

How Much Does the Supplemental Nutrition Assistance Program* Alleviate Food Insecurity? Evidence from Recent Program Leavers

Appendix Tables

Table A-1. Characteristics of analysis samples by receipt of SNAP in final 30 days prior to food security survey

	Pooled single-year sample ¹		Pooled 2-year panel sample ²	
	On SNAP final 30 days	Left SNAP prior to final 30 days	On SNAP final 30 days in Year 2	Left SNAP prior to final 30 days in Year 2
	----- percent -----			
Very low food security in last 30 days	14.9	17.8	14.2	18.5
Size of SNAP benefit				
Small (less than 1/3 maximum benefit)	27.5	28.8	27.1	23.3
Medium (1/3 to 2/3 maximum benefit)	37.1	36.9	41.5	42.3
Large (2/3 maximum benefit or more)	35.3	34.3	31.4	34.5
Raw score on 30-day adult food security scale in previous year				
0			75.0	80.4
1			5.3	5.3
2			5.6	4.1
3			5.3	3.2
4			3.6	1.8
5			2.6	2.3
6			1.5	1.5
7			1.1	1.5
Income relative to the poverty line				
Income not reported	7.4	7.6	6.3	7.0
0 to 50%	29.9	17.2	31.5	19.9
50% to 75%	21.3	13.7	24.6	17.9
75% to 100%	16.6	14.8	18.2	16.9
100% to 125%	10.0	13.2	10.1	16.8
125% to 150%	5.4	10.2	4.1	6.7
150% to 200%	5.4	12.1	3.3	9.3
200% or higher	3.9	11.1	1.9	5.5
Employment/labor force status of primary earner				
Employed full time	30.6	59.2	23.7	48.6
Not in labor force—retired	11.0	6.2	14.3	9.1
Employed part time—non-economic reasons	8.4	7.8	8.2	8.3
Employed part time—economic reasons (i.e., prefer to work more hours)	4.8	4.4	3.9	3.4
Unemployed (looking for work)	11.8	8.9	7.7	11.3
Not in labor force due to disability	22.8	8.9	31.2	14.6
Not in labor force—reasons other than retirement or disability	10.6	4.6	11.1	4.8
Change in full-time employment from previous year				
Full-time in current year, no full-time in previous year			7.6	22.0
No full-time in current year, one or more full-time in previous year			7.1	8.7
Education of most highly educated adult				
Less than high school	28.5	16.5	32.5	23.3
High school or GED	61.4	62.8	62.1	65.9
Some college, no four-year degree	27.1	36.0	24.3	32.5
Bachelor degree or higher	5.8	10.3	5.3	10.1

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(Table A-1 continued)

	Pooled single-year sample ¹		Pooled 2-year panel sample ²	
	On SNAP final 30 days	Left SNAP prior to final 30 days	On SNAP final 30 days in Year 2	Left SNAP prior to final 30 days in Year 2
	----- percent -----			
Household composition				
Married couple with child/children	17.8	27.2	15.4	19.8
Single male with child/children	4.2	6.2	3.3	3.9
Single female with child/children	38.9	32.5	37.1	41.8
Two or more adults, no children	15.0	17.9	13.9	14.2
Sole male	8.3	6.3	10.5	7.5
Sole female	15.8	9.9	19.8	12.7
One or more elderly household members	15.6	8.9	19.3	12.1
Changes in household composition since previous year				
Baby added to household since previous year			4.5	4.9
Household member other than baby added to household since previous year			7.2	8.8
Household member moved out or died since previous year			10.2	14.9
Race and Hispanic ethnicity				
White non-Hispanic and all other non-Black non-Hispanics	51.2	53.3	52.3	55.4
Black non-Hispanic	30.2	28.6	30.2	29.6
Hispanic	18.6	18.1	17.5	15.1
Census region				
Northeast	17.4	10.7	19.3	12.9
Midwest	24.0	22.7	24.1	27.1
South	42.2	46.8	42.1	43.3
West	16.3	19.8	14.5	16.6
Number of cases	19,058	4,024	3,158	343

Notes:

¹This is the analysis sample for Model 1, comprising households that received SNAP at some time during the year and had valid data on food security, amount of SNAP benefit received, and whether SNAP was received during the final 30 days prior to the survey.

²This is the analysis sample for Model 3, comprising households interviewed in two successive years 2002-03 through 2008-09 that received SNAP during the final 30 days of Year 1, received SNAP at least sometime in Year 2, and had valid data on food security in both years, amount of SNAP benefit received, and whether SNAP was received during the final 30 days prior to the survey in Year 2. Unless otherwise noted, statistics for the pooled 2-year sample refer to conditions during Year 2.

Source: Calculated by the author using 2001-2009 Current Population Food Security Supplement data.

Table A-2 (Model 1). Logistic regression of very low food security during 30 days prior to the food security survey on SNAP receipt during that period among households that received SNAP at some time during the year.

Characteristic ¹	Log-odds	Odds ratio	p
Intercept	-1.86	0.155	<.01
Received SNAP benefits last 30 days	-.32	.723	<.01
Size of SNAP benefit (Less than 1/3 maximum benefit reference)			
Medium (1/3 to 2/3 maximum benefit)	-.10	.905	.03
Large (2/3 maximum benefit or more)	-.45	.673	<.01
Income relative to the poverty line (higher than 200 percent reference)			
Income not reported	.29	1.334	<.01
0 to 50%	.17	1.189	.07
50% to 75%	.21	1.228	.03
75% to 100%	.09	1.096	.35
100% to 125%	.06	1.060	.57
125% to 150%	-.04	.960	.73
150% to 200%	.01	1.005	.96
Employment/labor force status of primary earner (employed full time reference)			
Not in labor force—retired	-.14	.865	.15
Employed part time—non-economic reasons	.11	1.118	.15
Employed part time—economic reasons (i.e., prefer to work more hours)	.36	1.430	<.01
Unemployed (looking for work)	.47	1.605	<.01
Not in labor force due to disability	.56	1.749	<.01
Not in labor force—reasons other than retirement or disability	.33	1.392	<.01
Education of most highly educated adult (high school or GED reference)			
Less than high school	-.16	.852	<.01
Some college, no four-year degree	.15	1.167	<.01
Bachelor degree or higher	.04	1.045	.40
Household composition (married couple with children reference) ²			
Single male with child/children	-.05	.953	.65
Single female with child/children	.15	1.165	<.01
Two or more adults, no children	.55	1.741	<.01
Sole male	.52	1.688	<.01
Sole female	.63	1.886	<.01
One or more elderly household members	-.61	.543	<.01
Race and Hispanic ethnicity (non-Black non-Hispanic reference) ³			
Black non-Hispanic	-.30	.743	<.01
Hispanic	-.30	.741	<.01
Census region (Northeast reference)			
Midwest	-.04	.963	.54
South	-.07	.930	.19
West	.09	1.091	.18
Sample size	23,082		
Somers' D	.299		

¹Dummy variables for survey year (not shown) were also included in the model.

²Reference group included a small number of households with children in complex living arrangements (such as children of a boarder or of an unmarried partner).

³Reference group is primarily White non-Hispanic, but includes non-Hispanics who are either Asian/Pacific Islanders, American Indian/Alaska Natives, or indicate more than one race.

Data source: Current Population Survey Food Security Supplement, 2001-2009. The sample comprised households that received SNAP benefits at some time during the survey year.

Table A-3 (Model 2). Logistic regression of very low food security during 30 days prior to the food security survey on SNAP receipt during that period, among households that received SNAP at some time during the year with SNAP benefits exceeding two-thirds of maximum benefit.

Characteristic ¹	Log-odds	Odds ratio	p
Intercept	-1.52	0.219	<.01
Received SNAP benefits last 30 days	-.46	.629	<.01
Income relative to the poverty line (higher than 200 percent reference)			
Income not reported	.10	1.107	.60
0 to 50%	-.26	.772	.12
50% to 75%	-.08	.919	.62
75% to 100%	-.13	.881	.47
100% to 125%	-.37	.692	.06
125% to 150%	-.36	.698	.11
150% to 200%	.05	1.052	.80
Employment/labor force status of primary earner (employed full time reference)			
Not in labor force—retired	-.68	.505	.01
Employed part time—non-economic reasons	.06	1.059	.68
Employed part time—economic reasons (i.e., prefer to work more hours)	.07	1.070	.69
Unemployed (looking for work)	.50	1.650	<.01
Not in labor force due to disability	.61	1.841	<.01
Not in labor force—reasons other than retirement or disability	.30	1.355	.02
Education of most highly educated adult (high school or GED reference)			
Less than high school	-.12	.887	.19
Some college, no four-year degree	.20	1.226	.01
Bachelor degree or higher	.23	1.255	.11
Household composition (married couple with children reference) ²			
Single male with child/children	-.15	.861	.48
Single female with child/children	.05	1.053	.65
Two or more adults, no children	.20	1.227	.19
Sole male	.52	1.688	<.01
Sole female	.69	2.001	<.01
One or more elderly household members	-.40	.669	<.05
Race and Hispanic ethnicity (non-Black non-Hispanic reference) ³			
Black non-Hispanic	-.39	.675	<.01
Hispanic	-.25	.781	.02
Census region (Northeast reference)			
Midwest	-.18	.833	.09
South	-.20	.819	.04
West	-.08	.924	.55
Sample size	7,901		
Somers' D	.309		

¹Dummy variables for survey year (not shown) were also included in the model.

²Reference group included a small number of households with children in complex living arrangements (such as children of a boarder or of an unmarried partner).

³Reference group is primarily White non-Hispanic, but includes non-Hispanics who are either Asian/Pacific Islanders, American Indian/Alaska Natives, or indicate more than one race.

Data source: Current Population Survey Food Security Supplement, 2001-2009. The sample comprised households that received SNAP benefits at some time during the survey year.

Table A-4 (Model 3). Logistic regression of very low food security during the 30-day period prior to the food security survey in Year 2 of 2-year panel data. The analysis sample comprised households that received SNAP in Year 1, including in the final 30 days prior to the food security, and received SNAP at some time during Year 2.

Characteristic ¹	Log-odds	Odds ratio	p
Intercept	-2.46	0.085	<.01
Received SNAP benefits last 30 days	-.59	.552	<.01
Size of SNAP benefit (Less than 1/3 maximum benefit reference)			
Medium (1/3 to 2/3 maximum benefit)	.05	1.053	.71
Large (2/3 maximum benefit or more)	-.34	.714	.03
Raw score on 30-day adult food security scale in previous year (raw=0 reference)			
1	1.18	3.246	<.01
2	1.21	3.369	<.01
3	1.43	4.186	<.01
4	1.93	6.885	<.01
5	2.67	14.447	<.01
6	3.06	21.270	<.01
7	3.22	24.925	<.01
Income relative to the poverty line (higher than 200 percent reference)			
Income not reported	.37	1.449	.43
0 to 50%	.58	1.779	.18
50% to 75%	.55	1.741	.20
75% to 100%	.44	1.554	.31
100% to 125%	.53	1.698	.23
125% to 150%	.46	1.580	.35
150% to 200%	.64	1.893	.20
Employment/labor force status of primary earner (employed full time reference)			
Not in labor force—retired	.39	1.476	.15
Employed part time—non-economic reasons	.17	1.184	.50
Employed part time—economic reasons (i.e., prefer to work more hours)	.78	2.185	<.01
Unemployed (looking for work)	-.07	.934	.80
Not in labor force due to disability	.36	1.433	.07
Not in labor force—reasons other than retirement or disability	.45	1.571	.05
Change in full-time employment from previous year (no change is reference)			
Full-time in current year, no full-time in previous year	-.50	.606	.05
No full-time in current year, one or more full-time in previous year	-.16	.855	.48
Education of most highly educated adult (high school or GED reference)			
Less than high school	-.22	.801	.11
Some college, no four-year degree	-.20	.820	.15
Bachelor degree or higher	.30	1.349	.18
Household composition (married couple with children reference) ²			
Single male with child/children	-.58	.560	.12
Single female with child/children	-.05	.947	.75
Two or more adults, no children	-.08	.928	.72
Sole male	-.10	.907	.69
Sole female	.11	1.120	.60
One or more elderly household members	-.94	.392	<.01
Baby added to household since previous year	-.23	.795	.44
Household member other than baby added to household since previous year	.07	1.067	.75
Household member moved out or died since previous year	.56	1.753	<.01

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(Table A-4 continued)

Characteristic ¹	Log-odds	Odds ratio	p
Race and Hispanic ethnicity (non-Black non-Hispanic reference) ³			
Black non-Hispanic	-.31	.731	.02
Hispanic	-.18	.839	.28
Census region (Northeast reference)			
Midwest	.02	1.020	.90
South	-.07	.930	.64
West	-.16	.850	.39
Sample size	3,501		
Somers' D	.545		

¹Dummy variables for survey year (not shown) were also included in the model. Except as noted, control variables were based on characteristics in Year 2.

²Reference group included a small number of households with children in complex living arrangements (such as children of a boarder or of an unmarried partner).

³Reference group is primarily White non-Hispanic, but includes non-Hispanics who are either Asian/Pacific Islanders, American Indian/Alaska Natives, or indicate more than one race.

Data source: Matched 2-year panels of Current Population Survey Food Security Supplement data, 2001-02 to 2008-09. The sample comprised households that received SNAP benefits in Year 1 and at least some months of Year 2.

Table A-5 (Model 4). Logistic regression of very low food security during the 30-day period prior to the food security survey in Year 2 of 2-year panel data. The analysis sample comprised households that received SNAP in Year 1, including in the final 30 days prior to the food security survey and received SNAP at some time during Year 2, with SNAP benefits exceeding two-thirds of maximum benefit.

Characteristic ¹	Log-odds	Odds ratio	p
Intercept	-4.23	0.015	<.01
Received SNAP benefits last 30 days	-1.07	.342	<.01
Raw score on 30-day adult food security scale in previous year (raw=0 reference)			
1	.80	2.218	<.09
2	2.05	7.788	<.01
3	1.50	4.492	<.01
4	2.02	7.510	<.01
5	2.61	13.537	<.01
6	3.44	31.195	<.01
7	4.75	115.258	<.01
Income relative to the poverty line (higher than 200 percent reference)			
Income not reported	1.77	5.893	.16
0 to 50%	1.07	2.910	.37
50% to 75%	1.27	3.548	.29
75% to 100%	1.44	4.205	.23
100% to 125%	1.53	4.606	.21
125% to 150%	1.45	4.253	.28
150% to 200%	1.70	5.473	.18
Employment/labor force status of primary earner (employed full time reference)			
Not in labor force—retired	1.02	2.770	.20
Employed part time—non-economic reasons	.58	1.787	.36
Employed part time—economic reasons (i.e., prefer to work more hours)	1.49	4.426	.02
Unemployed (looking for work)	.70	2.008	.23
Not in labor force due to disability	1.57	4.827	<.01
Not in labor force—reasons other than retirement or disability	1.16	3.191	<.01
Change in full-time employment from previous year (no change is reference)			
Full-time in current year, no full-time in previous year	-.05	.949	.94
No full-time in current year, one or more full-time in previous year	-.11	.897	.79
Education of most highly educated adult (high school or GED reference)			
Less than high school	-.21	.812	.49
Some college, no four-year degree	-.36	.694	.21
Bachelor degree or higher	1.37	3.926	<.01
Household composition (married couple with children reference) ²			
Single male with child/children	-.89	.409	.23
Single female with child/children	-.50	.608	.17
Two or more adults, no children	-.58	.561	.30
Sole male	-.73	.481	.14
Sole female	-.36	.697	.42
One or more elderly household members	-.76	.470	.19
Baby added to household since previous year	-.23	.791	.68
Household member other than baby added to household since previous year	-.42	.654	.53
Household member moved out or died since previous year	.54	1.708	.14

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(Table A-5 continued)

Characteristic ¹	Log-odds	Odds ratio	p
Race and Hispanic ethnicity (non-Black non-Hispanic reference) ³			
Black non-Hispanic	-.48	.618	.07
Hispanic	-1.02	.362	.04
Census region (Northeast reference)			
Midwest	.19	1.206	.60
South	.42	1.517	.23
West	-.38	.682	.41
Sample size	1,030		
Somers' D	.592		

¹Dummy variables for survey year (not shown) were also included in the model. Except as noted, control variables were based on characteristics in Year 2.

²Reference group included a small number of households with children in complex living arrangements (such as children of a boarder or of an unmarried partner).

³Reference group is primarily White non-Hispanic, but includes non-Hispanics who are either Asian/Pacific Islanders, American Indian/Alaska Natives, or indicate more than one race.

Data source: Matched 2-year panels of Current Population Survey Food Security Supplement data, 2001-02 to 2008-09. The sample comprised households that received SNAP benefits in Year 1 and at least some months of Year 2.