

# *FOOD PANTRIES or FOOD STAMPS: Who Uses Them and What Impact Do They Have on Poverty?*

Matthew Maury, Jennifer Laird, Christopher Wimer, and Irwin Garfinkel

Columbia University

June 2017



Columbia Population Research Center  
Advancing Research in Population, Health, and Society



CENTER ON  
POVERTY &  
SOCIAL POLICY  
at Columbia University

## *FOOD PANTRY or FOOD STAMPS:*

### *As NYC Food Assistance Programs Grow, How Much Does Poverty Decline?*

An alarming number of New York City residents are not able to meet basic food needs. According to the latest Poverty Tracker data collected by Columbia and Robin Hood (see [povertytracker.robinhood.org](http://povertytracker.robinhood.org) for more details), over one in ten New Yorkers – approximately nearly 1 Million people – report that it is often the case that their family does not have enough food to eat.

In this report, we examine two coping strategies used by those who experience a food hardship: accessing free food from food pantries and enrolling in the Supplemental Nutrition Assistance Program (SNAP; formerly known as food stamps). Only 63% of NYC residents experiencing severe food hardships receive food assistance- either through food stamps or food aid from a pantry or soup kitchen. In other words, a large share (37%) of those with a severe food hardship do not participate in any kind of food assistance program.

This report has four objectives:

- Report the prevalence and severity of food hardship in New York City
- Examine how often individuals with a food hardship use food pantries and food stamps
- Describe the characteristics of food pantry users and food stamp recipients
- Show potential reductions in poverty after increasing food stamp take-up and food pantry use

We consider a respondent to have a severe food hardship if s/he replies “often” to either of the following two statements:

- “I worried my food would run out before I got money to buy more.”
- “The food I bought didn’t last, and I didn’t have enough money to get more.”

Or if s/he replies “often not enough to eat” to a question about the availability and quality of food in the household. We consider a respondent to have a moderate food hardship if s/he replies “sometimes” to any/all of the questions above, and doesn’t reply “often” to any of them.

There are two primary ways individuals might respond to food hardship: food stamps<sup>1</sup> and emergency food aid (pantries and soup kitchens). While individuals may turn to friends or family or choose to skip meals or go hungry, this report focuses on whether New Yorkers tap the government and nonprofit food assistance mentioned above.

#### *Summary of findings:*

- 11% of New Yorkers – approximately 960,000 people- have a severe food hardship.
- Another 27% of New Yorkers – approximately 2.3 million people – have a moderate food hardship.

---

<sup>1</sup> The federal gross income cutoff for SNAP eligibility is 130% of the Federal Poverty Line (FPL). The New York State income cutoff is 150% FPL.

## *FOOD PANTRY or FOOD STAMPS:*

### *As NYC Food Assistance Programs Grow, How Much Does Poverty Decline?*

- Of those New York City residents with a severe food hardship, 57% (approximately 551,000 people) report receiving SNAP benefits.
- Only 54% of NYC residents who are eligible for SNAP according to the Poverty Tracker data receive SNAP benefits, though some people may misreport their receipt of benefits in surveys.
- Adults with a food hardship are much more likely to use SNAP rather than seek out emergency food aid through pantries or kitchens.
- Most pantry users receive SNAP; a small share of SNAP recipients use pantries.
- The pantry population is more disadvantaged than the SNAP population.
- If all New Yorkers with a severe or moderate food hardship received weekly food aid through pantries or soup kitchens, the poverty rate would be reduced by 18%. More than 360,000 people would be lifted out of poverty.
- The monetary value of the meals that would be supplied to all New Yorkers with a severe or moderate food hardship if they visited a pantry or soup kitchen on a weekly basis is \$1.1 billion. This estimate is based on the assumption that each visit would supply 9 meals per person per household (New York state standard). The value of each meal varies by borough, ranging from \$2.96 in Queens to \$3.99 in Manhattan.

This report uses Poverty Tracker data collected between 2013 and 2017. The Poverty Tracker is a quarterly survey of two representative samples of adults in New York. The first sample was interviewed from late 2012 to early 2015. The second sample, recruited in the spring of 2015, is currently being followed. In this analysis, we pool both samples. The total sample size is 6,195.

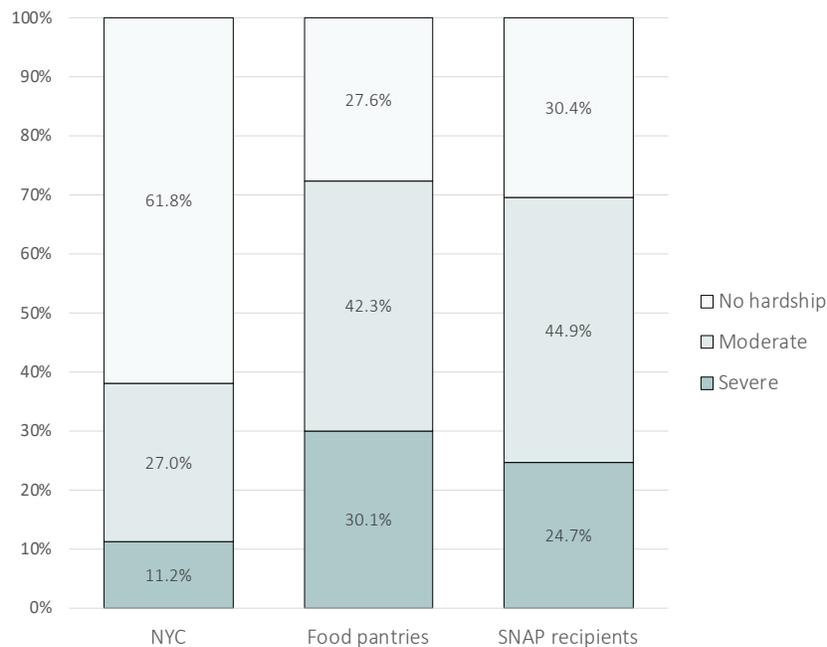
*Pantry versus SNAP users*

In this analysis, we examine two coping strategies used by those with a food hardship: food pantries and SNAP (food stamps). After each simulation, we examine how poverty outcomes are affected.

Food pantries serve the most disadvantaged (Figure 1). Nearly one third of pantry users have a severe food hardship, compared to one in four SNAP recipients. Compared to food pantry users, SNAP recipients have a slightly higher rate of moderate relative to severe food hardship.

Nearly one third of those who seek out food assistance (either through pantries or SNAP) do

*Figure 1. Food hardship for NYC overall, food pantry users, and SNAP recipients*



not report a food hardship. This group may not report a food hardship because they are able to meet their food needs through pantries and / or SNAP.

Most pantry users receive SNAP; a small share of SNAP recipients use pantries. Of those who receive SNAP benefits, 20% visit food pantries. Of those who visit pantries, 60% report receiving SNAP benefits.

Figures 2 and 3 (below) compare the race/ethnicity and education composition of food pantry users and SNAP recipients to the general population.

There are only minor differences in the educational and racial composition of SNAP recipients and pantry users. The education and race differences between those who receive

## FOOD PANTRY or FOOD STAMPS:

### As NYC Food Assistance Programs Grow, How Much Does Poverty Decline?

Figure 2. Race/ethnic composition of NYC overall, food pantry users, and SNAP recipients

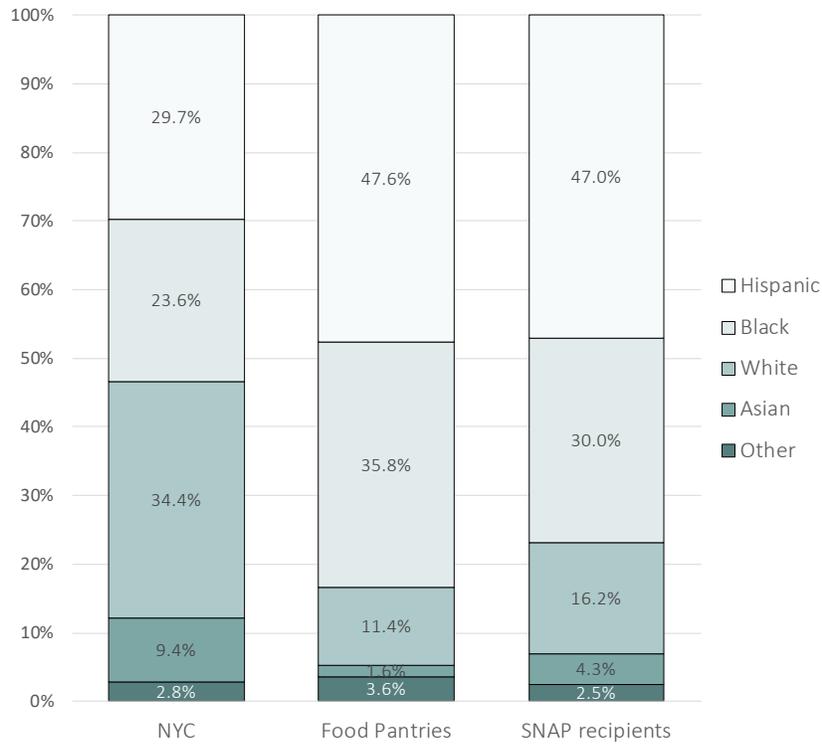
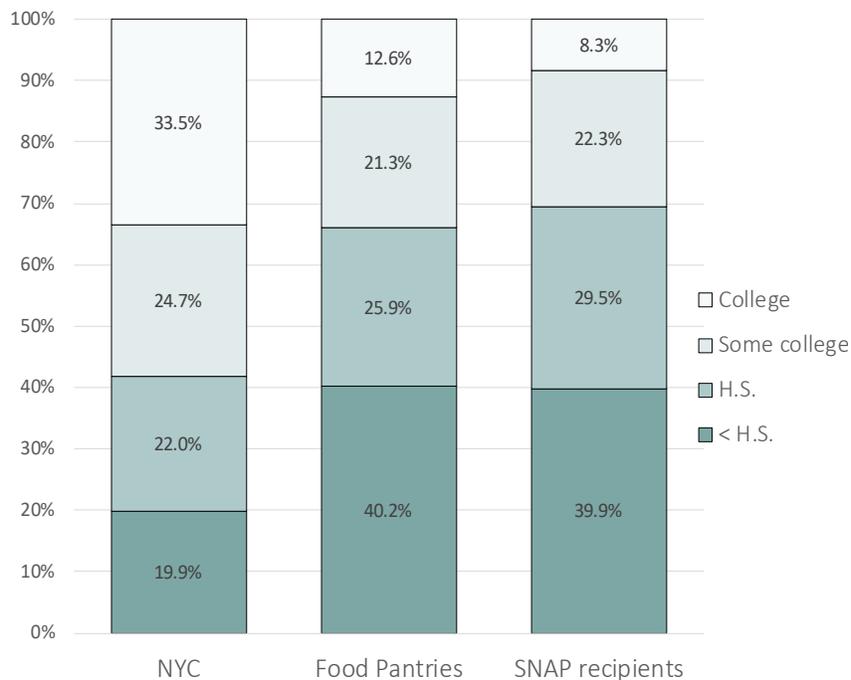


Figure 3. Education composition of NYC overall, food pantry users, and SNAP recipients



## *FOOD PANTRY or FOOD STAMPS:*

### *As NYC Food Assistance Programs Grow, How Much Does Poverty Decline?*

food assistance (either through pantries or SNAP) and the general population of New York City are consistent with what has been reported on the Poverty Tracker website ([povertytracker.robinhood.org](http://povertytracker.robinhood.org)). All hardships (food, housing, financial, utilities, medical) are disproportionately concentrated among the non-white and the non-college-educated population.

#### *Simulations of Poverty and the Impact of Expanded SNAP or Pantry Use*

Roughly 23% of New Yorkers are below the poverty line according to the Supplemental Poverty Measure, as calculated in the Poverty Tracker data. To what extent would we reduce the poverty rate if we were able to increase food pantry use or SNAP take-up? Before we describe the results of the simulations, we first define the outcomes:

##### *Poverty rate*

The Poverty Tracker designates respondents as poor if their annual income is below the Census Bureau's Supplemental Poverty Measure (SPM) threshold. This measure compares family income to a poverty line based on expenditure data on basic necessities. The SPM is a more accurate measure of income poverty than the official poverty measure because it takes into account the high cost of living in New York City, and also counts many government benefits that are not counted in the official poverty measure. According to the latest Poverty Tracker data, 23% of New York residents are poor by this measure.

##### *Poverty gap*

The poverty gap is the total amount of resources necessary to lift the entire population of poor residents over the poverty line (as defined by the SPM). The poverty gap in New York is approximately \$9.7 billion, according to the Poverty Tracker data.

##### *Deep poverty*

The deep poverty line is one half of the poverty line defined by the Supplemental Poverty Measure. According to the latest Poverty Tracker data, 8% of New York residents are experiencing deep poverty.

##### *Deep poverty gap*

The deep poverty gap is the total amount of resources necessary to lift the entire population in deep poverty over the deep poverty line. The deep poverty gap in New York is approximately \$3.5 billion.

##### *Food pantry simulations*

We examine how poverty changes under four different scenarios:

1. Adding the value of food from pantries to our estimate of family resources for those who already visit pantries (an income accounting adjustment; no changes in behavior)
2. Increase the frequency of food pantry visits:
3. All pantry users visit weekly
4. All pantry users and everyone with a severe food hardship visits a pantry weekly

## FOOD PANTRY or FOOD STAMPS:

### *As NYC Food Assistance Programs Grow, How Much Does Poverty Decline?*

5. All pantry users and everyone with a severe or moderate food hardship visits a pantry weekly

We first add the value of food pantry meals to the estimate of household resources. We use estimates of average cost per food pantry meal provided by Feeding America, the nation's largest network of free food assistance providers. These estimates vary by borough; they range from \$2.96 (Queens) to \$3.99 (Manhattan). We assume 9 meals per person in the household (New York State standard) for each food pantry visit. For example, if we take the average meal value across boroughs, we estimate the annual resource value of attending a food pantry on a weekly basis for a family of three to be \$4,538 a year. After we add the value of actual food pantry aid to the calculation of household resources, the poverty rate drops only modestly, from 23.4% to 23.0%.

Only 17% of actual food pantry users visit on a weekly basis. Of those with a severe food hardship, approximately 21% visit a pantry weekly. Of those with a severe or moderate food hardship, only 11% visit a pantry weekly. While many pantries may be limited in their capacity to increase food aid, these statistics suggest that more antipoverty impact could be achieved through increased pantry usage.

Table 1 below shows how the poverty rate is affected after simulating increased food pantry use. Table 2 shows changes in measures of deep poverty.

*Table 1. Poverty after food pantry interventions*

<i>Intervention</i>	<i>Poverty rate</i>	<i>Poverty gap</i>	<i>% of real poverty gap</i>	<i>Number of people lifted out of poverty</i>
Actual	23.4%	\$9.7 billion	100.0%	
Value of pantry food added to household resources	23.0%	\$9.5 billion	98.4%	29,000
If all food pantry users visit weekly	22.5%	\$9.3 billion	96.3%	80,000
If all with severe food hardship visit pantries weekly	21.6%	\$9.0 billion	92.8%	157,000
If all with severe or moderate food hardship visit pantries weekly	19.1%	\$8.2 billion	84.6%	367,000

If all New Yorkers with a severe or moderate food hardship received weekly food aid, the poverty rate would be reduced by over four percentage points, a decrease of approximately 18%.

If all New Yorkers with a severe or moderate food hardship received weekly food aid, the deep poverty rate would be reduced by over two percentage points, a decrease of approximately 25%.

*Table 2. Deep poverty after food pantry interventions*

<i>Intervention</i>	<i>Deep poverty rate</i>	<i>Deep poverty gap</i>	<i>% of real deep poverty gap</i>	<i>Number of people lifted out of deep poverty</i>
Actual	8.1%	\$3.5 billion	100.0%	
Value of pantry food added to household resources	7.8%	\$3.4 billion	98.7%	21,000
If all food pantry users visit weekly	7.5%	\$3.5 billion	96.9%	48,000
If all with severe food hardship visit pantries weekly	7.0%	\$3.3 billion	94.1%	89,000
If all with severe or moderate food hardship visit pantries weekly	5.9%	\$3 billion	87.8%	189,000

Table 3 shows the total value of all the meals distributed under each food pantry scenario. We calculate the value based on the assumption of 9 meals per person per household (New York State standard) for each food pantry visit. As noted earlier, the value of each meal ranges from \$2.96 in Queens to \$3.99 in Manhattan.

*Table 3. Monetary value of each food pantry intervention*

<i>Intervention</i>	<i>Value</i>
Actual food pantry meals	\$426 million
If all food pantry users visit weekly	\$1.1 billion
If all with severe food hardship visit pantries weekly	\$2.2 billion
If all with severe or moderate food hardship visit pantries weekly	\$5 billion

*SNAP Simulations*

*1) Increasing SNAP take-up among service users*

Another way that pantries help New Yorkers meet their food needs is not just through providing free food assistance but also through helping clients enroll in government food programs that enable them to afford food. Thus, we also simulate the potential antipoverty impact of increased enrollment in the SNAP program. Tables 4 and 5 below show how poverty changes after we assign SNAP benefits to those not already receiving SNAP who visit food pantries and then to those not already receiving SNAP who use other free community services (including food pantries). We assign SNAP benefits to those who earn less than 1.85 times the poverty line (the actual eligibility criteria in New York City is 1.5 times the poverty line; 1.85 represents an upper bound of eligibility given that assistance is based on monthly and not annual income and some New Yorkers may have annual incomes above the 1.5 limit but are still eligible part of the year based on spells of low-income and unemployment).

## FOOD PANTRY or FOOD STAMPS:

### *As NYC Food Assistance Programs Grow, How Much Does Poverty Decline?*

We estimate the simulated SNAP benefit by using the median value of a similar family with respect to yearly resources and family size. For example, if a family has two people, and has resources that are 1-2 times the poverty line, they are assigned the SNAP benefit amount of those with the same family characteristics who are receiving SNAP in the same category based on resources and family size. Tables 4 and 5 illustrate the anti-poverty impact of assigning these SNAP benefits to those who are likely eligible (based on their income) and who are visiting food pantries and other community organizations. When we assign SNAP benefits to those visiting food pantries, the poverty rate drops by 0.3 percentage points, the poverty gap is reduced to 99% of its actual value, and approximately 23,000 people are lifted out of poverty. When we assign SNAP benefits to those visiting any community service organization (including pantries), the poverty rate drops by 0.6 percentage points, the poverty gap becomes 97% of what it once was, and approximately 47,000 people move out of poverty.

*Table 4. Poverty after increasing SNAP take-up among service users*

<i>Intervention</i>	<i>Poverty rate</i>	<i>Poverty gap</i>	<i>% of real poverty gap</i>	<i>Number of people lifted out of poverty</i>
Actual	23.4%	\$9.7 billion	100.0%	
If everyone who visits food pantries gets SNAP	23.1%	\$9.6 billion	98.6%	23,000
If everyone who uses community services gets SNAP	22.8%	\$9.4 billion	97.3%	47,000

Table 5 includes the same scenarios as Table 4, but the outcome is deep poverty (one half of the poverty line). When we assign SNAP benefits to those visiting food pantries, the deep poverty rate drops by 0.2 percentage points, the deep poverty gap becomes 99% of its actual value, and approximately 14,000 people are lifted out of deep poverty. When we assign SNAP benefits to those visiting any community service organization (including pantries), the deep poverty rate drops by 0.4 percentage points, the deep poverty gap becomes 97% of what it once was, and approximately 35,000 people move out of deep poverty.

*Table 5. Deep poverty after increasing SNAP take-up among service users*

<i>Intervention</i>	<i>Deep poverty rate</i>	<i>Deep poverty gap</i>	<i>% of real deep poverty gap</i>	<i>Number of people lifted out of deep poverty</i>
Actual	8.1%	\$3.5 billion	100.0%	
If everyone who visits food pantries gets SNAP	7.9%	\$3.4 billion	98.6%	14,000
If everyone who uses community services gets SNAP	7.7%	\$3.3 billion	96.7%	35,000

*2) Increase SNAP take-up based on eligibility*

We estimate that only 54% of adults who are eligible for SNAP (i.e., those falling under 150% of the poverty line) receive SNAP benefits, though of course actual receipt of benefits is widely thought to be underreported in most surveys. We next present the results of simulations in which we expand SNAP receipt to those who earn less than 1.85 times the poverty line. In each simulation, we increase SNAP take-up as a shift between the 1st, 30th, 50th, and 70th percentiles of SNAP eligibility, a score we calculate based on family size and income (the higher the score, the more likely a family would be eligible for SNAP based on family size and income). For example, when simulating a shift above the 70th percentile, we assign SNAP benefits to the 30% of families most eligible for SNAP based on their incomes and family size. Tables 6 and 7 show the anti-poverty effect of assigning more people to SNAP based on eligibility scores. The first row in Tables 6 and 7 includes actual estimates of SNAP receipt. Each subsequent row represents an expansion of SNAP to new recipients.

*Table 6. Poverty after increasing SNAP take-up*

<i>Intervention: SNAP assigned to non-SNAP recipients with an eligibility score greater than or equal to:</i>	<i>Number of people receiving SNAP</i>	<i>Poverty rate</i>	<i>Poverty gap</i>	<i>% of real poverty gap</i>	<i>Number of people lifted out of poverty</i>
Actual	2.3 million	23.4%	\$9.7 billion	100.0%	
70th percentile of SNAP eligibility	2.9 million	22.4%	\$9.3 billion	95.6%	86,000
50th percentile of SNAP eligibility	3.1 million	22.1%	\$8.9 billion	92.3%	107,000
30th percentile of SNAP eligibility	3.3 million	22.0%	\$8.8 billion	90.6%	118,000
1st percentile of SNAP eligibility	3.9 million	21.0%	\$8.4 billion	86.6%	203,000

When we increase the number of people receiving SNAP to include everyone at or above the 70th percentile of eligibility, the poverty rate drops by 1 percentage point, the poverty gap becomes 96% of its actual value, and approximately 86,000 people are lifted out of poverty. In the last simulation in Table 6, we increase the number of people receiving SNAP to include everyone at or above the 1st percentile of eligibility. In this simulation, the poverty rate drops by 2.4 percentage points, the poverty gap becomes 87% of what it once was, and approximately 203,000 people transition out of poverty. Table 7 includes the same scenarios as Table 6. In Table 7, deep poverty is the outcome (one half of the poverty line).

*Table 7. Deep poverty after increasing SNAP take-up*

<i>Intervention: SNAP assigned to non-SNAP recipients with an eligibility score greater than or equal to:</i>	<i>Number of people receiving SNAP</i>	<i>Deep Poverty rate</i>	<i>Deep poverty gap</i>	<i>% of real deep poverty gap</i>	<i>Number of people lifted out of deep poverty</i>
Actual	2.3 million	8.1%	\$3.5 billion	100.0%	
70th percentile of SNAP eligibility	2.9 million	7.7%	\$3.3 billion	95.7%	34,000
50th percentile of SNAP eligibility	3.1 million	7.5%	\$3.1 billion	90.3%	49,000
30th percentile of SNAP eligibility	3.3 million	7.3%	\$3 billion	88.0%	70,000
1st percentile of SNAP eligibility	3.9 million	6.7%	\$2.9 billion	84.7%	118,000

## *FOOD PANTRY or FOOD STAMPS:*

### *As NYC Food Assistance Programs Grow, How Much Does Poverty Decline?*

When we increase the number of people receiving SNAP to include everyone at or above the 70th percentile of eligibility, the deep poverty rate drops by 0.4 percentage points, the deep poverty gap becomes 96% of its actual value, and approximately 34,000 people are lifted out of deep poverty. In the last simulation in Table 7, we increase the number of people receiving SNAP to include everyone at or above the 1st percentile of eligibility. In this simulation, the deep poverty rate drops by 1.4 percentage points, the deep poverty gap becomes 85% of what it once was, and approximately 118,000 people transition out of deep poverty.

#### *Conclusion and Limitations*

One might conclude from this analysis that maximizing food pantry aid will have a larger effect on poverty than maximizing SNAP take-up. We add two caveats to this conclusion. First, in this report, we maximize food pantry aid by assuming people with food hardship will visit a food pantry on a weekly basis. That is a large assumption. We view this scenario as an upper bound in a hypothetical world in which there are no limits to the amount of pantry food available and everyone with a food hardship is willing and able to visit a pantry on a weekly basis. Second, because New Yorkers with a food hardship are more likely to use SNAP than a food pantry, there are more non-pantry users to whom we can assign food aid than there are non-SNAP users to whom we can assign SNAP. In other words, there is more potential for expanding the food pantry population than there is potential for expanding the SNAP population. Obviously SNAP and pantries are not mutually exclusive. A combined effort to increase SNAP take-up and food pantry utilization would undoubtedly have the largest anti-poverty effect.