purchase nutritious low-cost meals at grocery stores and other USDA sanctioned food distribution sites. Most food stamp households are not allowed to use vouchers to purchase prepared meals. Homeless families and individuals are exempted from this policy

and are able to use food stamps to purchase prepared meals from a limited number of authorized restaurants. (7 *C.F.R. §274.10 (G)).*

Food stamp eligibility is determined by household income and assets, along with individual employment and immigration status. The 1996 Welfare Reform Act severely limited the eligibility of legal immigrants and unemployed, single, able-bodied adults without children. The program is a federal-state partnership, with the USDA's Food and Nutrition Service (FNS) covering the full cost of food stamp benefits and roughly half the states' administrative expenses. States are responsible for administering the program, including determining applicants' eligibility and calculating and issuing benefits.

For many low-income households, food stamps provide a major share of the family's total purchasing power. For the average food stamp household consisting of a single female head of household with two children, food stamps comprise about 25 percent of the family's resources.[15] Despite the obvious importance of the Food Stamp Program to the nutrition status and overall health of low income and homeless families, approximately 40% of families eligible for food stamps choose not to participate in the program.[16] In spite of persistent food insecurity, a growing number of low income families have abandoned the Food Stamp Program and have become increasingly reliant on non-profit emergency food assistance programs that struggle unsuccessfully to keep up with the mounting demand.

A recent study by America's Second Harvest found that over the past four years, food stamp participation has declined by more than 33 percent to a participation level of 17 million participants during the first quarter of 2000. The study concluded that while part of this decline can be attributed to a strengthening economy, this cannot adequately explain how " in the face of persistent food insecurity and rising demands placed on food banks, soup kitchens and food pantries, the nation's primary source of nutritional support has reached its lowest level of usage in over 20 years".[17] A recent GAO report examining this discrepancy confirmed that "the need for food assistance has not diminished: rather, needy individuals are relying on sources of assistance other than food stamps."[18]

Food Stamps and Child Nutrition

To a considerable extent, the Food Stamp Program is a child nutrition program; more than half (55.7%) of all recipients are children aged 17 and under. Thirty four percent of children on the program are pre-school age (under age 5).[19] One cannot underestimate the program's importance to the overall health and well being of poor, and particularly homeless, children for whom it provides an essential resource. The USDA estimates that children who receive food stamps enhance the nutritional value of their diets by 20% to 40%. It therefore serves as one of the nation's primary safeguards against childhood malnutrition.[20]

Despite its importance, a recent GAO report examining the ongoing decline in Food Stamp program participation found "a growing gap between the number of children living in poverty (an important indicator of children's need for food assistance) and the number of children receiving food stamp assistance". From fiscal year 1994 through fiscal year 1997, the number of children receiving food stamps declined by an estimated 2.5 million. In particular, during fiscal year 1997, the study found the number of children living in poverty dropped by 350,000 (or 3 percent) while the number of children participating in the Food Stamp Program dropped by 1.3 million (or 10 percent). As a result, the percentage of children living in poverty who received food stamps declined from 91.4% to 84.1%, accounting for 48% of the total decline in participation during fiscal year 1997.[21]

The GAO study also found this "growing gap between need and assistance" has not equally affected all food support programs directed at children. For example, the number of children served free lunches in the USDA's National School Lunch Program increased by 6% from fiscal year 1994 through fiscal year 1997, while the number of school age children participating in the Food Stamp Program declined by 18% - roughly 5 million more children obtained free lunches than food stamps in fiscal year 1997. In light of the increased nutritional vulnerability of impoverished young children, it is even more troubling to learn from the GAO study there was a 16% decline in food stamp usage amongst pre-school aged children from 1996 to 1997.[22]

Food Stamp Participation and Welfare Reform

While a direct causal relationship cannot be proven, it is clearly evident that the steepest declines in Food Stamp program participation occurred following the implementation of welfare reform in 1996. A recent USDA study examining the effects of welfare reform concluded that the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) "dramatically transformed and continues to transform the food assistance landscape in the United States". The ensuing reductions in individual food stamp benefits and newly enacted

restrictions in eligibility, resulted in more significant cuts in the food stamp program than from any other program. Despite these cuts, the Food Stamp program remains a central component of the post-welfare social safety net. In fact, the replacement of Aid to Families with Dependent Children (AFDC) with a nonentitlement program (Temporary Assistance to Needy Families (TANF) leaves the Food Stamp program as "one of the only remaining entitlement programs available to all low income households". [23]

Because of their extreme poverty, a majority of homeless families are eligible for food stamps, yet relatively few actually receive them. A recent study published by the Chicago Coalition for the Homeless found that 43 percent of the homeless families interviewed were not enrolled in the Food Stamp Program.[24] This is a startlingly low level of participation considering the significant food insecurity and hunger experienced by most homeless families. This lack of participation can be explained in part by the fact that as a result of welfare reform, significant barriers have been erected at the state and local level that effectively prevent many low income people from getting the assistance they need.

A recent GAO report examining the decline in food stamp usage concluded that "numerous state and local governments have implemented stringent policies designed to reduce their TANF caseloads. These policies have restricted low-income families' access to food stamp benefits".[25] Recent violations of Food Stamp regulation by the City of New York serve as a perfect example. Prompted by complaints of systemic diversions from applicants applying for welfare and food stamps, USDA officials investigated New York City welfare offices in November and December 1998. They found evidence of numerous illegal diversionary policies and practices that violated federal food stamp laws.[26] According to the USDA findings, New York City welfare workers:

- Encouraged or pressured applicants to withdraw their welfare applications and automatically withdrew the applicants' food stamp applications as well. Applicants were not informed of their right to apply for Food Stamp benefits independent of welfare.

- Illegally required applicants to search for jobs and meet other TANF related eligibility requirements before allowing them to apply for Food Stamp benefits.

- Did not make food stamp applications available nor allowed applicants to apply for food stamps during their first visit as required by law. Workers often refused to accept applications because it was "too late" in the day and told applicants that expedited food stamps were no longer available.

The GAO report also found that such exclusionary practices were fairly widespread. For example, using the comparable disqualification provision of the Welfare Reform Act, at least seven states have policies that improperly remove eligible households with children from the food stamp rolls as a sanction for a TANF violation by an individual member. As a result, these states can disqualify a homeless individual and their family for not complying with TANF's work requirements, even if the participant is exempt from work requirements under the Food Stamp rules. According to FNS regulations, only the noncomplying individual may be disqualified from the program.[27]

The report concluded that many states have misinterpreted welfare reform as a mandate to cut people off from food stamps in the process of moving them into the workforce and off welfare. The increasing number of examples of such misinterpretations recently prompted the former undersecretary of the USDA, Shirley Watkins, to note "There was a misreading of what the food stamp program was all about. It's a nutrition assistance program, not a welfare program. But in an era of pushing people from welfare to work, the focus was on work."[28]

Barriers to Food Stamp Enrollment

A recent General Accounting Office (GAO) report found that homeless individuals face considerable obstacles to accessing federal mainstream programs. Their ability to enroll and fully utilize these programs is often limited by the "inherent conditions of homelessness as well as the structure and operations of the programs themselves". A combination of unnecessary red tape, misinformation and difficulty in getting to the offices where applications and intake occur often serve as effective barriers to enrollment and retention of food stamp benefits. The report acknowledged that while all low income populations face barriers to applying for, retaining and using the services of the Food Stamp program, these barriers are compounded by the inherent conditions of homelessness, such as transience, instability and a lack of basic resources.[29]

Among the barriers identified in the report were misinformation about the program's eligibility requirements and application process; excessive length and complexity of application process; eligibility workers lack of expertise or experience in addressing the unique needs and circumstances of homeless people;

homeless individuals lack of facilities for refrigeration, storage and food preparation; and lack of effective outreach to the homeless. Although the USDA offers to match state funds to conduct Food Stamp Program outreach to hard-to-serve populations (such as the homeless), only nine states took advantage of this funding in 1999. [30]

One of the most difficult obstacles facing homeless people is the length and complexity of the application process. According to a recent USDA report, the average application process takes five hours of client time to complete and includes at least two trips to the local welfare office.[31] A review of food stamp applications from the 50 states conducted by America's Second Harvest found that applications are "much longer than necessary, are difficult to understand and complete and include excessive and invasive questions often with little or no legal connection to the Food Stamp Program". For example, more than half (29) of the states food stamp applications were between 10 and 36 pages long. Some applications asked if applicants owned burial plots, whether they had income from panhandling, bingo or plasma donation and about their children's income and bank accounts. The study concluded many of the hurdles placed before needy people attempting to enroll in the Food Stamp Program are "not required by Federal rules, can be immensely burdensome and have the effect of keeping hungry people from receiving assistance". [32]

A recent report issued by the National Law Center on Homelessness & Poverty documented many of the often illegal practices used to deny homeless people access to food stamps. Specific findings include:[33]

- **Lack of Permanent Address**
  Forty five percent of the homeless programs surveyed reported that their homeless clients were denied food stamps sometimes or frequently because their client did not have a permanent address. By law, an applicant does not have to reside at a permanent address in order to be eligible for food stamps.

- **Lack of identification**
  Seventy seven percent reported their homeless clients were sometimes or often denied food stamps because their clients did not have proper identification. Although federal law states that documentation should serve as the primary source for verifying someone's identity, the law does allow the use of collateral contact when an applicant cannot provide documentation. Often shelter staff may serve as the collateral contact. Only 25% of the service providers reported that there were alternative documentation procedures set up for verifying information on homeless

people in their locality.

- **Lack of Cooking Facilities**
  Twenty three percent reported their clients were denied food stamps often or sometimes because they did not have cooking facilities. While such a provision did once exist in federal law, it was repealed in 1977 and should not serve as a basis for denying food stamps.

- **Inability to File Food Stamp Application on the Same Day it is Received**
  Thirty two percent reported that their clients were only sometimes or never allowed to file a food stamp application the same day they received it. According to federal law, the food stamp office must provide applications upon request and applicants must be allowed to file an

  application on the same day.

- **Denial of Expedited Food Stamps**
  Fifty eight percent reported that their homeless clients sometimes or never received expedited food stamps (benefits that are to be provided within seven days of application). Although welfare reform eliminated "homeless households" from those categories of households entitled to receive expedited service, most homeless people still qualify under the income provision of food stamp regulations.

- **Past Negative Experiences**
  Eighty three percent reported that their homeless clients were discouraged from applying because eligibility workers were sometimes disrespectful or abusive toward applicants.

Our own survey of HCHC providers found that the homeless families served by their programs face similar difficulties accessing these services: 35% reported that their clients experienced barriers to receiving supplemental nutrition through WIC; 56% reported barriers to food stamp usage; and 67% reported increasing difficulties accessing emergency food services at food banks and soup kitchens.

Rather than seeking to mitigate the inherent obstacles that homeless families face in obtaining and retaining much needed support, many local governments have adopted a systematic policy of diversion and exclusion. These policies have profound consequences not only for homeless families but also for those transitioning out of homelessness.

While we are not aware of any studies examining food stamp retention and the transition from homelessness, several recent studies have shown that many former TANF recipients do not receive food stamp benefits, even though they remain eligible. A General Accounting Office report examining the decline in food stamp usage cited a Wisconsin study which found that former welfare recipients had a median wage of $7.00 per hour, which would meet the food stamp income eligibility standard for a household of three. However, 51% of these former recipients did not receive food stamps, and 34% of the former recipients were unaware that they might still qualify for food stamps. The Wisconsin study also found that 32% of the state's former welfare recipients had no way to buy food for some period of time after they left welfare and 13% relied on food pantries for assistance.[34]

In light of these findings, policymakers should consider new, innovative outreach strategies that would facilitate the process of maintaining eligibility for homeless and low income families who want to continue to receive support.

Homeless Family Shelters

The Rise In Family Homelessness

Beginning in the early 1980s the nation witnessed a dramatic rise in the number of homeless families. New York City, for example, experienced a five fold increase in the number of families requiring shelter, from almost one thousand families in 1982 to over five thousand families in 1992.[1] The character of family homelessness also changed. Prior to the 1980s family homelessness was often synonymous with temporary displacement caused by fire, illness, short term financial crisis or similar emergencies. The homeless families of the 1980s experienced a much more intractable form of homelessness which was the result of persistent, debilitating poverty, a decline in the availability of affordable housing and public housing support and a dramatic rise in the number of young single mothers facing many of the complex psycho-social issues outlined above. This resulted in more prolonged, chronic periods of homelessness that placed considerable demands on both governmental and nonprofit homeless service providers. Effective policy and service provision was often hampered not only by alarming growth in the number of homeless families, but also by significant changes in the demographics and characteristics of this population.

Community Response

State and local governments, working with private sector groups, including local volunteer, religious, non-profit organizations and foundations, initially assumed most of the responsibility for addressing the complex needs of homeless people. The majority of shelters for single adults and families were established and administered by private organizations.[2] Faced with dramatically increasing numbers of homeless families, many communities struggled to develop sufficient emergency housing resources to adequately address this crisis. Two studies conducted by the Department of Housing and Urban Development, the first in 1984 and a follow up study in 1988, found that the number of homeless shelters more than doubled during this time.[3]

The resulting family shelter "system" consisted primarily of a diverse group of loosely connected programs, organized mainly by private sponsors with varying levels of support. The "decentralized and uncoordinated development" of shelter programs was due, to a considerable degree, to the varying responses by communities to their homeless residents' needs. The level of state and local resources devoted to addressing homelessness varied considerably and was often driven by political considerations rather than an actual determination of need. In

a recent study examining this period, Weinreb and Rossi concluded that the absence of a "cohesive and coordinated federal plan to prevent and reduce homelessness" also contributed to the growth of many small organizations, each attempting in its own way to respond to family homelessness in its community.[4] The extent of family homelessness and the complexity of the problems confronting families soon overwhelmed the efforts of these nonfederal sources; even collectively, they could not meet the increasing demand for emergency services.[5]

Government Response

As the number of homeless individuals and families continued to rise throughout the 1980's, the federal government realized that state and local efforts alone could not adequately address the increased need for services. In 1987, Congress passed the Stewart B. McKinney Homeless Assistance Act in order to support and enhance existing state and local efforts. The McKinney legislation is the federal government's principal response to homelessness. The legislation authorized a broad range of homeless assistance programs administered by several different federal agencies. Since the legislation was enacted, the Congress has appropriated over $11 billion for McKinney Act programs.[6]

Currently, eight federal agencies the departments of Agriculture (USDA), Health and Human Services (HHS), Housing and Urban Development (HUD), Education, Labor, and Veterans Affairs (VA) and two independent agencies, the Federal Emergency Management Agency (FEMA) and the Social Security Administration (SSA) administer 50 programs which can serve homeless people. Of the 50 programs, 16 are targeted, or reserved for the homeless, and 34 are nontargeted, or available to low income people generally.[7]

Both targeted and nontargeted programs provide a broad range of services including healthcare, housing and job training. In certain instances, programs operated by more than one agency offer similar types of services. For example, 23 programs (11 targeted and 12 nontargeted) operated by four agencies offer housing, such as emergency shelter, transitional housing and supportive housing. Twenty six programs (11 targeted and 15 nontargeted) administered by six agencies offer food and nutrition services. The USDA, for example, provides food and nutrition services ranging from funding for school lunches and breakfasts to support for the Commodity Supplemental Food Program (CSFP) and food stamps.[8]

While all nontargeted programs may serve homeless people, it is difficult to

determine the extent to which they do so because the primary purpose is to serve low income, rather than specifically homeless, people; therefore most of the programs do not track homeless usage. As noted earlier, recent GAO reports have found that homeless individuals and families face considerable barriers to accessing a number of mainstream programs including Medicaid and Food Stamps.[9]

The Family Shelter "System"

Housing options developed in response to homelessness include emergency shelters, transitional housing, and service enriched permanent housing. Emergency facilities act as the initial entry point into the homeless services system and play an integral role in addressing the immediate needs of families in crisis. Although the term "emergency shelter" often implies a short shelter limit, such facilities vary considerably by the type of population served, the allowable length of stay and the range of services offered. Transitional housing programs generally provide a broader range of support services meant to prepare families for their eventual transition to permanent housing. Families are typically provided with six months to two years of housing and support services in transitional facilities.[10]

Currently a quarter of all housing programs for homeless clients are fully supported by government funds, and an almost equal proportion rely entirely on private funds (23%) or receive up to half of their budget from government sources (22%). The final 30% of housing programs receive from half to almost all their support from government funds. Secular nonprofit agencies operate more than half of housing programs, with the remaining facilities run by religious organizations, government agencies and a small number of for-profit entities which primarily provide shelter in motel voucher programs.[11]

According to a recent Housing and Urban Development Study, the United States currently has:

- 5,700 Emergency Shelters
- 4,400 Transitional housing facilities
- 3,100 Voucher distribution programs
- 3,500 Soup Kitchens, distributors of prepared meals[12]

Although the federal government has played an increasingly important role in the development and support of emergency homeless shelter services, it has not played a significant role in determining, or even assessing, the quality or appropriateness of these services. Thus the dramatic need for increased shelter

capacity that occurred in the 1980s was met, in certain instances, through the use of substandard, unsafe housing facilities; the most notorious of which was New York's Martinique Hotel. While the ultimate responsibility for these substandard conditions rightfully belong with local governments overseeing the services provided by grantees, a lack of uniform national shelter standards resulted in a broad range of services of widely divergent quality being provided to families.

According to a study by Weinreb and Buckner, the inability of policymakers to develop a comprehensive or coordinated strategy to eliminate family homelessness has compelled numerous individual organizations to develop "ad hoc methods" to meet the needs of homeless clients. Beyond the basic provision of housing assistance and case management services, there are large disparities in the quality and comprehensiveness of services provided to homeless mothers and their children. The lack of any uniform standards to guide the development of emergency shelters has resulted in "gaps in availability of crucial services and inefficiencies in the use of existing resources."[13] An essential service which we contend is often lacking is the provision of nutritious food and the availability of adequate cooking or food storage facilities with which families could feed themselves.

Once a family enters a shelter, its members must adjust to circumstances which are often difficult and stressful. Some shelters are able to provide high quality living spaces and services, including private apartments, cooking facilities, day care and supportive services for families. Unfortunately, many shelters lack the funding for such services and have limited physical space available, leading to a crowded, noisy environment where entire families may be cramped into one small room. In many parts of the country, homeless families continue to be housed in large congregate facilities, where families are separated from each other by makeshift partitions or cubicles affording little privacy. Play spaces are often not available and cooking facilities may be absent or limited to microwave ovens and vending machines. [14] On site meals, if offered at all, are provided at set times, often with little regard to families' schedules. Families are frequently asked to leave the facility during the day and are responsible for finding food on their own, often at a local soup kitchen.

Shelter Rules

Most shelters have established rules and regulations with which families must comply in order to remain shelter residents. Rules often dictate many aspects of daily living, including wake-up time, meal times and where residents are allowed to remain during the day. Undeniably, shelter rules are necessary for maintaining safety and order in a congregate living situation with large numbers of families and children. Yet, even rules which have positive effects are often a source of frustration and irritation for both shelter providers and residents. Many shelter providers find that setting and enforcing reasonable rules is their most difficult task.[15,16] Rules which attempt to modify families' behavior in a authoritarian manner contribute to parents' low self-esteem and to power struggles in the parent-staff relationship. While it is important to enforce rules, some flexibility is essential for creating an environment responsive to individual family needs.[17]

Rules regarding meal times, food storage and preparation provide an example in which the institutional demands of the shelter provider may ultimately jeopardize, rather than enhance, a families' well being. Some of the restrictive rules cited by Health Care for the Homeless providers in our survey included: those prohibiting food in resident's rooms; inflexible meal times; inability or unwillingness on the part of shelter providers to meet special dietary needs; lack of cooking and food storage facilities; and requirements that families with young children vacate the shelter during the day. This final practice may be particularly harmful. Forcing families with pre-school age children to leave a shelter facility during the day poses considerable health and nutrition risks.

Similarly, prohibiting food storage in family rooms is also problematic. While it is important that proper hygiene be maintained in a facility, this should not serve as an obstacle to families and particularly young children having access to vital dietary resources. Although a lack of resources may preclude many shelters from providing refrigeration and food storage for each individual family, limiting food and formula storage due to concerns regarding hygiene is a misguided practice. Safe, sanitary food storage could be achieved by providing a compact refrigerator and a small enclosed cabinet for dry goods in each room. Regular inspection and pest control should be sufficient to maintain good hygiene. In fact, since many families admit to keeping food in their rooms despite prohibitions, "legalizing" this practice while providing adequate storage may ultimately help improve hygiene.

Not all shelters have adopted such strict rules. Many shelter providers identified in the "Best Shelter Practices" have managed to reconcile their institutional demands with the nutrition needs of homeless families. Shelters often help families improve their nutrition status by providing them with either private or shared kitchen and food storage facilities or with nutritious meals which take into account the needs of young children. A recent study established that nutrition support provided on-site at shelters (e.g., food and kitchen facilities) was strongly associated with better nutrition outcomes: higher utilization of food pantries and other community resources and improved diet reflected in increased vitamin and iron intake. The study also found that, compared to families in shelters without kitchen facilities, families in shelters with such facilities spent less on groceries and had a higher quality diet.[18]

Similarly, preschool children living in shelters with cooking and food storage facilities consumed more grain products (not including sweet baked goods), fruits and vegetables than their peers residing in facilities without those amenities.[19] The availability of such resources can have a profound effect on a child's overall development and well being. Homeless families spend increasingly long periods of time in emergency facilities. A recent study found that families spend six to ten months on average in emergency shelters. For very young children this constitutes a significant portion of their formative years, a period of life that is pivotal for their future growth and development. The well being of children and parents is deeply affected by the quality of the environments in which they live.[20]

While these studies show the clear benefits that may be achieved through the availability of kitchen facilities and food resources for homeless families, we are not aware of any studies that have examined the actual availability of such resources. Anecdotal reports show that such resources were the exception rather than the rule. In attempting to determine the prevalence of restrictive shelter practices, close to two hundred and seventy shelters were surveyed about their food related policies and procedures. Survey results show:

- Twenty-nine percent of shelters surveyed did not provide families with access to kitchen facilities. Of the remaining shelters, 24% provided private kitchens in individual apartments while 46% provided communal kitchens which were shared, on average, by ten families. Although communal kitchen facilities are certainly preferable to no kitchen facilities at all, ten families sharing one kitchen poses considerable access difficulties.

- Twenty percent of shelters did not provide any meals to families. At 37% of these shelters, resident families rely on local soup kitchens. The remaining families either have access to cooking facilities within the shelter or utilize restaurants or other sources of food.

- Fifty percent of the shelters surveyed provide three meals per day to residents. Just over half (51%) provide two or more snacks per day. Thirty-two percent do not provide any snacks at all.

- Among those facilities that provide meals, 79% attempt to meet special dietary needs, although six percent require a note from a doctor prior to doing so.

- Twelve percent of shelters surveyed do not provide a private or shared refrigerator to store food or formula. Twenty-seven percent provide a refrigerator in individual family rooms while 61% of shelter facilities have communal refrigerators. On average, each communal refrigerator is shared by seven families.

- Sixty percent of shelters surveyed do not allow residents to store food in their rooms.

- Infant formula is less often restricted. One in five homeless family shelters surveyed prohibit keeping infant formula in the family's room.

- More than 3/4 of the shelters surveyed provided some form of nutrition education. These included nutrition workshops and basic cooking classes that are often integrated into other "life skills" programs offered at he shelters.

In general, the survey results show that a clear majority of the shelters participating in the study attempt to meet the nutritional needs of families by either providing them with meals or with some access to cooking and refrigeration facilities. Given the fact that we are using a fairly small, self selected sub-sample of family shelters facilities, it is difficult to assess how truly representative these data are. Our impression is that the facilities responding to the survey were among the more motivated and sophisticated regarding nutrition issues, as indicated by the time they took to complete this lengthy and detailed survey. Additionally, our interest in identifying "Best Practices"and our subsequent surveying of those shelters may have further skewed our results. Despite the generally positive findings, it is troubling that in a majority of shelters residents are not allowed to store food in rooms and that in 20% of

facilities this prohibition extends to infant formula. This issue, coupled with a reliance on soup kitchens by close to 40% of families residing at shelters which do not provide meals, raises a number of concerns regarding the ability of young children to obtain a sufficient amount of nutritious food required for healthy development. The survey results clearly show that the absence of any uniform standards regarding the provision of nutrition assistance and cooking facilities in homeless shelters has resulted in services of widely divergent quality.

Establishing Shelter Standards

Currently there are no minimum national standards for shelters with respect to the quality of life and the provision of basic services. As a result, there are wide variations among shelters in terms of the populations served, services provided and the quality of life within the shelters. Often, regulatory oversight has been limited to fire, building, safety and sanitation codes that apply to all residential facilities yet do not include any specific recommendations regarding the provision of services for homeless families. This lack of local regulatory oversight or licensing requirements has resulted in the broad divergence in the scope and quality of shelter services.

Considering the recent trend toward devolution, any meaningful regulatory reform must occur on the local level. In recent years, many state and local governments have taken up the challenge and sought to improve the overall quality of homeless family shelters through the establishment of local licensing requirements or shelter regulations. Recent examples include:

Philadelphia, Pennsylvania

In January 1987, the Mayor of Philadelphia's Public/Private Task Force on Homelessness established the Shelter Standards Committee. As a result, standards were established for shelters within the City of Philadelphia and were adopted by the Office of Emergency Shelter Services (OESS) and the Voluntary Council on Emergency Food and Shelter. These standards were subsequently incorporated into all funding agreements between the OESS and shelter providers. A committee consisting of representatives of the city department of Licenses and Inspections, the Health Department, shelter providers, advocacy organizations and support service providers was convened in the fall of 1998 to review and update the existing shelter standards. The mission of the committee was to examine the standards in light of welfare reform and the increasing demand for shelter. The specific clauses regarding the nutrition needs of homeless families demonstrate a clear commitment on the part of the City of Philadelphia to ensure that homeless families have access to sufficient quantities

of nutritious food. The standards serve as an excellent model for other municipalities seeking to address the quality of life in homeless shelter facilities. Regulations regarding the provision of food include:

> 5.12 Facilities with families who have school age children are expected to provide breakfast early enough so that children attending school have started the day with a nutritious meal.
>
> 5.13 Facilities with families on TANF or with any residents who are planning to obtain/maintain employment are expected to assure that meals are set aside for residents (and their children) who are working or engaging in job search activities who miss regular meal times.
>
> 6.15 All shelters shall have approved policies for prevention of food-borne diseases as per the health department food preparation and handling procedures.
>
> 8.1 Facilities must conform to the City of Philadelphia Department of Public Health Code regulating "Eating and Drinking and Catering Establishments" (Title -6 Philadelphia Health Code)
>
> 8.2 Prior to the construction, remodeling or alteration of any food service facility, properly prepared plans and specifications must be submitted to and approved by the Department of Public Health
>
> 8.3 Three meals must be provided (breakfast, lunch, dinner) daily. Meals must be well balanced, nutritious and adequate in quality and quantity to meet basic dietary needs of residents according to the Federal Recommended Daily Allowances (RDA). Special efforts should be undertaken to ensure that pregnant women and children receive nutritious foods that exceed basic requirements and support healthy growth and development: snacks are recommended for these populations.
>
> 8.4 Residents whose service population includes very young children must, on a 24 hour basis:
>
> - maintain an adequate supply of the common types of milk-based and soy-based infant formula, and other baby food and food supplements.
> - include provisions/procedures for preparing and serving the formula
> - make accessible to parents refrigerated baby food and/or medications
> - make provisions for nursing mothers.
>
> 8.5 All attempts should be made to meet the special dietary needs of the populations served. Special needs include but are not limited to dietary restrictions based on medical conditions.
>
> 8.6 A general expectation for all food serving facilities is that each facility will offer juice, fresh fruit and vegetables to residents on a daily basis. Meal preparation should avoid excessive use of sodium or salt, fat and sugar.
>
> 8.7 Facilities should make every effort to provide portable meals (e.g., box lunch) to residents who indicate that they must be away from the facility on necessary business

at mealtime.[21]

In addition, the standards require that funded shelters are to operate 24 hours a day/seven days a week on a continuous basis and be accessible to families. The City of Philadelphia incorporated these revised standards into all shelter contracts. Further, the city continues to monitor and work with city-funded shelter providers to ensure compliance with these guidelines.

Columbus, Ohio

In 1986, the City of Columbus began to fashion a collective community response to homelessness. Working with the Franklin County Board of Commissioners, the United Way, the Columbus Chamber of Commerce, the Metropolitan Area Church Council and local homeless advocacy organizations, the city sought to develop a coordinated system for homeless assistance. To accomplish this goal, the city established the Community Shelter Board, an independent, nonprofit agency that coordinates and plans all emergency shelter services in the county. The Board provides a single conduit for shelter funding in the county and organizes the county's Continuum of Care plan.
A recent GAO report examining state and local efforts to integrate homeless assistance programs concluded that the Community Shelter Board's role as the single coordinating body allows the emergency shelters in Franklin County to work as a system rather than as a fragmented set of resources. The Board improved linkages between the emergency shelter system and mainstream resources within the community and served as a bridge among public, private and non-profit sectors on planning efforts and issues related to homelessness and emergency shelters.[22]

In the fall of 1999 the Community Shelter Board created a Community Advisory Committee charged with drafting shelter certification standards intended to improve the quality and accountability of homeless service programs. Funding is contingent upon meeting the newly developed standards. Shelter certification standards are currently used in contract compliance review and annual funding decisions.

Like Philadelphia, the Community Shelter Board has included specific operational standards related to the food services in homeless shelters. While not as comprehensive as the Philadelphia standards, they provide a minimal standard that ensures the provision of a sufficient amount food to meet a family's basic needs.

V.2 Shelter shall provide, or arrange for, food services to clients or make

known the available services nearby. At sites where clients prepare their own food, clients must have access to a kitchen. Food and other necessary supplies are provided on an as needed basis. At sites where food is prepared for clients, the staff is knowledgeable in nutrition and sanitary food safety handling and food storage.[23]

Louisville, Kentucky

The Louisville, Kentucky Coalition for the Homeless serves as an important example of the pivotal role homeless advocacy organizations can play in improving the quality of services in homeless facilities. Through the establishment of uniform Quality Assurance Standards (QAS), the Coalition developed a valuable measure by which shelter services could be evaluated and improved. These standards are critical since there are no licensing requirements for homeless shelters in Louisville. Through the QAS program, the coalition monitors the homeless shelters and enforces agreed upon standards in the areas of housing, health and safety, business administration, social services and homeless advocacy. Through QAS, the coalition also provides training to improve the skills of shelter staff.

Detroit, Michigan

In 1994 the Detroit City Council passed a law requiring homeless shelters to be licensed by the City. The ordinance required shelters to undergo more than a dozen inspections annually, by eight city departments, on everything from the building's electrical wiring to whether well balanced meals are served . Before the ordinance, for example, the health department did not inspect shelter kitchens. It is now applying the same standards used for commercial facilities, such as restaurants, to shelters. Licenses are issued only after shelters pass these strict inspections. In so doing, the city has sought to improve the safety of shelter facilities and the overall quality of their programming.[24]

Homeless Family Facility Nutrition Guidelines

The "Homeless Family Facility Nutrition Guidelines" are designed as a tool to assist homeless shelter providers to more adequately address the nutrition needs of homeless families and to serve as a benchmark by which they may assess their current services. These guidelines are intended to serve as a catalyst for shelter providers to re-examine their current rules and regulations and to consider the effects they may have on the health and well being of their clients. Additionally, it is hoped that by adopting some of the suggested modifications, shelter providers and HCH providers can work together to ultimately improve the nutrition and overall health status of the children and families they serve.

The "Homeless Family Facility Nutrition Guidelines" are intended to address a broad range of homeless family facilities and varying categories of service provision (ie. emergency shelters, transitional facilities). The guidelines were designed to have broad applicability to all homeless shelter programs and other essential community providers serving children in family shelters. Although critical of many current shelter practices, the guidelines should not be seen as a general indictment of the overall quality of family shelters. We recognize the considerable financial, administrative and legal pressures facing the family shelter system. It is understood that many of the policies and procedures which may have potentially negative consequences for the nutritional status of children are implemented to insure cleanliness and order within the facilities housing these families. By developing guidelines and identifying existing "Best Practices," we have attempted to demonstrate that the legitimate institutional demands of family shelter facilities can be reconciled with the nutritional needs of children.

Many homeless facilities lack the staff and necessary expertise required to implement some of the recommendations regarding nutrition assessment and education. For this reason, we have provided a resource list in the appendices to encourage homeless shelter providers to partner with local institutions such as Health Care for the Homeless programs, food banks and Cooperative Extension programs to improve the availability of nutrition services for their clients. The guidelines may also serve as a valuable advocacy tool for HCH and shelter programs seeking to modify and enhance shelter practices which they feel compromise the nutrition status of young children.

Guideline development was based on an analysis of current shelter practices, the results of HCH and shelter provider survey findings and an extensive review of relevant literature regarding this issue. Draft guidelines were reviewed and critiqued by a multidisciplinary panel of experts with extensive experience in the

provision of services to a homeless population. The draft guidelines were also posted on relevant Internet based listserves and discussion groups. The resulting guidelines reflect the thoughtful recommendations of our expert panel and the insights gained from actual shelter providers, nutritionists and emergency food service providers who responded to our internet postings.

The guidelines are available as a separate document. Guidelines will be mailed to all Bureau of Primary Healthcare's Health Care for the Homeless Programs as well as all organizations participating in the survey and the development of this project. A copy of the guideline document can also be found in the appendix.

Facility Mission Statement and Philosophy

A facility's mission statement or philosophy has an overarching effect on shelter services and how they are provided. Facilities with mission statements expressing a philosophy of compassion and caring often translate this into increased efforts to meet the varied and complex needs of homeless families. A common element distinguishing "best practice" shelters is an inclination to address needs in a holistic fashion, taking into account the overall health and well being of families rather than focusing exclusively on their core mission of providing housing. An important example of this can be found in "best practice" facilities' explicit commitment to ensure that homeless families have a sufficient quantity of nutritious food. This is often achieved through the direct provision of nutritious food by the shelter itself or through a greater degree of flexibility with rules and regulations regarding food preparation and storage. Although this issue is not addressed in the guidelines, we encourage shelters to incorporate an explicit commitment to addressing the nutrition needs of homeless families into their mission statements.

Guidelines

The guidelines make recommendations regarding six topics that relate to or impact on nutrition status of families in shelters:

1. **Optimize facility and family access to food resources.**

   - Develop linkages with organizations and businesses in the community to improve access to food resources. Churches, restaurants, grocery stores and local businesses may be willing to assist the shelter in meeting food service needs.
   - Assist families in accessing resources, such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Commodity Supplemental Food Program (CSFP), Self Help And Resource Exchange (SHARE), Food Stamp Program and other government resources.
   - If serving congregate meals to children 12 years of age and under, apply for meal funding under the USDA's Child and Adult Care Food Program (CACFP).
   - Encourage and assist parents to enroll their children in School Breakfast, School Lunch and summer food programs. Additionally, shelters can apply to be a summer meal site.
   - Provide on-site and referral resources for emergency formula, food and special diet needs.
   - Allow residents to retain food stamps and either WIC or CSFP vouchers for individual use to aid in meeting nutritional needs. Allow families to accrue these resources to establish a family food pantry which will aid in the transition to permanent housing.

Given the limited amount of financial resources available to family shelter providers, the ongoing provision of nutritious meals to homeless families would not be possible without the assistance of food banks, food service companies and other community resources. The importance of establishing linkages with community supports became apparent through interviews with "best practices" shelters. While each of the "best practice" facilities had a strong commitment to addressing the nutrition needs of families, it was their ability to identify and establish linkages with community and governmental sources of support that enabled them to achieve this goal. Shelter providers may not be aware of the broad range of nutrition resources currently available. For example, over 60 % of the shelter facilities surveyed were not aware of availability of funds through the

USDA's Child and Adult Care Food Program (CACFP). In fact, only 9% of those surveyed have actually applied for CACFP funding. Survey results indicate that shelter staff often have limited knowledge of federal nutrition programs directed at children, including potential funding opportunities that could enhance nutrition services.

Homeless families face similar difficulties. Often they are unaware of available resources or uncertain of their eligibility for support. Shelter staff, or the staff of community partners, such as HCH providers, can play an important role in identifying families at nutritional risk and linking them with available resources. Almost all homeless children qualify and should be enrolled in school breakfast and lunch programs. Similarly, while a majority of homeless families are eligible for food stamps or WIC, a surprisingly low percentage are actually enrolled. Shelter staff can assist families in overcoming the many obstacles to enrollment. These obstacles were outlined in the chapter on food security.

Shelter facilities can often support their own food service efforts by assisting families to enroll in the Food Stamp Program. USDA guidelines state that food stamp vouchers may be requested as payment for meals if certain conditions are met. We recognize that many homeless family facilities may need to request food stamp vouchers as payment for meals in order to sustain their food service budgets. We do recommend, however, that when possible, families should be allowed to retain personal usage of food stamps in order to accrue additional resources to meet nutritional needs. Families preparing to move into more permanent housing should be encouraged to save a portion of these benefits to facilitate the transition to independent living and food budgeting.

WIC benefits are specifically intended for the nutritionally at risk pregnant or breastfeeding mother and/or infant or young child. When participants accept WIC vouchers, they agree to use the food for their own nutrition needs. Shelters are not acting within their authority if they mandate or request families to contribute WIC coupons to the facility or pool them with other families. WIC is intended to be a supplemental food program. The amount of formula that WIC provides is insufficient to meet formula needs for most infants after two or three months of age.[1] Unfortunately, this fact is not well known among the social service community working with homeless families. Families "running out" of formula are often viewed as overfeeding or wasteful.

2. If families are completely or partially responsible for their own meals, provide adequate resources for preparation of meals and snacks.

- Provide families with appropriate private cooking and refrigeration facilities.
- If only shared cooking and refrigeration facilities can be provided, develop policies and practices to deal with resulting issues, including adequate space, cleaning, security of stored foods and child safety in shared kitchen spaces.
- Assess a family's need for nutrition assistance and provide a "starter-set" of food at the time of entrance into the facility, if indicated.
- Assess a family's need for food preparation equipment such as pots, pans and cooking utensils and provide a "starter set," if indicated.
- Assess and address a family's need for nutrition education, including healthy recipes, budgeting, meal planning and food safety.
- Assess the food shopping opportunities in the shelter's direct environment and, if indicated, arrange transportation to markets with nutritious and economical food selections.
- Promote food safety by providing families with education and necessary items such as dishwashing detergent, dishtowels and hand soap.

Ideally, each family housed in a homeless shelter should be provided access to food storage, cooking facilities and refrigeration. If this cannot be achieved for each individual family in an apartment type setting, shared food storage and cooking facilities should be made available. Many reviewers who examined the guidelines suggested this may prove to be an elusive ideal for a number of shelters. Shelter providers are often constrained by the physical limitations of their current facilities and do not have the financial resources to undertake large scale renovations. In spite of these obstacles, it is important that homeless family shelter facilities make the provision of shared food storage, cooking and refrigeration a minimum goal.

The absence of such facilities severely constrains the ability of homeless parents to meet the varying dietary needs of their children and limits their ability to fully utilize Food Stamp and other nutrition support programs. Families are better able to accommodate individual nutrition needs and preferences when cooking for themselves. The control of food choices and preparation of meals may provide families with substantial autonomy and dignity in a vital life area, something that

may be absent in other aspects of their lives in the homeless facility. Lacking responsibility for meal planning and budgeting deprives families of the opportunity to learn and practice needed skills in a "safe" environment.

Shared cooking facilities can also serve as a valuable mechanism for community building. In a number of facilities surveyed, families volunteered to cook on a rotating basis for other inhabitants of the shelter. This approach provides valuable opportunities for families to learn from and provide support to one another. The provision of adequate cookware and utensils is also often overlooked. A number of reviewers mentioned the importance of providing smaller child size utensils for families.

Many reviewers also stressed the importance of assessing a family's need for nutrition education. This includes assistance with budgeting, meal planning, food safety and healthy recipes. While most of the US population could benefit from nutrition and food safety education, these specific issues can be sensitive when dealing with the homeless population. It is important not to further stigmatize homeless families by assuming they have no experience with these issues. This can be avoided by initially assessing the family's need for nutrition education and providing information as needed.

3. If the facility provides meals and/or snacks, plan menus that are appetizing, nutritious, ethnically appropriate and child-friendly

- Ensure that meals include choices from all food groups in the USDA food guide pyramid.
- Make an effort to limit offerings of high calorie, high fat and low nutrient-density foods such as cakes, cookies, chips and doughnuts. Provide more nutritious foods, such as fresh fruits and vegetables and yogurt.
- If serving specific ethnic or religious groups, try to include some ethnic menus and menu items to accommodate preferences and religious practices.
- Plan the menu in accordance with needs and tastes of children. Offer alternatives for foods which are not safe or suitable for younger children. Provide child-sized eating utensils and arrange for appropriate child seating;
- If serving food cafeteria-style, try to accommodate individual requests for smaller portion sizes and allow individuals to decline certain items, especially for children and adults with poor appetite.
- Provide a forum for families to give menu suggestions and feedback regarding all aspects of food provision.
- Although families can assist in meal preparation and planning, having a professional cook is the most efficient way to ensure that meals are consistent in quality and food resources are used most economically. A professional cooking staff may also serve as a resource for training and education of residents and other staff members.
- If employing foodservice staff, periodically assess food safety procedures and the need for additional training. Provide foodservice staff with training opportunities when indicated (i.e., at local community colleges, area restaurants or via the Internet).
- Document and investigate facility food preparation and handling whenever vomiting and diarrhea, which are often symptoms of food-borne illnesses, occur among residents.

There are important advantages to providing meals for families in homeless facilities. Prepared menus can relieve overwhelmed parents with extremely limited resources from the burden of obtaining and preparing food and provide them with the opportunity to focus on more pressing issues in their lives, such as obtaining housing, work and ultimately moving toward self-sufficiency. For

families having endured an extended period of homelessness outside the homeless shelter system, living in vehicles, shanty towns or with friends or relatives, the meals provided by shelters may be the only stable source of nutritious food they have received in months. It can also be an opportunity to expose families to new foods and new ways of cooking. Given the tremendous stress associated with homelessness and the depression and anxiety many families suffer, the provision of nutritious, appetizing, child-friendly food in a hospitable eating environment can become a major challenge. When properly managed group meals may create a sense of community among families.

Budget constraints and the often limited variety of donated foods can make it difficult for shelter providers to obtain fresh produce and other equally nutritious items. Establishing relationships with local supermarket chains and food banks are crucial steps in achieving this goal. Several reviewers recommended that shelters use the USDA food guide pyramid as a nutrition education tool for families and as a meal planning tool for the facility. Reviewers also provided suggestions regarding foods that should be avoided by shelter food service providers. One of the issues mentioned most often was the high consumption of (often donated) baked goods. In general, reviewers suggested a decreased reliance on high fat, high calorie, low nutrient-density baked goods and an increased use of fresh fruit, yogurt and other healthy snacks for children.

While the issue of shelter meal quality has not been directly addressed in this report, based on our review of the literature it is clear that most shelter menus are not designed to address the nutrition needs of young children nor to accommodate their varying tastes. Typically, families are given a single meal choice at a set time. Despite the resource limitations faced by shelters, a thoughtful review of menu planning, scheduling, environment and food serving methods can result in meaningful adjustments, at minimal cost, which better meet the needs of children and families.

Often the approach to food provision is not so much a policy choice as it is a decision dictated by the physical structure of the building, logistical issues and available resources. Since homeless family facilities vary greatly, optimal strategies will differ. Although some degree of family control over food is advisable, it is not possible to give recommendations in a "one size fits all" approach. The best choice for facilities will depend on the local circumstances, needs and culture of the population served and the philosophy of the organization. Short-stay, emergency shelters may best serve by providing meals to allow families to focus on their most immediate needs. In this scenario, flexibility around meal service and planning is important to accommodate diverse needs and schedules. In longer-stay facilities, family control over food

preparation may better meet individual needs and to prevent dependance and institutionalization. Regardless of the approach that is chosen, eating together as a family unit should be encouraged.

4. **Identify common nutrition needs and develop policies and practices to meet those needs.**

- Identify and screen for frequently occurring special nutrition needs in the population served. Special needs include those due to medical conditions such as underweight, diabetes, lactose intolerance and food allergies, temporary illnesses such as influenza, diarrhea and vomiting. These needs also include non-medical choices such as vegetarian diets or abstinence from certain foods due to religious beliefs.
- Provide food and beverages which accommodate special needs, or help families to access them. Develop a plan to meet the identified needs of specific families, including nutrition education and referral of those with nutrition problems to a healthcare provider and/or nutritionist.
- Try to accommodate the medical provider or nutritionist's recommendations related to nutrition; this applies to facility practices and procedures as well as individual needs.
- Help pregnant and breastfeeding women meet increased nutritional needs by providing extra meals and snacks as well as a prenatal vitamin supplement. If this is not possible, assist pregnant and breastfeeding women in obtaining and storing these resources.
- Children need two or three healthy snacks in between meals to meet their nutritional needs. If snacks are not provided by the facility, families need access to refrigeration and food storage to allow them to meet this need.
- Encourage new mothers to breastfeed. Successful breastfeeding may be promoted by providing a quiet area for feeding, a supportive environment, access to a lactation consultant and a clean, safe place to refrigerate and/or freeze pumped breast milk.
- Assist mothers with formula feeding infants to provide adequate nutrition by allowing 24 hour flexible access to formula preparation, storage and sanitation. Ensure a sufficient quantity of formula by helping families to access WIC and providing emergency formula when necessary. A supply of emergency formula may be obtained through pediatricians' offices, the local Food Bank, or formula company sales representatives.
- Help families transition older infants to table food by providing or helping them provide appropriate foods of the right type and texture.
- Train shelter staff in nutrition and specific nutrition needs of the population served.

While many shelters attempt to meet at least part of the nutrition needs of families and children, systematic assessment of those needs is infrequent. In this way, a child's shelter stay may be a missed opportunity to improve health and nutrition status, or may even produce an unintended deterioration, due to lack of food resources and/or restrictive shelter regulations. This lack of focus on nutrition may be caused by a limited awareness of its importance and impact on general health, development and cognition. Poor maternal or child health caused by poor nutrition status make it difficult to secure and sustain employment, thus affecting a family's ability to live independently. An undernourished child is at risk for cognitive deficits and developmental delays, thereby decreasing his or her future social and economic welfare. By assisting families to meet nutrition needs, homeless family facilities have a unique opportunity to impact on homeless families' current and future health and independence.

The scope of a nutrition needs assessment varies according to situation, but may include a basic description of the needs of the most vulnerable residents, including pregnant and breastfeeding women, young infants and children. This description will usually include the type of food and number of meals and snacks needed, including special diets, breastfeeding resources and formula, the need for child friendly meals and utensils, food storage and refrigeration needs. Most shelters lack the expertise to perform a nutrition needs assessment and may need to locate technical assistance. Possible sources for guidance are local Health Care for the Homeless Programs, Public Health Departments, Cooperative Extension Programs, or Food Bank nutritionists. Using the assessment results, shelters can determine which needs are being met and have an opportunity to prioritize other identified needs.

Reviewers indicated that it is often difficult for shelters to meet special nutrition needs, such as those of children with growth delays, or individuals on special diets. This is also supported by the results of our survey, indicating that 21% of responders have difficulties meeting special needs. While it may be impossible to meet all needs, it is often feasible to provide food suitable for special diets, as long as these diets are taken into account while planning and preparing meals. A nutritionist, dietitian, dietetic technician or chef experienced in preparation of frequently occurring special diets may be able to offer guidance in menu planning and preparation. More detailed resources are included in the appendices.

Reviewers also identified the necessity of additional resources and information in other areas, such as training to help facility staff address cultural barriers for breastfeeding, and the development of a screening tool to assess nutrition status of incoming residents.

5. Adopt facility regulations and services that improve nutrition status.

- Provide refrigeration and food storage in the family's room, so families can have better access to food and formula. Pest control and hygiene can be achieved by education, periodic inspections and regular use of a pest control service.
- Provide access to drinking water, especially during the summer months.
- Allow families to stay in their room during the day, or in a communal room in the facility, so they are able to feed children regular meals and snacks.
- If families are not allowed to remain in the facility during the day, at a minimum make arrangements with other facilities to provide shelter, meals and snacks during that time period or supply families with a non-perishable food package for the day.
- If families are not allowed to remain in the facility during the day, make exceptions for families with young children or certain medical conditions and in extreme weather.

It is important that shelters keep their facilities open to families during the daytime whenever possible. The practice of not allowing families in the shelter during the day places an enormous burden on parents and is inappropriate for those with very young children. If facilities must ask families to leave during the day, shelter providers should attempt to identify and recommend locations where families may obtain food. If possible, they should also consider providing non-perishable meals that families may take with them. All facilities serving homeless families should consider 24 hour service a long term goal, providing families with much needed stability by allowing them in the facility and individual rooms during the day.

Maternal depression or stress may also severely undermine the health and nutrition status of mother and child. Loss of appetite or binge eating are often related to depression. Providing a supportive and nurturing environment for homeless families is a key component for improving their nutrition status. Anxiety and depression in homeless mothers often prevents them from seeking out and obtaining an adequate amount of food and severely impacts their ability to sustain a good feeding relationship with their children. In the context of parental depression and severe stress, the normal fussiness many children exhibit with food may act as an increased stressor and source of anxiety. Maternal or child depression should be considered a risk factor for nutritional difficulties and steps should be taken to mitigate its negative effects.

6. Food provides more than nutrients - Let food and meals help to improve the living environment.

- If serving meals, try to create a pleasant, organized and calm eating environment. Using family-size tables to provide privacy at meal times can help children adjust to a new environment and improve food intake.
- If not serving meals routinely, organizing a regular group meal for families can help create a sense of community and provide an opportunity for education on a range of nutrition and non-nutrition topics.
- Ensuring appropriate nutrition in a less favorable environment requires substantial parenting skills and emotional strength from the parent. Parental frustration and depression can have an adverse effect on dietary intake of child and parent. To support the feeding relationship, provide a nurturing environment for the parent and child, with access to family support and counseling services.
- Partner with a local restaurant, chef or culinary school which may provide culinary training, a fundraiser and/or a festive event in the shelter. Community colleges with food service or nutrition courses may also be a valuable resource.

Many shelter providers recognize the important role that the provision of quality food in a pleasant setting may play in improving the general morale and atmosphere in their facilities. Meals offer a valuable opportunity for both families and staff to interact with one another in an informal atmosphere which may reduce the stress that is often associated with congregate living situations. Addressing homeless families' nutrition needs should not be limited to simply providing a sufficient supply of nutrients but should also take into account the physical and social environment. Seemingly unrelated shelter policies and practices can result in positive or negative effects on nutrition status.

Finally, it is worth noting once again the important role community resources may play in addressing many of the needs described in the guidelines. Asking for donations of specific items mentioned in these guidelines, such as children's eating utensils, high chairs or booster seats, breast pumps, small refrigerators, pots, pans, food and formula, can be a low-cost way to provide additional resources for families. Similarly, requesting food service or nutrition professionals to volunteer some of their time is another valuable means of obtaining additional support normally beyond the capabilities of most shelter providers. Chefs,

nutritionists, lactation consultants and other skilled professionals often welcome the opportunity to provide assistance to homeless families and children. Chefs can be contacted via your local restaurant association and culinary schools. Cooperative Extension and the Food Stamp Nutrition Education Programs have nutrition professionals available to train and educate both staff and clients. La Leche League and WIC provide access to lactation professionals. A list of additional professional groups and associations is provided in the appendices.

Literature Review

Health status of homeless children and families

Key findings

- Most children and mothers in homeless shelters were medically underserved before becoming homeless. For children, this is indicated by their high rate of under-immunization, which in some communities is three times under the typical rate.
- Homeless children are more likely than domiciled poor children to have acute medical needs and chronic conditions.
- Homeless children are far more likely than domiciled poor children to show developmental delay, emotional-behavioral problems, and academic failure. They are also less likely to have their needs identified and to receive intervention.
- The unmet medical and mental health needs of mothers in homeless shelters place their children at high risk for health and nutritional problems.

The multiple environmental and psychosocial stressors associated with poverty are each independently related to compromised health status, including developmental and behavioral problems. These stressors include food insecurity, exposure to domestic violence, child maltreatment, and homelessness. The residential instability and transience experienced by homeless families disrupts continuity of care and undermines the child's ability to participate in a medical home. This further restricts access to preventive and routine primary care, encouraging a crisis-oriented health utilization pattern where problems are often treated in hospital emergency departments, after conditions have worsened.[1] In a New York City study, homelessness was associated with substantially increased costs for in-patient hospital stays.[2] This is often a consequence of unaddressed subspecialty care needs and untreated chronic health conditions resulting from limited health care access.

Health Status of Homeless Children

Homeless shelter placement typically is preceded by a period of housing instability and/or substandard housing. Other risk factors for homelessness include parental substance abuse, incarceration of a parent and a history of family problems including child maltreatment and foster care.[3,4] Many factors preceding homelessness also undermine access to pediatric primary care, a principal

indicator of which is the consistent report that children in homeless shelters are significantly less likely to be up-to-date for immunization.[5,6] In a recent chart audit by the New York Children's Health Project of the Division of Community Pediatrics, Children's Hospital at Montefiore, one of the nation's largest providers of health care to sheltered homeless children and families, only 39% of children in city shelters were up-to-date for immunization.[7] By comparison, 81.5% of New York City children are up-to-date[8]. Homeless children have more than triple the under-immunization rate .

Shelter placement generally entails congregate living situations, often with shared facilities (dining room, kitchen and sometimes bathroom). Exposure to a large number of children and medically compromised adults is frequent and may be related to increased infectious disease morbidity, higher rates of lead toxicity, and injury.[9,10] Increased symptoms of acute illness experienced by homeless children include fever, ear infection, diarrhea, and vomiting, and chronic conditions include asthma.[11,12] The American Academy of Pediatrics, reviewing the literature on health status as background for its policy statement on the health needs of homeless children and families, notes increased prevalence of sinusitis, anemia, asthma, bowel dysfunction, eczema, visual deficits, and neurological problems.[13]

These circumstances indicate that sheltered homeless children present a higher level of medical need than is typical of low-income housed children. Prior health care arrangements are frequently broken because shelter placement is often distant from the family's home community. For many homeless children, access to medical care is reliably accomplished only when the shelter makes arrangements with a health care provider to conveniently serve the shelter population.

Homeless children also experience higher rates of developmental and behavioral problems. A New York City study found that nearly all children in city shelters experienced some developmental and behavioral difficulties. 61% tested with delayed language development; 29% with delayed psychomotor development; and 38% presented emotional and behavioral problems. More than one fourth (28%) of the parents showed signs of depression, and a smaller percentage reported a history of mental illness.[14] These findings were corroborated the following year in a Georgia study.[15]

A California study found that 78% of homeless children had a serious emotional and/or academic problem including depression. However, only 15% of the children had received intervention for their identified problems.[16] Several years later the same investigators found that almost one half (45%) of school-aged

sheltered homeless children needed a special education evaluation, yet only 22% received testing or placement. Health care providers, not the schools, emerged as the principal point of identification of emotional, behavioral, and academic problems.[17,18]

These data are consistent with a series of studies conducted over the past 15 years examining children in Boston shelters. Using standard mental health screening instruments (behavior checklist, depression inventory, manifest anxiety scale), the majority of homeless children showed developmental delay, severe depression, and anxiety.[19] This trend towards internalizing problems (depression and anxiety) among homeless children was corroborated more than a decade later.[20,21,22]

A smaller number of studies have looked at the impact of homelessness on infants, toddlers and preschool age children. Using a comprehensive screening battery of cognitive, language, visual motor and projective tests, it was found that the intelligence of homeless children was within normal limits but clustered towards the lower end of that range. Their language test scores, however were significantly lower than predicted from their cognitive skills. This study strongly suggests that homeless children are at high risk for language and other developmental delays. It was also found that early childhood and other programs were unresponsive to the needs of homeless children, reducing the value of intervention when it can be arranged.[23]

This high rate of developmental delay is consistent with findings at the Martinique, a New York City welfare hotel, where 75% of three and four year old children served with on-site comprehensive day care initially presented with serious developmental delays and deviations, principally characterized by speech-language delay, poor impulse control, and short attention.[24] Another study found that homeless 3-5 year olds were significantly more likely than domiciled peers to present symptoms of emotional disturbance, speech-language delay, and visual-motor delay.[25]

This high prevalence of developmental delay was corroborated nearly a decade later, using a standardized cognitive assessment instrument, the Bayley Scales of Infant Development. Investigators found that the cognitive functioning of homeless infants was similar to that of infants in domiciled low-income families. However, the developmental status of the homeless infants declined over time, presumably in response to the multiple psychosocial stressors associated with extreme poverty.[26] This strongly suggests that infant and early childhood programs for the homeless can have a strong preventive impact.

These studies underline the importance that shelters provide or arrange for medical care, child care and after school programs for homeless children. Many of the developmental problems which have been shown to be more prevalent among homeless children may be associated with undernutrition, iron deficiency anemia, and lead toxicity. Underlying medical causes for observed developmental and behavioral problems will be missed if the child lacks access to comprehensive pediatric care.

Considering the fragile healthcare status of homeless children, the provision of appropriate nutrition resources for sheltered families is an essential first step to addressing developmental problems and other child health deficiencies. Shelter providers, in partnership with HCH programs, can play a vital role in both identifying and addressing these deficiencies.

Health Status of Homeless Mothers

The unmet medical and mental health needs of homeless mothers often place their children at high risk for health and nutritional problems. Chronic physical or mental health problems impose considerable burdens on homeless parents and may affect their ability to secure food and provide appropriate child feeding.

Recent studies have determined that homeless and domiciled low-income women have worse health status, more chronic conditions, lower physical functioning, and higher smoking rates than the general population. The prevalence of asthma, anemia and ulcers was high in both groups, although homeless women were found to have higher rates of hospitalization, more emergency department visits, and more behaviors which place them at risk for HIV infection. Additionally, they were less likely to receive preventive health services such as tuberculosis screening.[27] Even with support, sheltered homeless women have difficulty managing health problems. Barriers include lack of information about the health care system and eligibility for services.[28]

A variety of psychosocial stressors associated with homelessness place homeless mothers at increased risk for mental health problems. In a recent study, 72% of sheltered homeless mothers reported high current psychological distress or symptoms consistent with a major mental illness or substance abuse disorder. Despite this high level of need, only 15% received intervention services.[29]

Homeless mothers are more likely than domiciled single mothers to be socially isolated. They have less contact with friends and relatives, report fewer people they can turn to in time of need, and receive less help from others than do their domiciled peers.[30] The social isolation experienced by homeless mothers can be

extremely damaging. Social isolation often leads to maternal depression which is associated with poor child development, health, and nutrition outcomes.[31,32,33]

Nutrition Status of Homeless and Low-income Children

Key Findings

- Homeless children and families experience high rates of food insecurity and hunger, which are associated with poor health status and a wide range of health problems such as iron deficiency and obesity, and behavioral-developmental problems including aggression and anxiety;
- Diets of poor and homeless children and families are higher in fats, starches and sugars, but lower in fruits, vegetables and dairy. These diets are shaped by lack of food resources, high food prices in poor neighborhoods and use of desirable ('junk') food as a tool for parenting and communication;
- There are many advantages to breastfeeding, including improved infant nutrition, reduced infections and asthma, cost savings, and improved maternal-infant bonding. These benefits are especially important for sheltered homeless infants who have increased exposure to pathogens as a result of group living;
- Homeless children experience growth deficiencies at rates higher than expected and decreases in growth rates are less likely to be detected. Body changes associated with growth failure cause increased infections, worsening appetite and intake, creating a vicious cycle of infection-malnutrition that is difficult to break;
- Iron deficiency and iron deficiency anemia are more likely to affect low-income and homeless children and families, resulting in increased risk for low birth weight, and cognitive deficits that may persist after treatment. Iron deficient children are also at higher risk for lead poisoning;
- 'Feast or famine' eating patterns in combination with use of high fat and inexpensive foods to prevent hunger, may be related to increased rates of obesity in poor and homeless children.
- Homelessness in children has been associated with poor dental health, which can lead to impaired speech development, underweight, failure to thrive, school absences and reduced self-esteem;
- Characteristics of shelter living, including limited access to cooking, refrigeration, meals, restrictive rules, the stress of transition and being homeless, and public parenting, often impact negatively on nutrition status of children and families.

Food insecurity, hunger and malnutrition

Children and families in homeless shelters are especially vulnerable to food insecurity and hunger. Since shelter placement is often preceded by residential instability, families often lose contact with community supports and may have difficulty retaining entitlements like food stamps. Mail may not be received and mandatory meetings to maintain eligibility for cash and nutrition eligibility programs may be missed. When domestic violence precedes shelter placement, mothers may leave behind all relevant documentation, including insurance cards and cash benefits, and food allowances mailed to the family may not be received. In a recent study of low-income children, an episode of family homelessness in the year prior to the survey was found to be the strongest predictor of hunger.[34] Homeless mothers in Massachusetts reported their children's hunger is due to having to skip meals (37%), not having enough food (29%) or not having food at all (14%).[35] A study comparing the health of homeless and housed low income children in Los Angeles noted homeless children "were more likely to experience hunger during the past month because their families ran out of food." Over one fifth of homeless children surveyed were hungry at least 4 days out of the past month.[36] Families living in emergency shelters report children's food preferences, dislikes of food served at the shelter, inconvenient mealtimes, and lack of access to cooking and refrigeration as factors contributing to children's periodic hunger.[37]

Food insecurity can have serious implications for health status, with particularly detrimental effects for pregnant women, infants and children,[38] affecting health and quality of life directly or indirectly through nutrition status.[39] Even without malnutrition present, food insecurity and hunger are thought to have harmful health and behavioral impacts in their own right.[40]

Periods of food insecurity in adults and children can cause a preoccupation with food and eating. This may contribute to obesity, either by compensatory overeating behaviors and/or physiologic adaptations.[41] This has been supported by findings of a cross sectional study of women of childbearing age in rural New York State.[42] In another study, Polivy found that voluntary or involuntary food restriction and deprivation result in an array of cognitive, emotional and behavioral changes including preoccupation with food and eating.[43] A small population-based survey conducted in upstate New York found that eating patterns became progressively more disordered as food insecurity status worsened.[44] This theory is supported by a study which found that nearly one fourth of the sample of homeless children were observed to hoard food.[45]

Food insecurity and hunger may also affect psychosocial functioning. Using the Community Childhood Hunger Identification Project questionnaire, low income children classified as hungry "were significantly more likely to have clinical levels of psychosocial dysfunction on the Pediatric Symptom Checklist than similar children defined as at-risk for hunger or not hungry." Hungry children were also more likely to have behavioral, emotional and academic problems, particularly aggression and anxiety.[46]

Data regarding physical health outcomes of food insecurity are sparse. Hunger and food insecurity often lead to poor diet quality and result in higher rates of malnutrition, including iron deficiency anemia, growth deficiencies and even obesity for those experiencing mild or intermittent food insecurity. Children in food insecure households are at increased risk of becoming iron deficient or suffering iron-deficiency anemia.[47] A recent study scheduled for publication in the American Journal of Public Health found that food-insufficient children had significantly worse health status and reported stomachaches and headaches more often than food-sufficient children; food-insufficient pre-school children had colds more frequently.[48]

Our survey of HCH providers found a broad range of nutritional deficiencies in their patient population. When asked to identify some of the most prevalent diet and nutrition related morbidities, 52% reported a high prevalence of obesity, 45% cited anemia, 36% cited failure to thrive and 76% cited a very high prevalence of dental caries. Additionally, 92% of HCH providers surveyed reported that the homeless families they served had poor eating habits and would benefit from nutrition screening and education.

Diet quality and eating patterns

The diets of children in the United States generally exceed recommendations for fat and added sugars and are lacking in fruit, vegetables, grains and dairy products. The US Department of Agriculture's Continuing Surveys of Food Intakes by Individuals (CSFII) found that 35% of the average child's caloric intake is derived from fats. In all groups studied, 40% of the calories in children's diets were provided by discretionary fat and added sugars, indicating an exceedingly high intake. Only 30% of children met recommendations for fruit, grain, dairy, and meat consumption and only 36% of children met vegetable consumption recommendations. Over 45% of children and adolescents met none or only one of the USDA dietary recommendations. Those meeting none of the dietary recommendations also had average micronutrient intakes well below the recommended daily allowance for vitamin B6, calcium, iron and zinc.[49] Although

the data have not yet been further analyzed, similar trends seem to be present in the CSFII survey data from 1994-1996.[50]

The diet quality of low income children in the United States is even more disturbing. Lower intakes of calories, fruit and dairy were found among children from less affluent households.[51] Poverty directly limits food budgets, thus restricting the amount and type of food that can be purchased. The diets of low-income families are often characterized by low nutrient density starches, fats and sugars that provide filling meals at low cost. A recent study of hunger in the United States noted, "A common eating pattern in poverty populations across the nation is a marked periodicity in food consumption levels...purchase and consumption peak immediately after the paycheck, welfare check or food stamps arrive. Quantity and variety of food consumed subsequently taper down and level off, then take a nosedive in the last few days before the next check or stamp allotment."[52]

Dietary intake in children affects overall health. High saturated fat intakes and low intakes of fruits and vegetables are associated with higher risk for cardiovascular disease and cancer. The intake of sugars by children has increased over the last decade, contributing to higher overall caloric intake. Diets high in sugar increase the risk for dental caries and may contribute to increasing rates of overweight and obesity.[53] Soft drink consumption, which is a major contributor to sugar intake, has risen among children aged 2 to 17 years from a mean of 6.9 ounces per day in 1989-1991 to 9.5 ounces per day in 1994-1995. Milk consumption by children decreased over the same time period.[54] Many children may not be meeting their calcium requirements because milk is displaced by sweetened beverages.[55] Additionally, consumers of large amounts of soft drinks were found to have lower intakes of other micronutrients, including riboflavin, folate, vitamin A and vitamin C.[56] The contribution of soft drinks to caloric intake is higher among overweight youths compared to their non-overweight peers.[57]

A review of the literature indicates the diets of homeless individuals and families show similar eating patterns as those of low income families, but diet quality may often be worse. Studies measuring food quality in terms of nutrients provided found low intakes of iron, magnesium, zinc, folic acid, vitamin C, energy and calcium.[58,59,60] Low calcium and zinc intakes are of particular concern due to their critical role in tooth and bone development, as well as physical growth.[61] At the same time, diets of homeless people are high in saturated fat, cholesterol and sugar.[62,63,64]

Studies which evaluate diet in terms of foods and food groups report that

homeless children do not consume enough vegetables, fruits, meats and dairy, instead eating excessive amounts of grains, starch[65,66] and fast and convenience foods[67]. Another study showed slightly different results, with preschool children living in shelters receiving insufficient servings of pastas/breads, vegetables and marginal amounts of fresh fruits. This study found that excess milk, sweets and meats were provided.[68] Homeless preschool children were found to consume about five servings of low-nutrient density foods per day, mostly foods high in sugar such as soft drinks, imitation fruit drinks, doughnuts, candy, cookies and packaged sweets. These homeless preschoolers consumed two fewer servings of high-protein foods, half the servings of breads and cereals and more than twice the amount of soft drinks and sweetened beverages as their low-income housed peers.[69] For young homeless children, inadequate meal frequency may be one reason for insufficient intake. Nutrition needs of preschool and early school age children are difficult to meet by providing only three meals per day, even if those meals are of high nutrition quality.[70] Young children require access to frequent healthy snacks as well as regular mealtimes for optimum development.

Food insecurity, limited food resources and the need to avoid hunger contribute to nutritionally deficient homeless diets. Parents with an inadequate food budget have difficulty ensuring their children's nutritional needs are met on a daily basis. Similarly, shelters facing limited budgets and relying on donated foods may not be able to provide healthy foods and meals to their residents. For example, anecdotal information from shelter management interviewed to identify "Best Nutrition Practices" showed that staff thought it important to limit the amount of baked goods provided to homeless families as part of meals or snacks. Unfortunately, monetary constraints often forced them to provide this type of food more than they considered desirable.

Homeless families responsible for their own meals often exhibit the same reliance on inexpensive, filling foods with low nutritional value. Often these choices may be dictated by considerations of taste or convenience. Meals cooked by homeless families are sometimes high in fat because adding fat to meals is an inexpensive way to increase satiety and flavor, a tactic which may be used by both homeless facilities and families. When refrigeration is not available to families or is in short supply, foods high in sugar and sodium may be chosen because they store easily and are non-perishable.[71] Similarly, fast and convenience type foods may often be the only option when families have little or no access to cooking facilities. These foods typically have inferior nutritional quality and are quite expensive.

Food budgets of homeless and low-income families are further stressed through inequalities in food prices and poor access to nutritious and low-cost foods.

Homeless people often rely on more expensive single serving items because they cannot afford to buy in bulk and lack refrigeration and food storage space to store bulk items.[72] Studies have shown that low-income households also pay higher food prices because small food markets in low-income communities routinely charge higher prices than large supermarket chains.[73] Additionally, due to a lack of transportation, mothers living in transitional shelters may face difficulties maintaining adequate milk and dairy supplies throughout the month.[74]

Psychosocial factors, including anxiety over food shortages, may also affect food choices for homeless and low income children. Adults with childhood memories of hunger may yield to all their children's food requests, without consideration of budget or nutritional value, to avoid giving their children feelings of denial or deprivation. Periodic hunger causes some people to eat beyond the point of satiety whenever food is available. Parents often provide foods which appeal to children rather than nutritionally complete choices, especially when the child complains of hunger. This strategy may result in child malnutrition. The signs of malnutrition may be delayed or not readily apparent, but a child's complaints about hunger are immediate and cannot be ignored.[75]

Two recent studies reported that homeless women, when unable to afford the toys desired by their children, "treat" them to sugary food or candy.[76,77] Homeless mothers, often suffering from low self esteem and guilt about failing to provide their children with housing, are more likely to give in to pleas for junkfood and candy, particularly if children are hungry because they do not like food offered in the shelter.[78] Homeless parents may also use food as a means of quieting a child's crying or temper tantrum. Given the confined spaces and lack of privacy in many shelters, parents often rely on such measures to calm what may be deemed a disruptive child. For example, baby bottles with sweetened beverages are frequently used to pacify children and keep them quiet during the night. These strategies deplete an already limited food budget and may be harmful to the child's nutrition status.

Breastfeeding

The American Academy of Pediatrics recommends human milk as the sole source of nutrients for feeding full-term infants during the first 6 months of life, and, with the addition of solid foods, at least through the first year. The Academy cites evidence that breastfeeding reduces the incidence and/or severity of a wide range of health conditions including diarrhea, lower respiratory infections, otitis media, bacterial meningitis, urinary tract infections and necrotizing enterocolitis. Other studies suggest that breastfeeding may help protect the infant against sudden infant death syndrome, diabetes mellitus, Crohn's disease, lymphoma and allergic diseases. Breastfeeding may enhance cognitive development.[79]

Subsequent studies have corroborated these health related benefits. Human milk contains specific factors that improve the infant's immune system. Reduced incidence of gastrointestinal and respiratory illnesses, asthma and otitis media have been attributed to breastfeeding.[80,81] Breastfeeding has also been shown to be related to short and long term cognitive benefits in infants and children.[82,83,84]

Additionally, frequent mother-infant interaction and body contact improves attachment.[85] While bottle feeding does not preclude frequent interaction and close contact, it does allow for more "distant" parenting. By contrast, it is difficult to breastfeed without physical closeness. Breastfeeding promotes bonding and encourages nurturing behavior by the mother via physiological pathways.[86] The neurohormone oxytocin, which stimulates milk ejection during lactation, has been related to lower blood pressure and anti-stress effects,[87] more positive social interactions[88] and enhanced maternal behavior and mother-infant bonding[89,90]. Improved bonding is an extremely important benefit in high risk homeless families in which social and economic stressors, as well as health issues, may pose threats to attachment. Maternal health benefits from breastfeeding include possible earlier return to pre-pregnancy weight[91], reduced risk of breast cancer[92] and enhanced maternal self-esteem and success in parenting.[93,94]

Breastfeeding is especially important to low income and homeless children. The late Executive Director of UNICEF, James Grant, has said "Breastfeeding is a natural 'safety net' against the worst effects of poverty...It is almost as if breastfeeding takes the infant out of poverty for those first few vital months in order to give the child a fairer start in life and compensate for the injustice of the world in which it was born."[95] Ironically, infants at the highest risk for compromised health and developmental outcomes are least likely to be breastfed. In 1998, 64% of all US mothers breastfed in the postpartum period and 29% reported breastfeeding their infants at 6 months. These rates are substantially lower for infants born to African American women. Only 45% of black women breastfed in the postpartum period; at 6 months, the breastfeeding rate was 19% for black women, compared with 28% for Hispanic women and 31% for white women. In women of lower socio-economic status breastfeeding rates are substantially lower.[96,97,98] In 1995, the breastfeeding rate immediately post-partum was 46.6% for WIC participants versus 71% for those who did not participate in WIC. At 6 months these rates were 12.7% and 29.2% respectively.[99] A study found that lower levels of breastfeeding among low-income mothers may be due to misunderstandings about the process and to their own feelings of guilt and deprivation. The authors concluded that educational interventions can improve rates of breastfeeding among low income mothers.[100]

The unique protections against illness and infection which breast milk provides is especially important for homeless infants with the increased exposure to

pathogens associated with the shelter environment.[101,102] Homeless families often do not have adequate opportunity to prepare formula and sterilize bottles, placing infants at even higher risk for infection. Breastfeeding can protect homeless infants from the nutrition-related morbidities associated with homelessness, including growth deficiencies and iron-deficiency anemia and may help prevent future obesity. Unfortunately, at many shelters there are logistical barriers to breastfeeding, including lack of privacy and inadequate resources and support. As discussed previously, homeless mothers are frequently depressed and socially isolated, which make breastfeeding still more unlikely. Among the shelters surveyed that had "best practices" for nutrition, none actively promoted breastfeeding.

Homeless families who formula-feed their infants on a limited food budget frequently run out of formula supplies. Although the WIC program provides formula, it is a supplemental nutrition program, and its benefits do not cover an infant's total nutrition need. For a typical infant, the 26 oz of formula that WIC provides daily is sufficient until approximately 2-3 months of age.[103] Parents who are not able to access WIC or whose older infant needs more formula than WIC provides, commonly overdilute the formula to make it last longer, use other types of milk or introduce table food inappropriately early. A study of WIC infant feeding practices found that 8% of mothers excessively diluted the formula and roughly 25% added other foods or liquids to the formula by the time their infants were three months old. Many WIC infants are given cereal, fruits, vegetables and non-formula liquids (including fruit juice, sugar water, fruit flavored beverages) too early.[104] These strategies help to decrease use of formula, but compromise the nutrition value of the infant's diet and heighten the risk for anemia, growth delays and cognitive deficits.

Formula feeding is more expensive for the health care system. Investigators focusing on lower respiratory tract illness, otitis media, and gastrointestinal tract illness found an enormous difference in health care utilization between breastfed and non-breastfed infants. Between birth and 12 months of age, the additional cost to a managed care company for a non-breastfed infant was between $331 and $475 for excess office visits, days of hospitalization and prescription medication. Managed care plans can improve infant health status and realize cash savings by encouraging exclusive breastfeeding during the first year of life.[105]

Undernutrition

Pediatric undernutrition may severely impair the health and development of homeless children yet homeless families often lack sufficient resources to adequately address this issue. Shelter staff and Health Care for Homeless

clinicians can play a significant role in both identifying and addressing undernutrition.

In a study of growth and development, Metallinos-Katsaras and Gorma define undernutrition as "an inadequate supply of nutrients in relation to biological needs for optimal functioning of an organism." Undernutrition is assumed to be present in growth delay in the form of caloric and/or protein deficiency, possibly accompanied by micronutrient deficiencies. It can also be present with sufficient or even excessive caloric intake, as may be the case in obese children who consume mainly low nutrient density but high calorie foods. Measurements of growth and biochemical indicators of micronutrient levels are used to assess undernutrition. Assessments of nutrient content of diet are an indicator of risk and do not measure the availability of a particular nutrient at the cellular level.[106]

Undernutrition and resulting growth failure during infancy or early childhood may be caused by a combination of psychosocial stressors, including parental mental health issues, stress and lack of social support in combination with individual child factors (e.g. temperament) or inappropriate feeding practices. Children of homeless and poor families are at high risk for undernutrition and also are less likely to have the resources for intervention. According to a recent study on the effects of undernutrition on growth and development, "Organic factors such as low birth weight, medical conditions (including metabolic disorders and recurrent infections) and oral-motor dysfunction may contribute to the development of pediatric undernutrition. Undernutrition may affect physical growth directly or through its influence on biological processes, such as immune function, hormonal function and organ development." Cognitive development and behavior are also compromised by undernutrition.[107]

Early undernutrition affects an infant's activity level. Malnourished infants interact less with their mother and present a lower level of environmental exploration. By 18 months, malnourished toddlers move around six times less than do their adequately nourished peers, and exhibit behavior patterns which are not as complex. Because they are less active and demanding, undernourished children receive less feedback on appropriate behavior from their mothers. This compromises subsequent behavioral development.[108] Studies show that motor coordination in preschool age children is negatively affected by undernutrition.[109]

The long-term effects of early undernutrition are now well established. The suboptimal brain development caused by undernutrition during the first year of life leads to lower intelligence and academic achievement.[110] Early undernutrition

alters brain neural receptor function, which affects emotional responses to stressful events.[111] A longitudinal study found the negative impact of undernutrition on intellectual development and visual-motor perception are still notable at 15 -18 years of age.[112]

It is believed that the impact of environmental deficiencies associated with poverty and undernutrition are cumulative. Recent studies show that even relatively mild food insufficiency during childhood, if not corrected, can produce lifelong cognitive impairments. All aspects of child functioning may suffer, including motivation, attention, emotional expressiveness, parent-child interaction, play, and learning. The longer nutritional needs go unmet, the greater the resulting cognitive and behavioral deficits. The damage caused by undernutrition is not necessarily permanent, however, and subsequent improvement in nutrition and environmental stimulation may improve cognitive and behavioral outcomes.[113]

In one study, children of low-income families who received supplemental nutrition scored higher on tests of knowledge, vocabulary and reading than those who did not receive supplements. Reaction time for information processing tasks was faster. In addition, children receiving supplemental nutrition were found to benefit more from educational services available to them, and subsequent differences in performance between supplemented and unsupplemented children increased with each year of schooling. [114] The national evaluation of the WIC program found a consistent, although not significant, relationship between WIC dietary supplementation and increased attention span and creativity in children.[115] In studies of inner city public school students, hunger and food insufficiency were related to poor behavioral and academic performance characterized by hyperactivity, aggression and anxiety. School absenteeism was also noted to be an associated problem.[116,117]

These findings relating poor nutrition and hunger to school problems have led to a simple but powerful solution: providing meals in public schools. The National School Lunch Program administered by the U.S. Department of Agriculture provides from one-third to one-half of the nutritional intake of participating children from low-income families.[118] In a study conducted in Baltimore and Philadelphia, it was found that students who participated in a school breakfast program had significantly higher math scores and significantly lower scores on behavior screening used to identify psychosocial problems. Subjective ratings of emotional and behavioral problems by teachers decreased for participating children. School attendance also improved.[119] Shelters can play an equally

significant role as schools by ensuring that adequate food resources are made available to homeless families, particularly those with young children.

Growth deficiencies

The growth of young children is evaluated by comparing cumulative height and weight data to established growth charts for age and gender. Failure to thrive is a clinical term that is generally used to describe infants and young children with weights below the fifth percentile on standardized norms for age and gender and children who fall behind in weight gain over time, e.g., "falling across" two "major percentiles" (for example, from 55th to 20th percentile). In general, the finding of low weight for age alone ($<5^{th}$ percentile) suggests acute malnutrition, while depressed height for age ($<5^{th}$ percentile) suggests more chronic malnutrition (stunting). This definition suggests that stunting is the long term result of uncorrected acute malnutrition, but research has not shown a correlation between these two conditions. It is now thought that stunting and wasting may involve different risk factors, with some possible overlap.[120]

Approximately 5% of healthy children should fall below the fifth percentile of height for age. It is probable that full growth potential is not being reached by some children in a group if over 5% of that population group is below the fifth percentile. Children living in poverty disproportionally experience these growth problems. Of all poor children under one year of age, 10% are growth retarded; for African American children in the same age group, the figure is 15%.[121]

In a study of comparing homeless children with domiciled low income children using National Center for Health Statistics standards for growth, it was found that homeless children had significantly ($p<.001$) lower height percentiles. Domiciled children had higher weight for height compared to homeless children. According to the authors, "homeless children in this study exhibited a pattern of stunting without wasting, which is characteristic of children experiencing moderate chronic nutrition stress." [122] In another study of homeless children, Wood found 5% of boys and 9% of girls to have weight for height measurements below the 5th percentile. Again, the homeless children presented a pattern of stunting without wasting, characteristic of moderate chronic undernutrition. In these children, both weight and height are decreased, but weight for height is normal.[123] One of the Healthy People 2010 objectives, which are set to reduce growth retardation in low-income children, recommends paying special attention to reducing growth retardation in homeless children.[124]

The visible effect of growth deficiencies and failure to thrive is reduced size. Full catch-up growth can occur, but is dependent on the timing of intervention. If treatment is not available or too late, adult size will be affected. Work capacity and economic productivity have been associated with adult size. Reproductive capability in women has been directly related to attained size and lean muscle mass. Women of greater height typically give birth to heavier babies, and have less incidence of low birth weight and infant mortality.[125]

The less obvious results associated with lack of growth have a higher impact on health but are not easily measured. Hormonal function, immune function, brain and organ development are all affected. In turn, these bodily changes cause more infections, poor appetite and poor dietary intake, thus creating a vicious cycle of infection-malnutrition that is difficult to break.[126] Studies have also found decreases in motor development, cognitive function, and activity levels that may persist long-term.[127,128]

Poverty can contribute to poor growth in various ways, the most obvious of which is food insecurity, ranging from insufficient amounts of food or formula to being unable to purchase desired foods. Following the mealtime management practices generally recommended for a child who is "difficult to feed" is likely to result in a certain amount of "food-wasting," which may be troublesome with a tight food budget. Given the often erratic appetites of young children, advice to "try different foods" and "not force-feed" will inevitably result in some food being discarded.

Food intake can be influenced by many other aspects of poverty, including: overcrowded housing; limited day care access; and increased health risks, such as low birth weight and lead toxicity. Parental depression, substance abuse and violence, which occur in all social classes, but for which families living in poverty are at higher risk, can result in erratic or highly stressful feedings.[129]

Iron Deficiency and Iron Deficiency Anemia

Iron deficiency is the most common nutritional deficit in the United States. Its prevalence is highest among young children (with toddlers, pre-term and low birth weight infants at increased risk) and women of childbearing age, particularly pregnant women. Iron deficiency in children is highest among racial and ethnic minorities and low-income children.[130,131132] Of children 1-2 years of age, 17% of Mexican American, 10% of African American and 6% of white children were found to be iron deficient. For children living with families having

incomes lower than 130% of the poverty threshold, the iron deficiency rate was 12%, compared to a 7% iron deficiency rate among children of higher income families. Homeless children living in shelters in New York City were found to have higher rates of depleted iron stores than housed children of similar economic status.[133]

Maternal iron deficiency anemia increases the risk of preterm delivery and subsequent low birth weight. Low birth weight babies will in turn be at high risk for significant developmental, behavioral and academic problems. Some studies have shown an association between maternal anemia and infant health (as measured by Apgar scores) and increased neonatal death has been found in infants of mothers not supplemented with iron during pregnancy. Although maternal hemoglobin levels are not associated with infant hemoglobin status immediately post partum, infants born to anemic mothers seem to have lower iron stores and are at higher risk of becoming anemic themselves.[134] A recent study showed that continuous participation in the WIC Program may reduce the likelihood that high risk pregnant women become anemic.[135]

Iron deficiency is a continuum that is usually described in three stages. The first stage consists of depleted iron stores without functional or health impairment. In the second stage, circulating iron (measured by serum iron or by serum transferrin) is decreased. Iron deficiency anemia is the third stage, characterized by the decreased production of hemoglobin, which transports oxygen. Anemia can also be caused by factors other than iron deficiency, including infection and inflammation.[136,137]

Iron deficiency in young children can be prevented by good nutrition, including breastfeeding, use of iron fortified formulas and delaying the introduction of cow's milk until 12 months of age. When table foods are introduced into the infant diet, it is important that iron-rich foods are offered, including iron fortified infant cereals
and pureed meats. Iron-rich foods such as fortified cereals, meats and beans should be selected as part of toddler diets. For at risk groups or extremely selective eaters, a multivitamin supplement which includes iron may be added as part of the prevention strategy.

Iron deficiency and iron deficiency anemia often occur jointly with growth deficiencies but may also occur independently. Obese children, appearing outwardly well-fed, may be anemic. The more acute effects of iron deficiency anemia include fatigue, irritability and decreased exercise tolerance.[138] Young

children usually lack specific complaints, but parents may notice tiredness, sleepiness and inappropriate behaviors.[139] Other behavioral issues such as increased fearfulness and short attention have also been observed.[140] The combination of these physical and behavioral effects can lead to more difficult child behavior, which will put higher demands on parenting skills.[141] Because it can result in a more "difficult to feed" child, anemia itself may put children at higher risk for growth deficiencies. Clinical trials of iron supplementation in infants and children with iron-deficiency anemia have shown positive effects on weight gain and/or linear growth.[142]

Iron deficiency anemia in infancy is associated with alterations in affect and activity, indicating this condition may inhibit cognitive growth. Infants and toddlers 12 to 23 months of age with iron deficiency anemia were less exploratory of the environment, took less pleasure in stimuli, remained closer to their caregiver, made fewer attempts at tasks and were less attentive to instructions and demonstrations.[143] These developmental and behavioral problems persist for ten years or longer after iron treatment, indicating an extreme level of risk to life outcomes posed by severe chronic iron deficiency anemia. Using the Conners Behavior Checklist (CBCL), children with iron deficiency anemia were statistically more likely to score in the problem range for Anxiety/Depression, Social Problems, Thought Problems, Attention Problems and Delinquent Behavior.[144] Due to the developmental risk associated with iron deficiency anemia, it has been concluded that primary prevention of mild and moderate mental retardation should include ensuring adequate nutrition during infancy and early childhood to reduce the prevalence of iron deficiency anemia. A study linking early childhood WIC nutrition data and school records found "anemia, independent of birth weight, maternal education, race/ethnicity or other factors, was associated with an increased likelihood of mental retardation." It is also noted that participation in the WIC nutrition program may protect intellectual development from the deleterious impact of undernutrition associated with poverty.[145]
Although traditionally cognitive effects of iron deficiency have been described in infants and toddlers and related to future scholastic performance, more recently effects of decreased verbal learning and memory were found in iron deficient adolescent females, unrelated to early childhood occurrences of iron deficiency.[146,147]

Poor nutrition, especially iron-deficiency anemia, places the child at increased risk for lead poisoning. Children with low iron and/or calcium stores have enhanced lead absorption. Healthy snacks have a preventive value, because the

gastrointestinal absorption of lead is increased when the child's stomach is empty.[148] Increased absorption of lead has also been found in children deficient in calcium, protein and /or zinc.[149] A low-fat diet may reduce lead absorption, and for children over 24 months of age, has the added benefit of improving cardiovascular health.[150]

Lead acts as a neurotoxin, disrupting central nervous system development, especially before 24 months of age. The effects of lead poisoning are greatest when the exposure begins early and persists over time. Elevated blood lead levels during this critical period can affect early cognitive development, attention and behavior.[151] Elevated lead levels at 24 months have been found to be associated with a decline in IQ score and academic deficits at 10 years of age.[152]

Obesity

Rates of overweight and obesity, increasing dramatically in the general pediatric population, seem to disproportionally affect poor and minority children of all ages. The rate of overweight and obesity during the 1988-1994 period is estimated at 11% for all children and adolescents aged 6 to 19 years. The corresponding rates for African American children and Mexican American children during the same period were 14% and 15% respectively. Children from low income households (under 130% of the official poverty level) had an overweight and obesity rate of 13%.[153] A recent survey of low-income children aged 2 to 5 years found overweight or obesity in 17% of white children, 19% of black children and 23% of Hispanic children.[154] Obesity is also frequently found among homeless children. A study by Wood found 12% of homeless boys and girls having weight for height measurements over the 95th percentile.[155]

Some individuals and policy makers have questioned the existence of widespread hunger and food insecurity in the low income population, precisely because of the high prevalence of obesity and overweight in the same subgroup. Dietz was one of the first researchers to describe this phenomenon in a 1995 case-study of an obese 7-year old girl who regularly experienced food shortages and whose mother provided her with high fat and inexpensive foods to prevent hunger. He hypothesized that food choices or physiologic adaptations in response to episodic food shortages could cause increased body fat.[156] Olson supports this hypothesis on the basis of the eating pattern literature which has shown that food restriction, whether voluntary or involuntary, results in a variety of cognitive, emotional and behavioral changes, such as preoccupation with food and eating. The relationship between Body Mass Index (BMI) and food insecurity has not

been tested in children, but Olson's findings from a cross-sectional study in adult women suggest that food insecurity in this population is related to weight. Compared to women in food secure households, she found that the least severe level of household food insecurity (without hunger) was associated with a significantly increased rate of obesity (BMI>29).[157] A recent study among shantytown children in Brazil lent support to the hypothesis of physiologic adaptations in response to undernutrition. This study found "nutritionally stunted children...to have impaired fat oxidation, a factor which predicted obesity in other at risk populations.[158]

Obese children may be affected by concerns about appearance, and may suffer from social stigmatization, discrimination and lowered self-esteem. Even young children seem to be biased in favor of thinness. When shown fat and thin silhouettes, nine-year-old children characterized the fat figures as having fewer friends, being less liked by their parents, doing less well at school, being less content with their appearance and wanting to be thinner.[159] A recent study demonstrated lower levels of self-esteem in 13-14 year old obese white and Hispanic girls as compared with non-obese girls. Childhood obesity also had a mild effect on self-esteem in young adolescent boys. Obese children with low self-esteem were more likely to exhibit sadness, loneliness, nervousness, and high-risk behaviors such as smoking or consuming alcohol.[160]

Complications of pediatric obesity are orthopedic complaints, sleep apnea, high blood pressure, high cholesterol and Type II diabetes.[161] Type II diabetes, typically seen in adults, is now starting to occur in adolescents, with African American and Hispanic low-income children at high risk.[162,163] Obese children whose overweight tracks into adulthood will also be at higher risk for heart disease and stroke, gallbladder disease, arthritis and certain types of cancers.[164]

Oral health

Dental caries remains one of the most common diseases among U.S. children. Early childhood caries, sometimes referred to as baby bottle tooth decay or nursing caries, is evident in 17% of children aged 2–4 years. Unpublished data from the National Health and Nutrition Examination Survey (NHANES III) indicates that among children aged 6 to 8 years, African American children (36%) and Hispanic children (43%) have a higher incidence of untreated dental caries than white children (26%). The same data showed that as few as 3% of poor children have dental sealants compared to the national average (23%).[165]

Baby bottle tooth decay can be caused by too frequent and/or too long feeding episodes from a nursing bottle filled with milk or another carbohydrate-containing liquid.[166] The inappropriate use of a nursing bottle has been deemed a nutrition risk factor for qualification for the WIC program.[167]

Homelessness in children has been associated with poor dental health.[168,169] Conditions may include periodontal disease, dental decay and acute oral pain.[170] A Boston survey reported that among homeless children ages 5 to 9 years, 33% required immediate care. More active dental disease was present in the homeless children of this sample than in regional and national data.[171] Unreliable sources of food and inadequate nutrition reduce a homeless person's oral health. Dietary limitations by missing teeth or toothache also affect nutrition and overall health.[172,173] Nutrition deficiencies in homeless pregnant women may impair fetal tooth development, particularly during the early phase of tooth growth from conception through age 6 months.[174]

Early tooth loss caused by dental decay can result in impaired speech development, underweight and failure to thrive, absence from and inability to concentrate in school, and reduced self-esteem.[175,176] Oral health affects diet, nutrition, sleep, psychological status, social interaction, school and work, and ultimately, a person's psychosocial and economic quality of life. Impaired oral health can lead to a compromised ability to bite, chew, and swallow foods, thus limiting food selection and resulting in poor nutrition.[177]

Recommendations

For the State and Federal Government

- Establish minimum service standards for homeless family facilities that take into account the nutritional needs of homeless families and children.
- Provide sufficient financial assistance to enable shelter providers to fully adopt new minimum standards.
- Adopt The Food Stamp Outreach For Kids (FORK) Act introduced by Representatives Bill Coyne (D-PA) and Sander Levin (D-MI) and Senator Bob Graham (D-FL). (H.R. 2738 / S. 1800)
- Reduce the length and complexity of food stamp applications along with the amount of time required to enroll and re-certify.
- Facilitate food stamp enrollment by expanding food stamp and welfare office hours to evenings and weekends.
- Promote increased awareness of nutrition assistance resources including food stamps, WIC and the Child and Adult Care Food Program (CACFP) by encouraging outreach efforts to homeless family shelters, their residents and other homeless service providers.
- Out-station trained food stamp eligibility workers in family shelters on a periodic basis to increase program awareness, assist with applications and address misconceptions regarding program eligibility. Establish mobile or satellite WIC clinics in soup kitchens, shelters and other locations serving homeless families.
- Encourage increased collaboration between Health Care for the Homeless programs and shelter providers. Increase nutrition assessment and support services for homeless families by providing additional resources for HCH nutrition programming.
- Require the USDA's Food and Nutrition Service to conduct periodic reviews of local food stamp offices' compliance with USDA regulations.
- Include food security for homeless families as a component of HUD Continuum of Care goals. Encourage Continuum of Care Coordinators to identify local nutrition needs and service gaps effecting homeless families and promote collaborative efforts to address these needs.

For Health Care for the Homeless Providers

- Identify local shelter policies and practices that affect the nutrition and health status of patients served by HCH programs. Establish closer linkages with shelters whose residents you serve and educate providers about the health consequences of restrictive food policies.
- Advocate for improved nutrition related shelter policies. Use enclosed shelter nutrition guidelines as an advocacy tool to improve the level of nutrition awareness and services among shelter staff and management.
- Working in partnership with shelter providers, offer nutrition screening, education and treatment to shelter residents.

For Shelter Providers

- Use the enclosed shelter nutrition guidelines as a tool to assess your nutrition policies and practices and adopt recommendations as needed.
- Employ the shelter nutrition guidelines as an advocacy tool to argue for increased funding for food and nutrition services targeted at homeless individuals and families.

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