

If the economy is so good, why are so many still hungry?

The nation has experienced a record strong economy and historically low rates of unemployment.

At the same time, there has been large-scale involvement by both the federal government and private organizations to provide food assistance to the poor.

Despite a strong economy and these public and private efforts, millions of Americans continue to experience hunger and food insecurity every year.

The question is therefore raised: Why are the poor still struggling to have enough to eat?

Four Major Research Questions

- 1) What are the rates of food insecurity and hunger in Hartford?
- 2) Who participates in public, private and community-based food assistance programs, who doesn't and why?
- 3) What is the role of the community? What are the relationships between food security and social networks?
- 4) What differences exist between neighborhoods in Hartford with regard to food security and program participation?

Definitions

Hunger: The mental and physical condition that comes from not eating enough food, due to insufficient economic, family or community resources. (Wehler et al., 1992)

Food Insecurity: Limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.

Food Security: Access by all people at all times to enough food for an active healthy life and includes at a minimum: a) the ready availability of nutritionally adequate and safe foods, and b) the assured ability to acquire acceptable foods in socially acceptable ways (e.g. without resorting to emergency food supplies, scavenging, or stealing.)
(Life Sciences Research Office)

Two Underlying Determinants of Food Security

- 1) Whether a Household Can Afford Enough Food
Income
Education
Employment
Participation in Food Assistance Programs
Social Capital
- 2) Whether a Household Can Access Enough Food
Own a Car
Presence of Supermarket or Food Assistance Programs in one's neighborhood
Time to travel to the Supermarket
Time to travel to Food Assistance Programs
Social Capital

Social Capital

Social Capital: The features of social organization such as networks, norms and trust that increase a community's productive potential. (Robert Putnam, 1993)

Social capital is what many people describe as a "sense of community."

Social Capital describes the strength and role of social networks within communities:

Whether neighbors trust one another,
Whether neighbors reciprocate for one another, and
Whether people feel safe in their neighborhood.

The concept of social capital has been studied with regard to crime rates and with several health indicators, but has not been analyzed with regard to food security and hunger.

Methods

Sampling frame consisted of a list of all residential addresses in Hartford, from the City of Hartford Assessor's Office.

Systematic sample with a random start was selected.

Target population is households with incomes below 185% of the federal poverty level.

The most recent USDA estimates of food security show that food insecurity is six times as prevalent in households with annual incomes below 185% of the poverty line as in households with incomes at or above this level.

More Methods

Four focus groups were conducted for feedback on the hypotheses and survey instrument.

Survey instrument was translated into Spanish and pretested.

330 surveys were conducted door-to-door from May to October 1999. Respondents were paid \$5 for their participation.

73 households had incomes above the income screen and were not included in the sample.

270 households refused to participate in the study.

The Survey Instrument

Food Shopping Behavior

Knowledge of and Participation in Federal and Community-Based Food Assistance Programs

Food Security and Hunger (USDA Hunger Core Module)

Social Capital (Community Survey Questionnaire in Chicago Neighborhoods, 1994)

Fruit and Vegetable Consumption (Block Screening Questionnaire)

Household Demographics

Measuring Food Security and Hunger

USDA Food Security / Hunger Core Module was used. The U.S. Census Bureau first administered the Module in April 1995 as a supplement to the regular Current Population Survey.

18 questions that ask about a household's experiences with food insufficiency during the previous 12-month period. Examples of questions (Often, Sometimes or Never True):

"We worried whether our food would run out before we got money to buy more."

"My child was not eating enough because we just couldn't afford enough food."

In the last 12 months, were you ever hungry but didn't eat because you couldn't afford enough food?

Measuring Social Capital

To measure social capital, a 7-item Likert-type scale was used. Answering Agree or Disagree, Questions included:

"People around here are willing to help their neighbors."

"People in this neighborhood can be trusted."

"If I had to borrow \$30 in an emergency, I could borrow it from a neighbor."

Respondents were also asked if anyone in the household is a member of a social or civic organization, and how long they have lived in Hartford and in their house or apartment.

Rates of Food Insecurity and Hunger

Over half of households from the study experienced some level of food insecurity during the 12 months prior to the survey date.

- 48% Food Secure
- 28% Food Insecure without Hunger
- 16% Food Insecure with Moderate Hunger (where at least one adult experiences hunger)
- 8% Food Insecure with Severe Hunger (where at least one child experiences hunger)

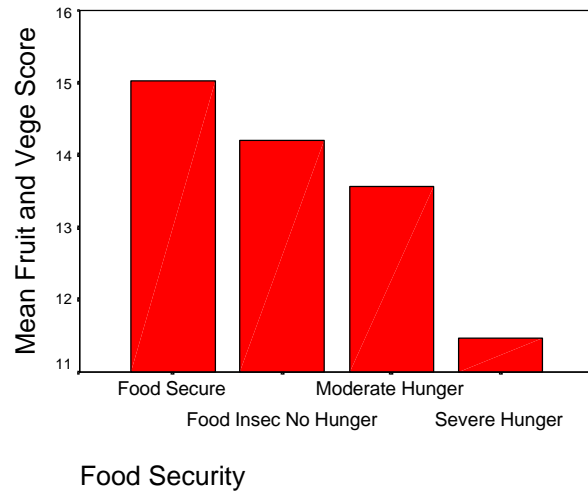
Compared to USDA figures for 1999: In central cities, below 130% of Poverty:

- 63% Food Secure
- 25% Food Insecure without Hunger
- 12% Food Insecure with Hunger

Food Security Status by Household Demographics

Characteristic	Total #	Sample %	Food Secure %	FI No Hunger %	FI with Hunger %
Overall Sample	330	100	48	28	24
Black	146	44	46	31	22
White	20	6	65	15	20
Hispanic	153	47	48	28	24
< 50% Poverty	35	11	37	32	31
> 100% Poverty	157	49	59	22	19
With Child under age 5	119	36	56	29	15
With School-age Child	174	53	44	30	26
With Senior	53	16	62	25	13
With No Car	183	56	40	33	27

Food Security and Fruit and Vegetable Consumption



Program Knowledge and Participation

Program	% who Know about Program	% who Participate
Food Stamps	97	53
Welfare / TFA	96	31
School Breakfast Program (1)	93	50
Summer Food Program (1)	59	15
Congregate Meal Program (2)	79	8
Food Pantry	77	26
Soup Kitchen	72	12
WIC (3)	100	72
Farmers' Market	77	29
Community Garden	29	3

(1) Among households with school-age child.
 (2) Among households with member over 60 years old.
 (3) Among households with child under 5 years old.

Program Participation and Food Security Status

Program	% of Participants who are Food Secure
Food Stamps	41 **
Welfare / TFA	44
School Breakfast Program	42
Summer Food Program	35
Congregate Meal Program	50
Food Pantry	34 **
Soup Kitchen	31 *
WIC	57
Farmers' Market	57 *
Community Garden	60

* significant at .05 level, ** significant at .01 level.

How Households Heard about Food Assistance Programs

Source of Information	Summer Food Pgm	Food Pantry	Soup Kitchen	Farmers' Market	Cmty Garden
Family or Friends	22	69	63	28	44
Saw passing by	6	8	13	17	48
Child's School	46	-	-	-	-
Church	-	10	9	-	1
WIC	-	-	-	44	-
From childhood	10	-	-	-	-
Newspaper or TV	3	2	9	6	5
Other	13	11	6	5	2
TOTAL	100	100	100	100	100

Program Non-Participation

Among households who were not only food insecure, but who experienced hunger during the past 12 months:

**45% did not receive Food Stamps,
65% did not receive TANF,
67% did not go to a food pantry, and
78% did not go to a soup kitchen for emergency food.**

Reasons for Not Participating

When asked why they did not go to a food pantry, food secure households were significantly more likely than food insecure households to say that:

**they didn't need the food ($p=.00$),
they didn't believe they were eligible ($p=.01$), and
they felt uncomfortable going to a food pantry ($p=.00$).**

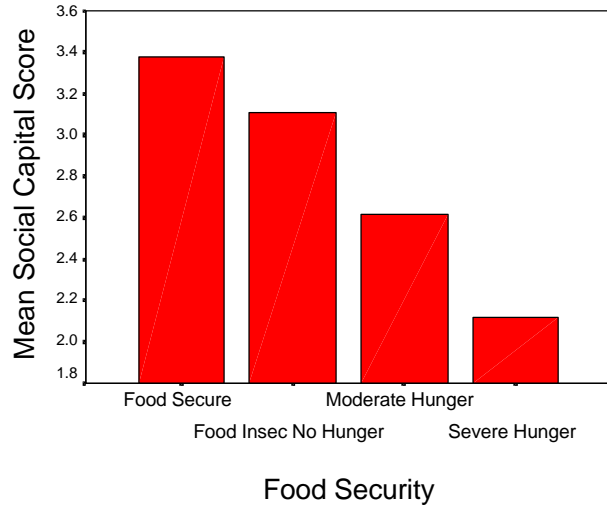
Reasons for Not Participating

However, food secure and food insecure households were equally likely to say that they felt uncomfortable going to a soup kitchen.

When asked about food pantries, soup kitchens, farmers' markets and WIC, food insecure households were significantly more likely to say that:

**It was difficult to get to the program ($p=.00$) and
Lack of transportation was a reason for not participating.**

Food Security and Social Capital



Social Capital

Having trust in one’s neighbors and being involved in one’s community are positively associated with household food security.

Households with higher degrees of social capital are less likely to be hungry, after controlling for income.

Households that are involved in social or civic organizations are less likely to be hungry.

Hispanics are more likely to have low social capital compared to non-Hispanics.

Neighborhoods

Households were classified into one of 14 residential neighborhoods in Hartford (excluding North and South Meadows and Downtown).

There is a significant difference between neighborhoods based on how often children participate in the School Breakfast Program, after controlling for income.

Children in the central and north neighborhoods of Hartford (except for Blue Hills) are more likely to eat breakfast at school compared to children in the South end of Hartford.

There are also significant differences between neighborhoods in the rates of food security and social capital.

Neighborhood Differences

Neighborhood	% Food Secure	% Participating Often in SBP
Parkville	25	56
Barry Square	41	48
Blue Hills	41	40
Sheldon Charter Oak	42	63
South End	43	20
Asylum Hill	44	65
Clay Arsenal	44	77
Northeast	45	78
Frog Hollow	50	54
South Green	52	33
Upper Albany	59	67
Southwest	60	0
West End	63	100
Charter Oak-Zion	77	56

Neighborhood Maps

Map displaying food resources in Hartford, including:

- Supermarkets
- Food pantries and soup kitchens
- Farmers' markets
- Community gardens

Maps displaying differences by neighborhood in:

- Food security status
- School Breakfast participation
- Social Capital

Transportation and Food Shopping

55% of households do not own a car.

20% of households rely on alternative forms of transportation (bus, walking, taxi) to get to and from the supermarket.

Transportation from the Supermarket:

- 44% Drive own car
- 36% Friend drives respondent home
- 10% Take a bus
- 5% Walk
- 5% Taxi

Where do you buy *most* of your food?

- 76% Large Supermarket
- 21% Medium sized grocery Store
- 3% Small Convenience Stores

Food Shopping Behavior

Households that are food secure:

- Are more likely to shop at a large supermarket
- Take more trips to a large supermarket each month
- Are more likely to own a car
- Buy *most* of their food at a large supermarket

Households that buy most of their food at medium-sized grocery stores or small corner stores are significantly less likely to be food secure.

Food insecure households have difficulty accessing food because they:

- Are less likely to shop at a large supermarket
- Take fewer trips to a large supermarket each month
- Are more likely to take alternative forms of transportation to and from the supermarket

Logistic Regression Models

Measuring the effect of participation in public, private and community-based food programs on food security, while controlling for income, education, and owning a car.

Households with incomes above the poverty line are more than twice as likely to be food secure. The most significant predictor of food security is the number of trips to the supermarket each month.

Households that go to a Food Pantry are less than half as likely to be food secure. Participating in WIC and going to a Farmers' Market are moderately significant in predicting food security.

Participation in Food Stamps, School Breakfast and Summer Food did not significantly increase the odds of being food secure.

Logistic Regression Models

When predicting the odds of being hungry, household income is moderately significant ($p=.07$).

Households that go to a soup kitchen are more than 3 times as likely to be hungry as households that don't go. The fewer trips to the supermarket each month, the more likely to be hungry.

Households with high social capital are significantly less likely to be hungry ($p=.02$) than households with low social capital, after controlling for income, education and owning a car.

Social capital helps protect against hunger even though a household may still be food insecure.

Housing Factors

87% of households rent rather than own their apartments.
27% of households receive Section 8 vouchers for rent.

Median time living in Hartford: 20 years
Median time living in apartment: 2 years

Length of time living in apartment is positively correlated with food security.

Moderately significant relationship ($p=.06$) between owning a home and being food secure.

The higher the rent payment, the more likely the household is to be hungry.

Barriers to Food Access

- Inadequate transportation to get to and from supermarkets and food assistance programs
- Lack of Information about food assistance programs, particularly Summer Food Program

At-Risk Groups

- Households without a car
- Households with school-age children
- Isolated households without social support

Community Assets

Measured both at the household-level and when aggregated to the neighborhood-level, social capital is a significant factor in increasing food security and decreasing hunger.

Study Highlights

There are high levels of food insecurity and hunger in Hartford.

Many needy households are not receiving benefits from available food resources.

Transportation is a barrier for food insecure households and a major reason why they don't participate in WIC, food pantries, soup kitchens and farmers' markets.

Even when households do participate in food assistance programs, many remain food insecure and may also experience hunger.

Social capital helps protect against hunger, even though a household may be food insecure.