



AN ANNUAL REPORT

THE STATE OF SENIOR HUNGER IN AMERICA IN 2015

Professor James P. Zilak
University of Kentucky

Professor Craig Gundersen
University of Illinois

AUGUST 2017



NATIONAL
FOUNDATION
TO END
SENIOR
HUNGER

The State of Senior Hunger in America 2015: An Annual Report

Prepared for Feeding America and the National Foundation to End Senior Hunger

August 16, 2017

Professor James P. Ziliak
University of Kentucky

Professor Craig Gundersen
University of Illinois

ACKNOWLEDGEMENTS

This supplement to our report was made possible by a generous grant from Feeding America. The conclusions and opinions expressed herein are our own and do not necessarily represent the views of any sponsoring agency.

EXECUTIVE SUMMARY

In this report we provide an overview of the extent and distribution of food insecurity in 2015 among seniors in the United States, along with trends over the past decade using national and state-level data from the December Supplements to the Current Population Survey. Based on the full set of 18 questions in the Food Security Supplement, the module used by the USDA to establish the official food insecurity rates of households in the United States, our emphasis here is on quantifying the senior population facing the *threat of hunger* (i.e. marginally food insecure). A supplement to this report also presents evidence on seniors *at risk of hunger* (i.e. food insecure) and on seniors *facing hunger* (i.e. very low food secure).

This report demonstrates that seniors in 2015 continued to face pressing challenges meeting food need. Specifically, we find that

- 14.7% of seniors face the threat of hunger. This translates into 9.8 million seniors.
- The proportion of seniors experiencing the threat of hunger fell by 1 percentage point between 2014 and 2015, and this decline was statistically significant. This decline was most pronounced among those living in metro areas, African Americans, Hispanics, younger seniors, and those raising a grandchild. Nevertheless, when compared to 2001, the fraction of seniors experiencing the threat of hunger has increased by 37%, and the number of seniors rose 109%, where the latter also reflects the growing population of seniors.
- Continuing with historic trends documented in prior reports, we find that the threat of hunger is greatest among those living in states in the South and Southwest, those who are racial or ethnic minorities, those with lower incomes, and those who are younger (ages 60-69).

Despite an improving economy and financial markets, millions of seniors in the United States are going without enough food due to economic constraints. Based on the findings regarding food insecurity and health in Gundersen and Ziliak (2017), this stubbornly high proportion of food insecure seniors continues to impose a major health care challenge in the U.S.

I. FOOD INSECURITY IN 2015

We document the state of hunger among senior Americans ages 60 and older in 2015 using data from the most recently available Current Population Survey (CPS). This is part of a series of reports on food insecurity among seniors which began with Ziliak et al. (2008), and has been produced annually since 2012 with the most recent being Ziliak and Gundersen (2016). In December of each year, households respond to a series of 18 questions (10 questions if there are no children present) that make up the Food Security Supplement (FSS) in the CPS. (See the Appendix for more details on the CPS and FSS.) Each question is designed to capture some aspect of food insecurity and, for some questions, the frequency with which it manifests itself. Respondents are asked questions about their food security status in the last 30 days as well as over the past 12 months. Following USDA official reports, we focus on the questions referring to the past year.

Consistent with the nomenclature and categorizations in our past reports, we consider three characterizations of food insecurity: the *threat of hunger*, when a person is defined as marginally food insecure due to having answered affirmatively to one or more questions on the FSS; the *risk of hunger*, when a person is food insecure (three or more affirmative responses to questions on the FSS); and *facing hunger*, when a person is very low food secure (8 or more affirmative responses to questions in households with children; 6 or more affirmative responses in households without children). The threat of hunger is the broadest category of food insecurity since it encompasses those responding to at least one question on the FSS. The next broadest category is the risk of hunger since this group encompasses those who are either low food secure or very low food secure. It follows then that the most severe category in our taxonomy is facing hunger. Box 1 summarizes the categories. For the purpose of this report we focus on the threat of hunger, but a supplement to the report provides a parallel analysis for seniors at risk of hunger and those facing hunger.

Box 1: Categories of Food Insecurity

	USDA Classification	Number of Affirmative Responses to FSS
Fully Food Secure	Fully Food Secure	0
Threat of Hunger	Marginally Food Insecure	1 or more
Risk of Hunger	Food Insecure	3 or more
Facing Hunger	Very Low Food Secure	8 or more (households with children) 6 or more (households without children)

In Table 1 we present estimates of food insecurity among seniors in 2015. Overall, 14.7% faced the threat of hunger, which translates into 9.8 million seniors. The table also presents estimates of food insecurity across selected socioeconomic categories. Here we see great heterogeneity across the senior population. For example, for those with incomes below the poverty line, 45.3% face the threat of hunger. In contrast, seniors with incomes above twice the poverty line, this number falls to 7.5%. Turning to race, white seniors have food insecurity rates that are less than half the rates for African-American seniors. (The category of “other race” includes those American Indians, Asians, and Pacific Islanders.) Similarly, Hispanics (of any racial category) have food insecurity rates that are more than double the rates of non-Hispanics.

The threat of hunger among divorced or separated and among never married seniors is substantially greater than married seniors. As age increases, rates of the threat of hunger fall. For example, seniors between the ages of 60 and 64 have rates that are over 50 percent higher than those over the age of 80. The threat of hunger is over 3 times higher among persons with disability in comparison to the retired or employed, and if a grandchild is present, the threat of hunger is more than two-times higher than among households with no grandchildren present.

Table 1 allows us to see the proportions of persons within any category who are facing the threat of hunger and, with this information, we can make statements about who are more likely to fall into this category. For example, those with lower incomes are substantially more likely to face the threat of hunger than those with higher incomes. Also of interest, though, is the distribution of senior hunger. In other words, out of those who face the threat of hunger, what proportion fall into a particular category?

Table 1. The Extent of the Threat of Senior Hunger in 2015

Overall	14.71%
By Income	
Below the Poverty Line	45.27
Between 100% and 200% of the Poverty Line	33.72
Above 200% of the Poverty Line	7.45
Income Not Reported	9.67
By Race	
White	12.78
Black	31.07
Other	14.28
By Hispanic Status	
Hispanic	23.60
Non-Hispanic	13.87
By Marital Status	
Married	10.46
Widowed	16.89
Divorced or Separated	25.28
Never Married	24.58
By Metropolitan Location	
Non-Metro	16.91
Metro	14.29
By Age	
60-64	17.71
65-69	15.67
70-74	12.87
75-79	14.04
80 and older	10.59
By Employment Status	
Employed	11.03
Unemployed	29.32
Retired	12.69
Disabled	38.10
By Gender	
Male	13.33
Female	15.87
By Grandchild Present	
No Grandchild Present	13.91
Grandchildren Present	31.66

Source: Authors' calculations of December 2015 Current Population Survey. The numbers in the table show the rates of marginal food insecurity.

Table 2. The Distribution of the Threat of Senior Hunger in 2015

By Income	
Below the Poverty Line	23.08%
Between 100% and 200% of the Poverty Line	32.76
Above 200% of the Poverty Line	24.33
Income Not Reported	19.83
By Race	
White	72.85
Black	21.34
Other	5.81
By Hispanic Status	
Non-Hispanic	13.88
Hispanic	86.12
By Marital Status	
Married	42.93
Widowed	21.40
Divorced or Separated	25.04
Never Married	10.63
By Metropolitan Location	
Non-Metro	18.52
Metro	81.48
By Age	
60-64	34.84
65-69	26.15
70-74	15.10
75-79	11.64
80 and older	12.27
By Employment Status	
Employed	21.61
Unemployed	1.88
Retired	52.61
Disabled	23.89
By Gender	
Male	41.14
Female	58.86
By Grandchild Present	
No Grandchild Present	90.20
Grandchildren Present	9.80

Source: Authors' calculations from 2015 December Current Population Survey. The numbers in the table sum to 100 percent within each subcategory.

As seen in Table 2, the majority of seniors facing the threat of hunger have incomes above the poverty line. For example, out of those reporting income, nearly 2 in 3 seniors facing the threat of hunger have incomes above the poverty line. A similar story holds for race – while African-Americans are at greater risk than whites, almost 3 in 4 seniors facing the threat of hunger are white. Despite the lower food insecurity rates among older seniors, 12.3% of seniors facing the threat of hunger are over age 80. And while the rates of food insecurity are lowest for retired persons, they make up just over half of the population under the threat of hunger.

In Table 3 we present state level estimates of the threat of senior hunger for 2015. These range from 6.1% in North Dakota to 24.3% in Mississippi. In Table 4 we highlight the ten states with the highest rates of threats of senior hunger in 2015. New entrants to this list this year include West Virginia, Indiana, and Oklahoma with rates of 18.5%, 18.2%, and 18.1%.

Table 3. State-Level Estimates of Threat of Senior Hunger in 2015

AL	18.10%	MT	9.62%
AK	13.46	NE	13.91
AZ	17.79	NV	13.58
AR	19.56	NH	12.63
CA	14.45	NJ	13.96
CO	10.17	NM	17.99
CT	14.18	NY	19.34
DE	12.27	NC	20.73
DC	17.78	ND	6.14
FL	13.62	OH	15.02
GA	18.13	OK	18.14
HI	12.33	OR	14.90
ID	10.66	PA	15.13
IL	15.32	RI	14.49
IN	18.24	SC	19.58
IA	10.93	SD	10.47
KS	13.84	TN	16.39
KY	18.04	TX	16.80
LA	23.44	UT	13.71
ME	15.62	VT	12.28
MD	11.22	VA	11.29
MA	10.46	WA	10.95
MI	13.33	WV	18.50
MN	9.49	WI	10.40
MS	24.28	WY	9.11
MO	12.85		

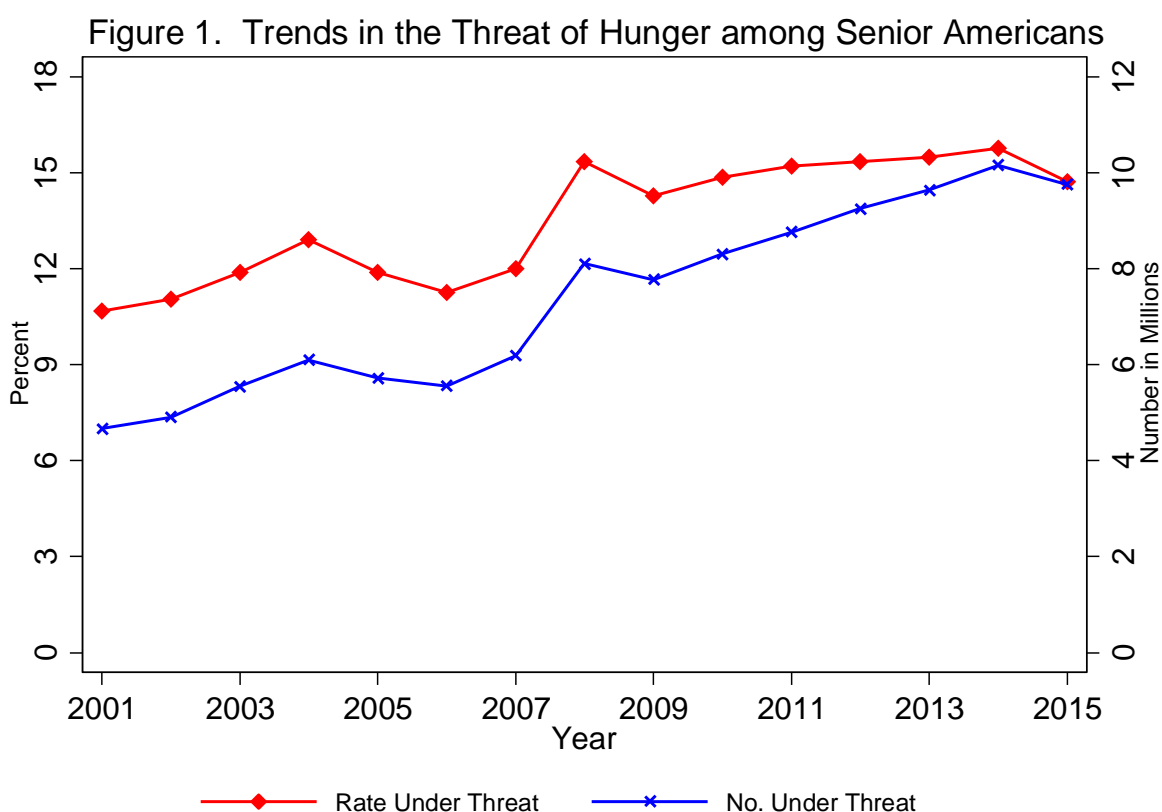
Source: Authors' calculations. The numbers are two-year averages found by summing the number of marginally food insecure seniors by state across the 2014-2015 December Current Population Surveys and dividing by the corresponding total number of seniors in each state across the two years.

Table 4. Top Ten States in Terms of the Threat of Senior Hunger in 2015

MS	24.28
LA	23.44
NC	20.73
SC	19.58
AR	19.56
NY	19.34
WV	18.50
IN	18.24
OK	18.14
GA	18.13

II. FOOD INSECURITY OVER TIME

To place the 2015 estimates into perspective, we now examine trends in the threat of hunger since 2001. In Figure 1 we display results for the full population in terms of the percentage of seniors (left-hand axis) and number of seniors in millions (right-hand axis). As seen there, the proportion of seniors facing the threat of hunger fell by 1 percentage point from 2014 to 2015, and this decline is statistically different from zero. That said, the rate remains higher than at the start of the Great Recession in 2007. And, the threat of hunger remains far higher than in 2001 - the fraction of seniors experiencing the threat of hunger increased by 37%. In addition, the number of seniors facing the threat of hunger rose 113% reflecting both the growing number of seniors and their rising food insecurity rates.



In Table 5 we take a deeper look into underlying changes in the composition of food insecure seniors from 2014 to 2015. The table presents percentage point changes in the threat of senior hunger by the same set of socioeconomic characteristics in Table 1. Consistent with the overall trends in food insecurity, for several categories, there are statistically significant declines and some of these are large. For example, Hispanic seniors saw declines of 7.0 percentage points and African-American seniors saw declines of 3.3 percentage points. Or, to cite another example, households with a grandchild present saw declines of 8.7 percentage points. There were no statistically significant increases for any of the categories.

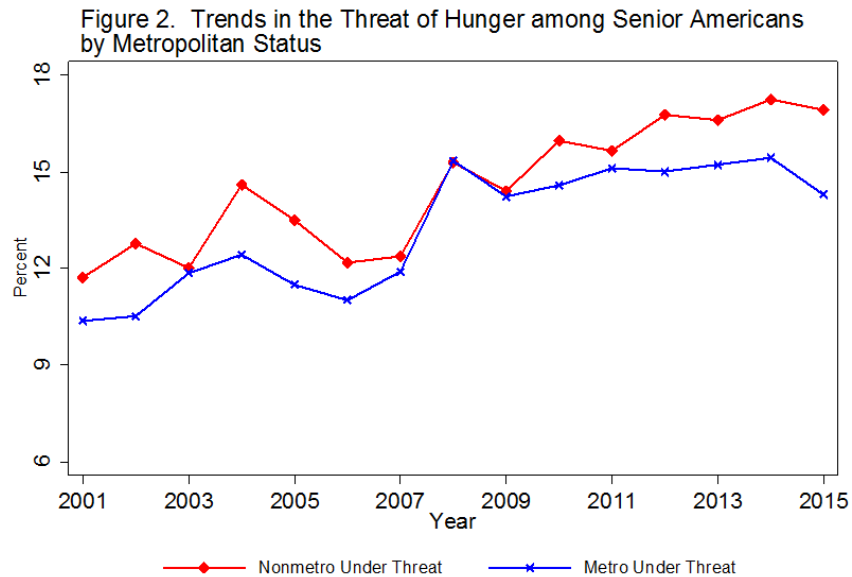
Table 5. Changes in the Composition of the Threat of Senior Hunger from 2014 to 2015

Overall	-1.04***
By Income	
Below the Poverty Line	-3.53*
Between 100% and 200% of the Poverty Line	2.50**
Above 200% of the Poverty Line	-0.23
Income Not Reported	-1.04
By Race	
White	-0.67*
Black	-3.27*
Other	-2.61
By Hispanic Status	
Hispanic	-7.01***
Non-Hispanic	-0.52
By Marital Status	
Married	-0.64
Widowed	-1.35
Divorced or Separated	-2.90**
Never Married	0.18
By Metropolitan Location	
Non-Metro	-0.34
Metro	-1.15**
By Age	
60-64	-1.90*
65-69	-0.38
70-74	-1.49*
75-79	-0.18
80 and older	-0.64
By Employment Status	
Employed	-0.75
Unemployed	-12.55**
Retired	-0.40
Disabled	-4.19**
By Gender	
Male	-0.61
Female	-1.39**
By Grandchild Present	
No Grandchild Present	-0.71*
Grandchildren Present	-8.68**

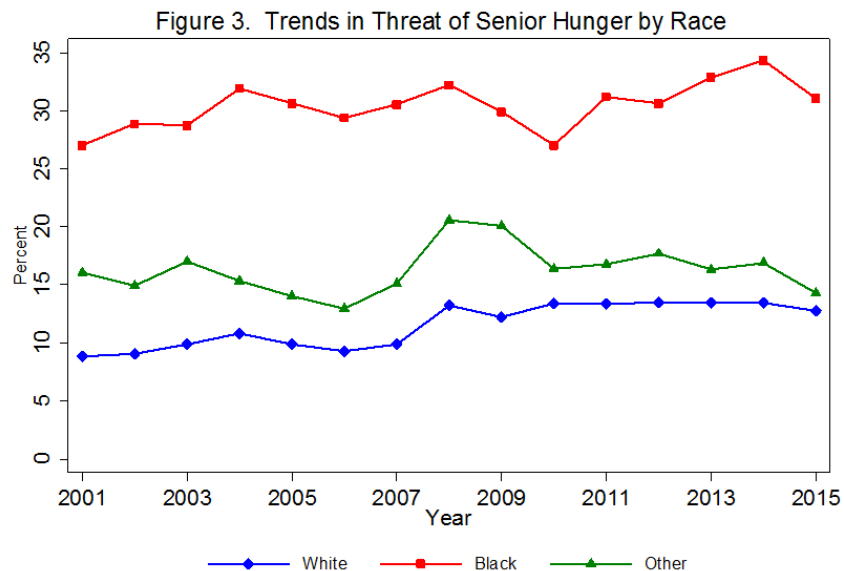
Source: Authors' calculations. The numbers in the table reflect percentage point changes from 2014-2015. The asterisks denote statistical significance at the following levels:

*** p<0.01; ** p<0.05; * p<0.1

In the next set of figures we examine trends in the threat of hunger since 2001 across a variety of subpopulations found in Tables 1 and 5. We begin in Figure 2 with trends for seniors living in metropolitan areas versus nonmetropolitan areas. The figure shows that, in the years leading up to the Great Recession there were differences between metro and non-metro areas, but this seemed to dissipate during the recession. In 2015, the proportion was higher in non-metro areas, mimicking what occurred in pre-recession years.



Figures 3 and 4 depict trends in the threat of hunger across different races and ethnicity. As discussed above, the rates of food insecurity for blacks are substantially higher than whites. These figures reveal that these differences were present in each year from 2001 to 2015, albeit this gap narrowed substantially in 2015. Similarly, rates are higher among the “other” category than among whites in all years.



In Figure 4 we present trends broken down by Hispanic status. Rates are substantially higher among Hispanics than non-Hispanics, but again, this gap narrowed sharply in 2015.

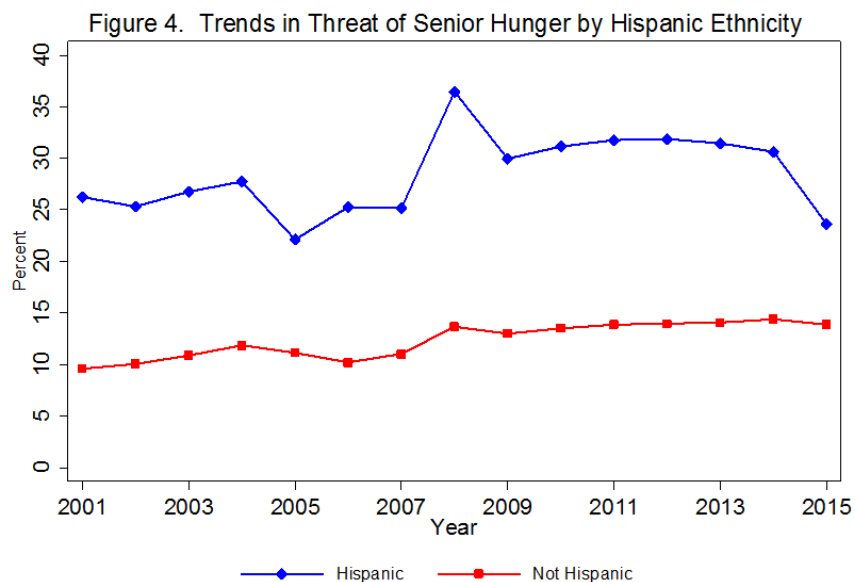
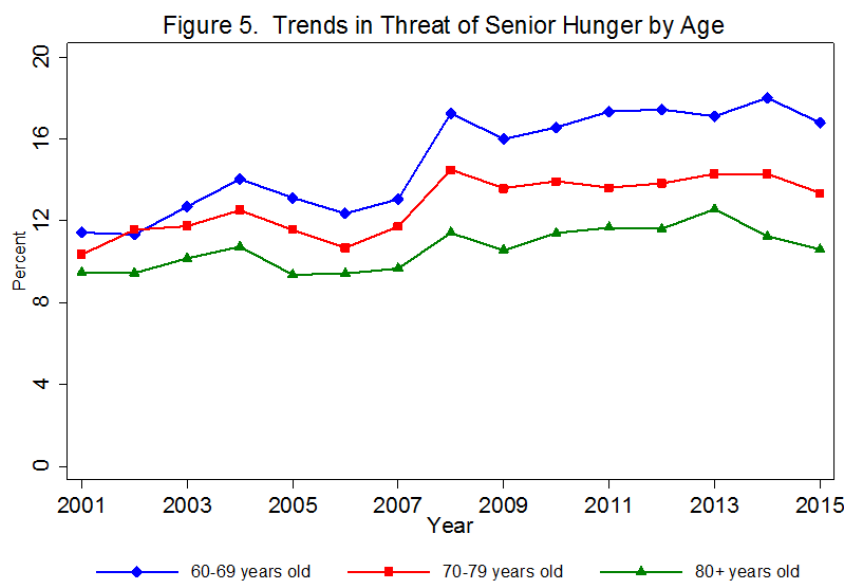


Figure 5 presents results for seniors of three age groups—60-69 years old, 70-79 years old, and age 80 and older. There were sharp increases in the threat of hunger from 2007 to 2008 across all three age groups and these rates remain, in 2015, above those found in 2007. In 2015, the gap between the oldest and youngest category narrowed.



III. CONCLUSION

This report demonstrates that the threat of hunger among seniors in America is a continued challenge facing the nation. Despite the end of the Great Recession in 2009, almost 1 in 6 seniors faced the threat of hunger in 2015, and the number of seniors facing the threat is 113% higher in 2015 compared to 2001. Given the compelling evidence in Ziliak and Gunderson (2017) that food insecurity is associated with a host of poor nutrition and health outcomes among seniors, this report implies that these high rates of food insecurity among seniors will likely lead to additional public health challenges for our country. This suggests that a key potential avenue to stem the growth of health care expenditures on older Americans is to ameliorate the problem of food insecurity.

APPEXDIX

The CPS is a nationally representative survey conducted by the Census Bureau for the Bureau of Labor Statistics, providing employment, income and poverty statistics. Households are selected to be representative of civilian households at the state and national levels, using suitably appropriate sampling weights. The CPS does not include information on individuals living in group quarters including nursing homes or assisted living facilities. For this report and previous reports, we use data from the December Supplement which contains the Food Security Supplement (FSS). The questions from the FSS are found in Appendix Table 1. Because our focus is on hunger among seniors, our CPS sample is of persons age 60 and older. In 2015 this results in 22,626 sample observations. Appendix Table 2 presents selected summary statistics for the CPS sample.

Appendix Table 1: Questions on the Food Security Supplement

Food Insecurity Question	Asked of Households with Children	Asked of Households without Children
1. “We worried whether our food would run out before we got money to buy more.” Was that often, sometimes , or never true for you in the last 12 months?	x	x
2. “The food that we bought just didn’t last and we didn’t have money to get more.” Was that often, sometimes , or never true for you in the last 12 months?	x	x
3. “We couldn’t afford to eat balanced meals.” Was that often, sometimes , or never true for you in the last 12 months?	x	x
4. “We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food.” Was that often, sometimes , or never true for you in the last 12 months?	x	
5. In the last 12 months, did you or other adults in the household ever cut the size of your meals or skip meals because there wasn’t enough money for food? (Yes/No)	x	x
6. “We couldn’t feed our children a balanced meal, because we couldn’t afford that.” Was that often, sometimes , or never true for you in the last 12 months?	x	
7. In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money for food? (Yes/No)	x	x
8. (If yes to Question 5) How often did this happen— almost every month, some months but not every month , or in only 1 or 2 months?	x	x
9. “The children were not eating enough because we just couldn’t afford enough food.” Was that often, sometimes , or never true for you in the last 12 months?	x	
10. In the last 12 months, were you ever hungry, but didn’t eat, because you couldn’t afford enough food? (Yes/No)	x	x
11. In the last 12 months, did you lose weight because you didn’t have enough money for food? (Yes/No)	x	x
12. In the last 12 months, did you ever cut the size of any of the children’s meals because there wasn’t enough money for food? (Yes/No)	x	
13. In the last 12 months did you or other adults in your household ever not eat for a whole day because there wasn’t enough money for food? (Yes/No)	x	x
14. In the last 12 months, were the children ever hungry but you just couldn’t afford more food? (Yes/No)	x	
15. (If yes to Question 13) How often did this happen— almost every month, some months but not every month , or in only 1 or 2 months?	x	x
16. In the last 12 months, did any of the children ever skip a meal because there wasn’t enough money for food? (Yes/No)	x	
17. (If yes to Question 16) How often did this happen— almost every month, some months but not every month , or in only 1 or 2 months?	x	
18. In the last 12 months did any of the children ever not eat for a whole day because there wasn’t enough money for food? (Yes/No)	x	

Notes: Responses in bold indicate an “affirmative” response.

Appendix Table 2: Selected Characteristics of Senior Americans Age 60 and older in 2015

Income Categories	
Below the Poverty Line	0.08
Between 100% and 200% of the Poverty Line	0.14
Above 200% of the Poverty Line	0.48
Missing Income	0.30
Racial Categories	
White	0.84
Black	0.10
Other	0.06
Hispanic Status	
Hispanic	0.09
Non-Hispanic	0.91
Marital Status	
Married	0.60
Widowed	0.19
Divorced or Separated	0.15
Never Married	0.06
Metropolitan Location	
Non-Metro	0.16
Metro	0.84
Age	
60 to 64	0.29
65 to 69	0.25
70 to 74	0.17
75 to 79	0.12
80 and older	0.17
Employment Status	
Employed	0.29
Unemployed	0.01
Retired	0.61
Disabled	0.09
By Gender	
Male	0.45
Female	0.55
Grandchild Present	
No Grandchild Present	0.95
Grandchild Present	0.05

References

Gundersen, C. and J. Ziliak. 2017. *The Health Consequences of Senior Hunger in the United States: Evidence from the 1999-2014 NHANES*. Report submitted to Feeding America.

Ziliak, J., and C. Gundersen. 2016. *The State of Senior Hunger in America 2014: An Annual Report*. Report submitted to National Foundation to End Senior Hunger.

Ziliak, J., C. Gundersen, and M. Haist. 2008. *The Causes, Consequences, and Future of Senior Hunger in America*. Report submitted to Meals on Wheels Association of America Foundation.

About the Authors

James P. Ziliak, Ph.D., holds the Carol Martin Gatton Endowed Chair in Microeconomics in the Department of Economics and is Founding Director of the Center for Poverty Research at the University of Kentucky. He earned received his BA/BS degrees in economics and sociology from Purdue University, and his Ph.D. in Economics from Indiana University. He served as assistant and associate professor of economics at the University of Oregon, and has held visiting positions at the Brookings Institution, University College London, University of Michigan, and University of Wisconsin. His research expertise is in the areas of labor economics, poverty, food insecurity, and tax and transfer policy. Recent projects include the causes and consequences of hunger among older Americans; trends in earnings and income volatility in the U.S.; trends in the antipoverty effectiveness of the social safety net; the origins of persistent poverty in America; and regional wage differentials across the earnings distribution. He is editor of *Welfare Reform and its Long Term Consequences for America's Poor* published by Cambridge University Press (2009) and *Appalachian Legacy: Economic Opportunity after the War on Poverty* published by Brookings Institution Press (2012), and co-editor of *SNAP Matters: How Food Stamps Affect Health and Well Being* at Stanford University Press (2015).

Craig Gundersen, Ph.D., is Soybean Industry Endowed Professor of Agricultural Strategy in the Department of Agricultural and Consumer Economics at the University of Illinois and Executive Director of the National Soybean Research Laboratory. Previously, he was at the Economic Research Service (ERS) of the USDA and at Iowa State University. Dr. Gundersen's research is primarily focused on the causes and consequences of food insecurity and on evaluations of food assistance programs, especially the Supplemental Nutrition Assistance Program SNAP. Among other journals, he has published in *Journal of the American Statistical Association*, *Journal of Human Resources*, *Journal of Health Economics*, *Journal of Econometrics*, *American Journal of Agricultural Economics*, *Journal of Nutrition*, *Pediatrics*, *Demography*, *Canadian Medical Association Journal*, *Health Affairs*, and *American Journal of Public Health*.

Contact information:

Professor James P. Ziliak
Center for Poverty Research
University of Kentucky
Gatton Building, Suite 234
550 South Limestone St.
Lexington, KY 40506-0034
Phone: (859) 257-6902
Email: jziliak@uky.edu

Professor Craig Gundersen
Department of Agriculture and Consumer Economics
University of Illinois
323 Mumford Hall
1301 W. Gregory Dr.
Urbana, IL 61801
Phone: (217) 333-2857
Email: cggunder@illinois.edu