

Executive Summary
from
The Health Consequences of Senior Hunger
in the United States: Evidence from the
1999-2010 NHANES

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Executive Summary

Millions of seniors are food insecure in the United States, meaning that scores do not have access to enough food at all times for an active, healthy life. What makes food insecurity an even more pressing issue is its association with a wide array of negative nutrition and health consequences. In our earlier reports on food insecurity among seniors (Ziliak et al., 2008; Ziliak and Gundersen, 2011) we documented that food insecure seniors, even after controlling for other factors, were at higher risk of experiencing negative nutrition and health consequences than food secure seniors.

In this report we build on those earlier findings in three main directions. Namely, we add in several new health outcomes; we use four more years of data ; and we examine how trends in health and nutrition outcomes among food secure and food insecure seniors have changed over the past decade. Using data from the 1999-2010 National Health and Nutrition Examination Survey (NHANES), we considered the following outcomes related to nutrient intakes: energy intake, protein, vitamin A, vitamin C, thiamin, riboflavin, vitamin B6, calcium, phosphorous, magnesium, and iron. The set of health outcomes we analyzed were diabetes, general health , depression, diabetes, ADL limitations, high blood pressure, high cholesterol, congestive heart failure, coronary heart disease, cancer, reports of chest pain, gum disease, psoriasis, asthma, having had a heart attack, and a self-report of gum health. Here we summarize some of our principal findings.

Food insecure seniors have lower nutrient intakes. For each of the eleven nutrients, average intakes are statistically significantly lower generally by 10-20 percent for food insecure seniors in comparison to food secure seniors. After controlling for other confounding factors, the effect of food insecurity is still negative for each of the nutrients albeit in some of the cases, the effect is statistically insignificant. These differences in health outcomes held across time.

Food insecure seniors have worse health outcomes. For a wide array of health outcomes, food insecure seniors are worse-off than food secure seniors. Namely, they are 50 percent more likely to be diabetic, twice as likely to report fair or poor general health, three times more likely to suffer from depression, 30 percent more likely to report at least one ADL limitation, 14 percent more likely to have high blood pressure, nearly 60 percent more likely to have congestive heart failure or experienced a heart attack, and twice as likely to report having gum disease or have asthma. These differences were present in both the aggregate and for each four-year time period we examined. And, with the exception of gum disease, these worse outcomes hold even after controlling for other factors, though attenuated in magnitude.

The effect of food insecurity holds even for a lower-income sample. As shown in Ziliak and Gundersen (2013), food insecurity rates are substantially higher for those with incomes less than 200% of the poverty line. So, we investigated whether or not the negative association of food insecurity with nutrient intakes and health remain even when we limit our multivariate analyses to those with incomes below 200% of the poverty line. We find that, in the main, the substantive and statistical significance of the results are quite similar to those for the full sample. This further demonstrates the importance of looking at food insecurity as an independent predictor of negative health and nutrition outcomes, even among lower-income seniors.

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).

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