



# FOOD SECURITY EVIDENCE REVIEW

## Key Drivers and What Works To Improve Food Security

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## TABLE OF CONTENTS

<b>INTRODUCTION</b> .....	2
<b>HOUSEHOLD CHARACTERISTICS THAT MAY INCREASE THE RISK OF FOOD INSECURITY</b> .....	2
Household Composition .....	2
Systemic Barriers .....	2
<b>KEY DRIVERS OF FOOD INSECURITY</b> .....	3
Limited <i>Household</i> Resources .....	3
Limited <i>Community</i> Resources .....	3
Health and Health-Related Behaviors .....	4
Human Capital .....	4
<b>WHAT WORKS TO ALLEVIATE FOOD INSECURITY</b> .....	5
METHODS .....	5
RESULTS .....	6
Food Provision and Access .....	6
Transportation .....	7
Financial Stability .....	8
Income .....	8
Housing .....	9
Health .....	9
<b>LOOKING FORWARD</b> .....	10
<b>ACKNOWLEDGMENTS</b> .....	10
<b>SUGGESTED CITATION</b> .....	10
<b>APPENDIX</b> .....	11
Levels of Evidence Framework: Purpose .....	11
Levels of Evidence Framework: Process .....	11
<b>REFERENCES</b> .....	14

## INTRODUCTION

The USDA defines **food security** as “access by all people at all times to enough food for an active, healthy life.”<sup>1</sup>

Over the last 10 years, public attention around the issue of food insecurity and the literature on effective interventions have grown substantially. This increased attention likely reflects:

- 1) Stubbornly high food insecurity rates, even after the end of the Great Recession
- 2) Mounting evidence of negative health consequences related to food insecurity
- 3) Increasing recognition that food insecurity is an important, and well-validated, indicator of wellbeing
- 4) Commitment by the U.S. Department of Agriculture Food and Nutrition Service (USDA FNS) to funding research on very low food security among children, which brought many new researchers into the field.

Despite these influencing factors, much more is known about what drives people *into* food insecurity than what effectively brings people *out of it*. This memo consolidates the findings around the drivers of food insecurity, provides a high-level outline of interventions shown to reduce food insecurity, and highlights gaps in the literature where additional evaluation is needed.

## HOUSEHOLD CHARACTERISTICS THAT MAY INCREASE THE RISK OF FOOD INSECURITY

**Household Composition** | Certain household characteristics increase the probability of food insecurity.<sup>1</sup> Policy and programmatic interventions should include special considerations to address the distinct needs these households may have. Households are more likely to be food insecure if:

- A child or parent is disabled.<sup>2,3</sup>
- The household is headed by a single parent, especially if the parent is female.<sup>4,5</sup>
- The household has children.<sup>6,7</sup>
- There are members of a minority race/ethnicity, specifically African American, Latino, and American Indian, and certain Asian nationalities in certain geographies.<sup>8,9,10,11,12,13</sup>
- A member is the veteran of a recent war.<sup>14,15</sup>
- A member was ever incarcerated.<sup>16,17</sup>

**Systemic Barriers** | Individuals and households experience food insecurity within the context of their community and broader environment. Associations between household characteristics and increased risk of food insecurity often reflect underlying inequalities, such as longstanding economic and social disadvantage resulting from structural racism. These barriers result in reduced resources, a key driver of food insecurity.

## KEY DRIVERS OF FOOD INSECURITY

Food insecurity is an economic condition, meaning that it is driven primarily by lack of money and other critical resources. The following section outlines drivers that have been directly linked to food insecurity as well as household or individual characteristics that increase the risk of food insecurity. It is important to note that some of these conditions are bidirectional. For example, poor health can result in food insecurity and food insecurity can result in poor health (see the Health section below). It should also be noted that low-income households often struggle with multiple kinds of material hardship, in addition to food insecurity.

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*Limited Household Resources* | Conditions that most strongly impact food insecurity are those that directly affect access to money and other assets.

**We know the following conditions lead to greater risk of and/or persistent food insecurity.**

Being **unemployed** is associated with higher levels of food insecurity.<sup>18</sup> At the county level, a one percentage-point increase in the unemployment rate leads to a 0.5 percentage-point increase in food insecurity.<sup>19</sup>

**Income shocks** also predict food insecurity.<sup>20</sup> These shocks can follow a job loss, a health emergency, foreclosure, or loss of stable housing, among other factors.

**Lower assets** can affect a household's ability to manage an income shock. This includes both physical assets such as owning a home,<sup>21</sup> and financial assets such as having savings.<sup>22,23</sup>

**Renting and frequent relocation** (i.e. moving) due to limited resources<sup>24</sup> and lack of affordable housing are also predictors of food insecurity.<sup>25,26</sup>

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*Limited Community Resources* | Conditions outside of the household can make it hard for individuals to thrive. Lack of resources at the community level only exacerbate challenges faced by households with already strained resources.

**We know the following conditions lead to greater risk of and/or persistent food insecurity.**

**High costs of food** directly increase food insecurity.<sup>27</sup> They also increase food insecurity indirectly by reducing the effectiveness of SNAP, since SNAP benefits are not adjusted to reflect geographic variation in food costs or costs-of-living.<sup>28</sup>

**High utility bills** (e.g., water, gas, electricity) are increasingly being shown to negatively impact food security.<sup>29</sup>

**High housing costs** can compete with food budgets.<sup>30</sup> When families experience a high housing cost burden, food budgets are often among the first expenses to be cut.

**We think the following conditions have a relationship with food insecurity, but additional research is needed.**

**Limited or no access to transportation** also likely drives food insecurity.<sup>31</sup> Households without access to a car in areas with high food costs or rural areas are especially challenged in acquiring affordable food.<sup>32</sup>

Living in a low-income neighborhood, even after controlling for household characteristics, may increase a household's risk of being food insecure, especially for children.<sup>33,34</sup>

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**Health and Health-Related Behaviors** | This includes physical health, behavioral health, and other health-related considerations.

**We know the following conditions lead to greater risk of and/or persistent food insecurity.**

The presence of **family chaos** in the home is linked to higher levels of food insecurity. Chaos is characterized by lack of order and routine, high levels of background noise, high stress and crowded living conditions.<sup>35,36</sup>

The presence of an **adult household member who smokes** increases the risk of food security.<sup>37,38</sup>

**We think the following conditions have a relationship with food insecurity, but additional research is needed.**

**High healthcare costs** (e.g., chronic, pre-existing conditions, reliance on medication) and **health emergencies** (e.g., major surgeries, accidents) can drive a household into food insecurity.<sup>39,40,41</sup>

Poor health can also affect employability and can **reduce the stability of employment**, which increases food insecurity.<sup>42</sup>

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**Human Capital** | The skills, knowledge, and experience possessed by an individual or household can predict if a household will be food insecure. Systemic barriers faced by certain populations can limit access to resources that build human capital.

**We know the following conditions lead to greater risk of and/or persistent food insecurity.**

**Limited financial management skills** have been linked to greater food insecurity.<sup>43</sup>

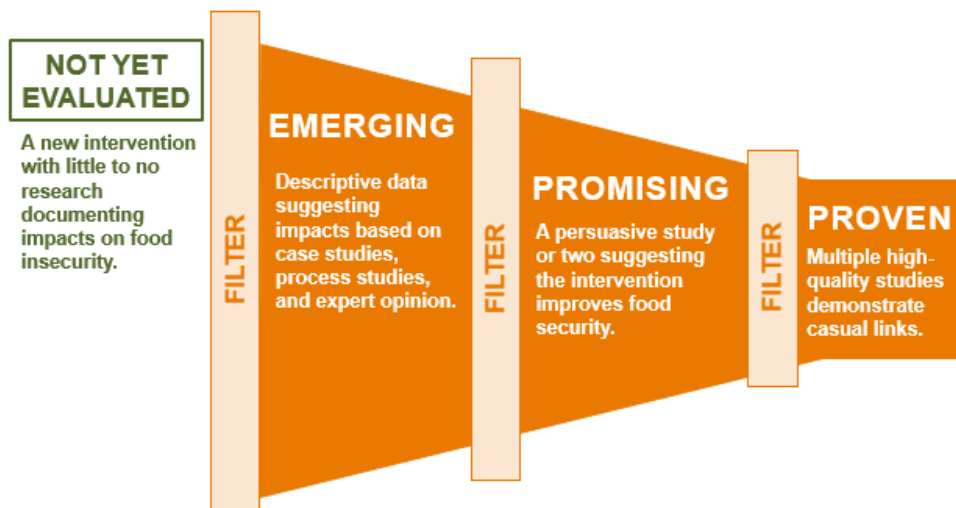
**Lower education levels** also increase a household's risk of food insecurity.<sup>44</sup>

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## WHAT WORKS TO ALLEVIATE FOOD INSECURITY

**METHODS** | Interventions that address the above drivers are likely to improve food security, though much work remains to demonstrate which solutions are effective, and further, which are *most* effective. In this section, we identify and rate the evidence of six categories of interventions that have been clearly linked to improvements in food security: 1) Food Provision and Access (through federal nutrition and charitable programs), 2) Transportation, 3) Financial Stability, 4) Income, 5) Housing, and 6) Health.

The interventions are rated using Feeding America's **Levels of Evidence Framework**, which reflects the quality and quantity of accumulated research examining the effectiveness of each intervention. The image below represents the four rating levels as a filtered funnel:



**Before reading the results of this review, it is important to note that:**

- 1) If an intervention is not yet rated as Proven, it may still be effective. The other ratings only mean that more research is needed to understand the program's effectiveness. **A rating of Not Yet Evaluated, Emerging or Promising does not suggest that the intervention is ineffective.**
- 2) **The interventions in this review were rated based on their effectiveness in addressing the outcome of food insecurity only.** There may be ample literature that demonstrates their effectiveness for addressing other important outcomes (e.g. dietary and health outcomes, poverty, etc.).
- 3) **The information in this report was collected during the summer and fall of 2019** and the evidence ratings within the report reflect published literature and information available up to this point. The food security literature is rapidly growing, and new evidence may be available since the publication of this review.

Please see the Appendix for more detail on the Levels of Evidence Framework.

## RESULTS

**Food Provision and Access** | The solutions in this section directly provide food to families (e.g. food pantries, school lunch) or provide benefits that can be used to purchase food (e.g. SNAP, WIC). Government programs have been more closely evaluated than programs in the charitable food space.

Level of Evidence	Federal Nutrition Programs
Proven	<p><b>The Supplemental Nutrition Assistance Program (SNAP)</b> is by and large the most rigorously studied intervention and the most effective in addressing food insecurity, compared to all other interventions outlined in this review.<sup>45</sup></p> <p>Multiple studies have found that participants receiving SNAP are 5-20 percentage points less likely to be food insecure than those who are eligible but unenrolled in the program.</p>
Proven	<p><b>National School Lunch Program (NSLP)</b> participation decreased food insecurity among households with children in school by a range of 2-9 percentage points across multiple studies.<sup>46</sup></p>
Proven	<p><b>The School Breakfast Program (SBP)</b> has been shown to reduce food insecurity for children in elementary, middle, and high school.<sup>47</sup></p>
Proven	<p><b>The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)</b> provides supplemental foods and other supports during pregnancy and early life stages and has been shown to improve food security. Evidence suggests that WIC reduces the prevalence of child food insecurity by at least 20%.<sup>48</sup></p>
Promising	<p><b>The Summer Food Service Program (SFSP)</b> likely improves food security for households with children, but more robust investigations are needed.<sup>49</sup></p>
Promising	<p><b>The Supplemental Nutrition Assistance Program Education (SNAP-Ed)</b>, the education arm of the SNAP program, has also been shown as a promising approach to improving food security.<sup>50</sup></p> <p>A randomized-controlled trial (RCT) demonstrated that adding financial management skills to SNAP-Ed reduced food insecurity.</p>
Promising	<p><b>The Child and Adult Care Food Program (CACFP)</b> likely improves food insecurity among low-income households by providing food at key life stages when support is needed.<sup>51</sup></p>

Level of Evidence	Charitable Food Programs <sup>a</sup>
Promising	<b>Food pantries:</b> To date, few robust studies have assessed the impact of food pantry use on either short-term measures (e.g., food budget shortfalls and food tradeoffs), or longer-term measures (e.g., chronic food insecurity over months and years). <sup>52</sup>
Promising	<b>Food pantries plus diabetes self-management support:</b> Providing bundled supports to pantry clients with diabetes that included nutritionally- appropriate food, education, blood sugar monitoring, and doctor referrals were shown to have a positive impact on food security. <sup>53</sup>
Promising	<b>Food pantries plus individual case management:</b> One study with strong methods looked at the effectiveness of combining a client-choice pantry model and individual case management, which showed a reduction in very low food security. <sup>54</sup>
Promising	<b>BackPack program:</b> Participation has been shown to reduce food insecurity in certain settings, though further research should examine its effectiveness across geographies and the benefit-cost ratio of implementing the program. <sup>55</sup>
Emerging	<b>Meal delivery programs</b> have been shown to improve some health outcomes, but more research is needed to understand the impact on food insecurity. <sup>56</sup>
Not Yet Evaluated	<b>Regional produce cooperatives:</b> Ongoing research is identifying the role of alternative distribution methods for fresh fruits and vegetables, such as regional produce cooperatives, in reducing food insecurity.
Not Yet Evaluated	<b>Mobile pantries</b> that meet clients where they are may impact food insecurity, although no research has been published on this topic to date. <sup>57</sup>
Not Yet Evaluated	<b>School pantries</b> provide convenient access to food for children and their families, though to date no research has been published about whether school-based pantries improve food security. <sup>58</sup>

**Transportation** | Little research has examined the relationship between improved transportation and food security.

Level of Evidence	Car or Transit Access
Emerging	<b>Access to public transit,</b> such as buses and subway or metro systems likely improve food insecurity by making it easier travel to and from grocery stores. <sup>59</sup>

<sup>a</sup> Many of these programs receive food and/or funds from The Emergency Food Assistance Program (TEFAP) and the Commodity Supplemental Food Program (CSFP).



**Financial Stability** | Given that income and employment shocks are important predictors of transitions into and out of food insecurity, programs that help protect against these shocks likely help protect against food insecurity.

Level of Evidence	Financial Stability
Emerging	<b>Financial education/Financial management training</b> has been shown to have small impacts on financial behaviors, but more research is needed to understand the impact on food insecurity. Some evidence indicates that “just-in-time” education <sup>b</sup> may be worth pursuing. <sup>60</sup>  Financial literacy may not lead to better savings decisions or have direct impacts on food security, but it can lead to more efficient food shopping decisions. This relationship should be further explored.
Emerging	Despite being negatively perceived, emerging evidence suggests that access to <b>payday lenders</b> positively impacts food security. However, more research is needed to understand the long-term impacts. <sup>61</sup>

**Income** | Given that food insecurity is primarily driven by lack of resources, activities that increase household income should have a positive impact.

Level of Evidence	Household Income Supports
Proven	There is evidence that <b>Earned Income Tax Credits (EITC)</b> reduce food insecurity in households with children. <sup>62</sup>
Emerging	<b>Child Tax Credits (CTCs)</b> have not been studied for their impact on food insecurity specifically, but because they increase income for households with children there is directional evidence of impact. <sup>63</sup>
Emerging	<b>Low Income Home Energy Assistance Program (LIHEAP)</b> may indirectly lead to improved food security through improved energy and utility security. <sup>64</sup>
Emerging	Internationally, a substantial literature exists examining the effectiveness of <b>cash transfers</b> in improving food security. There are several pilot programs in the U.S. and Canada that are investigating the effects of providing a universal basic income. More investigation into this solution and its impact on food security would be beneficial. <sup>65</sup>
Not Yet Evaluated	<b>Social Security</b> very likely improves food security. Participation in the program prevented nearly 22 million individuals from falling into poverty in 2018. <sup>c</sup>
Not Yet Evaluated	<b>Workforce development programs</b> have not yet been studied in-depth for their impact on food insecurity. <sup>66</sup>

<sup>b</sup> The goal of just-in-time education is to provide financial training when it is most relevant and applicable (i.e. when the financial decision arises, and the training can be immediately utilized).

<sup>c</sup> Romig, K. (2020). Social Security Lifts More Americans Above Poverty Than Any Other Program. Washington, DC: Center on Budget and Policy Priorities. Available online at <https://www.cbpp.org/sites/default/files/atoms/files/10-25-13ss.pdf>

<b>Not Yet Evaluated</b>	Some studies suggest that labor policy, such as <b>minimum wage laws</b> and <b>overtime regulations</b> , may help support low income households, but the direct impact and generalizability of these findings are still unclear.
<b>Not Yet Evaluated</b>	There is little research on the impact of <b>childcare subsidies</b> on food security.

**Housing** | There has been increasing interest in the policy and research world in understanding housing stability, some of which focuses on the intersection of housing and food insecurity. The U.S. Department of Housing and Urban Development (HUD) is currently developing a Housing Security Measure (inspired by the effectiveness of the Household Food Security Measure),<sup>d</sup> which will support more and better research on the topic.

<b>Level of Evidence</b>	<b>Housing Stability</b>
<b>Promising</b>	<b>Permanent housing subsidies</b> provide a long-term benefit and are available if residents continue to qualify for housing assistance. One study suggested that these programs have a substantial impact on food insecurity, even when other supportive services are not offered along with the subsidies. <sup>67</sup>
<b>Emerging</b>	<b>Temporary housing subsidies</b> provide a short-term, time-limited transitional benefit. These programs have been shown to improve short-term food security but did not have a meaningful impact long term. <sup>68</sup>
<b>Not Yet Evaluated</b>	<b>Foreclosure and eviction prevention programs</b> have not yet been investigated for effects on food insecurity. <sup>69</sup>

**Health** | Programs that address health issues may improve multiple health outcomes in addition to food security.

<b>Level of Evidence</b>	<b>Healthcare and Health Promotion</b>
<b>Promising</b>	<b>Fruit and vegetable prescriptions or vouchers</b> (e.g., EatSF or VeggieRx) have been shown to improve food insecurity in some settings. <sup>70</sup>
<b>Promising</b>	<b>Expansions in Medicaid</b> likely result in overall improvements in food security. <sup>71</sup>
<b>Emerging</b>	The presence of <b>free clinics at pantries</b> or conversely, <b>pantries in healthcare settings</b> have not been adequately studied, though preliminary research suggests these programs may have a positive impact on food security. <sup>72</sup>

<sup>d</sup> Note: The Household Food Security measure, developed by the USDA, is a validated survey module that is used to systematically assess food insecurity.

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## Emerging

Screening for food insecurity in outpatient, inpatient and emergency room settings, collectively known as **screen and intervene**,<sup>e</sup> has shown high rates of referrals and acceptance into food assistance programs as well as high rates of satisfaction among patients. Some local data also suggests the practice both improves food security and clinical outcomes, although more research is needed.<sup>73</sup>

## LOOKING FORWARD

There is still substantial work to be done to better understand how to improve the lives of people living in food-insecure households. That said, the increased attention around food insecurity in the U.S. has also highlighted the many potential partners in the academic, non-profit, policy, and foundations fields that are eager to investigate effective and innovative solutions.

Developing a strong evidence base around effective interventions is foundational to Feeding America's 2025 Strategy and Outcomes and completing and updating Evidence Reviews like this one provides a strong foundation on which to learn more.

Please visit HungerNet for updates and additional information about Feeding America's [Evidence Reviews](#).

## ACKNOWLEDGMENTS

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## SUGGESTED CITATION

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<sup>e</sup> Screen and intervene programs are being used in healthcare organizations to identify patients who are food insecure and connect them with a solution to support improved access to healthy food. That might be 1) referrals to existing food bank programs & agencies; 2) creation of new programs for accessing healthy food (e.g. on-site pantries, mobile distributions at the clinic, or even some new home-delivered grocery programs); and 3) support for SNAP enrollment. For additional information, see Feeding America's *Evidence Review of Food Bank - Health Care Partnerships and Related Interventions* at [www.feedingamerica.org/research/program-evaluation](http://www.feedingamerica.org/research/program-evaluation).

## APPENDIX

Levels of Evidence Framework: Purpose | Feeding America believes in utilizing the best available evidence to inform our decisions and investments. This necessitates a systematic approach to assessing the effectiveness of potential and existing interventions with the purpose of understanding what works, what is ineffective in achieving specified outcome, and where more evaluation is needed.

To that end, Feeding America has developed a Levels of Evidence Framework with four primary goals:

1. Provide a systematic approach to assessing and describing **how well an intervention works** towards achieving a specified outcome.
2. Identify interventions where effectiveness **still needs to be evaluated**.
3. Develop a **shared language** so that interventions can be placed on a continuum of known effectiveness.
4. Provide food banks and FANO transparent information into what interventions have clear positive outcome(s): a key input to inform decision-making around **implementation and dissemination**.

The Levels of Evidence ratings are Proven, Promising, Emerging and Not Yet Evaluated. They represent the quality and quantity of existing evidence that an intervention is effective at improving a specified outcome(s), such as food security, or earned income.

Levels of Evidence Framework: Process | Feeding America's Evidence Review process begins by identifying research that examines the effectiveness of programs and interventions on a stated outcome and meet our eligibility criteria. For this report, the outcome of interest is Food Security and the eligibility criteria are listed in **Table 1**.

Once the evidence pool has been identified, relevant studies are reviewed for quality. These ladder up to assign each intervention a rating corresponding to one of four levels of evidence. These ratings are based on the quantity and quality of research available demonstrating an intervention's effectiveness.

**Table 1: Eligibility Criteria for the Food Security Evidence Review**

Category	Variable	Eligible if...
Study Details	Geography	Conducted within the U.S.
	Language	English
	Date of Publication	Published 1998 or later
	Publication Type	Published journal articles, academic research, technical reports,* Unpublished research**
Research Question	Outcome of Interest	Food security
Population	Age	All available studies; No exclusions
	Race/Ethnicity	
	Socioeconomic Status	
	Geography	

*\*Note that conference papers and book chapters were eligible for inclusion in this review. Newspaper articles, editorials, dissertations (Master's or PhD), commentary, and book reviews were excluded.*

*\*\*Unpublished research includes the "gray literature," or rigorous research that may not have been published in an academic journal.*

Table 2 lists and describes the four levels of evidence, which remain consistent across all Evidence Reviews.

**Table 2: Feeding America’s Levels of Evidence**

Rating	Background Inputs	Additional Detail
<b>Proven</b>	Multiple high-quality studies demonstrating that the intervention is causally related to improvements in the outcome of interest (e.g., food security)	<ul style="list-style-type: none"> <li>The intervention is evidence-based and used actively in practice, ideally with ongoing data collection for performance monitoring</li> <li>Rigorous and comprehensive research (e.g., RCTs, QEDs, or other econometric approaches) demonstrates positive impact on the outcome of interest</li> <li>Collectively, relevant studies indicate the intervention is generalizable across multiple geographies and populations (broadly, or within the population of interest); in rare cases, a single, rigorous study that studies multiple populations across multiple geographies may deem an intervention as proven</li> </ul>
<b>Promising</b>	One or more persuasive studies suggesting that the intervention is causally related to improvements in the outcome of interest	<ul style="list-style-type: none"> <li>The intervention is used widely but not considered generalizable because it has not been replicated or validated as extensively across contexts as a proven practice</li> <li>Moderate evidence from research with some methodological limitations (e.g., RCTs, QEDs, pre-post studies, or other econometric approaches that are limited in scope or scale) indicate effectiveness on impacting the outcome of interest</li> </ul>
<b>Emerging</b>	One or more studies suggesting that the intervention may impact the outcome of interest, supported by expert opinion or theory, or descriptive data from case studies or process studies, or limited pre-post or administrative data	<ul style="list-style-type: none"> <li>The intervention may be new, in pilot phase, and/or an innovative approach suggested by expert opinion as having a strong potential for impact</li> <li>Limited evidence (e.g., anecdotal or persuasive evidence based on expert opinion or practice data) suggests positive effects on the outcome of interest, but is not supported by rigorous research</li> </ul>
<b>Not Yet Evaluated</b>	Few studies, if any, exist that document the effects of the intervention on the outcome of interest, but expert opinion, theory, and/or preliminary practice data suggest potential for impact	<ul style="list-style-type: none"> <li>The intervention is new or considered a commonly accepted practice that has not been rigorously or thoroughly investigated</li> </ul>

For more information, contact the Feeding America Research Team at [research@feedingamerica.org](mailto:research@feedingamerica.org).

## REFERENCES

### HOUSEHOLD CHARACTERISTICS

- <sup>1</sup> Coleman-Jensen, A., Rabbitt, M.P., Gregory, C.A., & Singh, A. (2019). Household food security in the United States in 2018. U.S. Department of Agriculture Economic Research Service. Available online at: <https://www.ers.usda.gov/webdocs/publications/94849/err-270.pdf?v=963.1>
- <sup>2</sup> Coleman-Jensen A., & Nord, M. (2013). Food insecurity among households with working-age adults with disabilities. U.S. Department of Agriculture, Economic Research Service: Washington, D.C.
- <sup>3</sup> Sonik, R., Parish, S. L., Ghosh, S., & Igdalsky, L. (2016). Food insecurity in US households that include children with disabilities. *Exceptional Children*, 83(1), 42-57.
- <sup>4</sup> Balistreri, K.S. (2018). Family structure and child food insecurity: evidence from the current population survey. *Social Indicators Research*, 138(3), 1171-1185.
- <sup>5</sup> Nepomnyaschy, L., Miller, D. P., Garasky, S., & Nanda, N. (2014). Nonresident fathers and child food insecurity: Evidence from longitudinal data. *Social Service Review*, 88(1), 92-133.
- <sup>6</sup> Cook, J.T., Frank, D.A., Levenson, S.M., Neault, N.B., Heeren, T.C., Black, M.M., ... & Chilton, M. (2006). Child food insecurity increases risks posed by household food insecurity to young children's health. *The Journal of Nutrition* 136(4), 1073-1076.
- <sup>7</sup> Gundersen, C., & Ziliak, J.P. (2015). Food insecurity and health outcomes. *Health Affairs*, 34(11), 1830-1839.
- <sup>8</sup> See Coleman-Jensen, *et al.*, 2019.
- <sup>9</sup> McDonough, I.K., Roy, M., Roychowdhury, P. (2020). Exploring the dynamics of racial food insecurity gaps in the United States. *Rev. Econ Household* (18): 387-412.
- <sup>10</sup> Gundersen, C. (2008). Measuring the extent, depth, and severity of food insecurity: an application to American Indians in the USA. *Journal of Population Economics*, 21(1), 191-215.
- <sup>11</sup> Jernigan, V.B.B., Huyser, K.R., Valdes, J., & Simonds, V.W. (2017). Food insecurity among American Indians and Alaska Natives: A national profile using the current population survey-food security supplement. *Journal of Hunger and Environmental Nutrition*, 12(1), 1-10.
- <sup>12</sup> Becerra, M. B., Mshigeni, S. K., & Becerra, B. J. (2018). The overlooked burden of food insecurity among Asian Americans: Results from the California Health Interview Survey. *International Journal of Environmental Research and Public Health*, 15(8), 1684.
- <sup>13</sup> Becerra, M. B., & Chawdhury, V. (2018). Health disparities among South Asians: Is food insecurity the missing link, 3, 2.
- <sup>14</sup> Widome, R., Jensen, A., Bangerter, A., & Fu, S.S. (2015). Food insecurity among veterans of the US wars in Iraq and Afghanistan. *Public Health Nutrition*, 18(5), 844-849.
- <sup>15</sup> Wang, E.A., McGinnis, K.A., Goulet, J., Bryant, K., Gibert, C., Leaf, D.A., ... & Fiellin, D.A. (2015). Food insecurity and health: data from the Veterans Aging Cohort Study. *Public Health Reports*, 130(3), 261-268.
- <sup>16</sup> Cox, R., & Wallace, S. (2016). Identifying the link between food security and incarceration. *Southern Economic Journal* 82 (4): 1062-77.
- <sup>17</sup> Turney, K. (2015). Paternal incarceration and children's food insecurity: A consideration of variation and mechanisms. *Social Service Review* 89 (2): 335-67.

### KEY DRIVERS OF FOOD INSECURITY

- <sup>18</sup> Nord, M., Coleman-Jensen, A., & Gregory, C.A., (2014). Prevalence of U.S. food insecurity is related to changes in unemployment, inflation, and the price of food. U.S. Department of Agriculture Economic Research Service. No. ERR-167. Available online at: [https://www.ers.usda.gov/webdocs/publications/45213/48167\\_err167.pdf?v=0](https://www.ers.usda.gov/webdocs/publications/45213/48167_err167.pdf?v=0)

- <sup>19</sup> Gundersen, C., Dewey, A., Kato, M., Crumbaugh A., & Strayer, M. (2019). Map the Meal Gap 2019: A report on county and congressional district food insecurity and county food cost in the United States in 2017. Feeding America. <https://www.ers.usda.gov/webdocs/publication/s/84241/err-233.pdf?v=0>
- <sup>20</sup> Loopstra, R., & Tarasuk, V. (2013). Severity of household food insecurity is sensitive to change in household income and employment status among low-income families. *The Journal of Nutrition*, 143(8), 1316-1323.
- <sup>21</sup> Gundersen, C., Weinreb, L., Wehler, C., & Hosmer, D. (2003). Homelessness and food insecurity. *Journal of Housing Economics* 12 (3): 250-72.
- <sup>22</sup> Shobe, M.A., Narcisse, M.R., & Christy, K. (2018). Household financial capital and food security. *Journal of Poverty*, 22(1), 1-22.
- <sup>23</sup> Loibl, C., Snyder, A., & Mountain, T. (2017). Connecting saving and food security: Evidence from an asset-building program for families in poverty. *Journal of Consumer Affairs*, 51(3), 659-681.
- <sup>24</sup> King, C. (2018). Food insecurity and housing instability in vulnerable families. *Review of Economics of the Household*, 16(2), 255-273.
- <sup>25</sup> Gundersen, C., Engelhard, E., & Hake, M. (2017). The determinants of food insecurity among food bank clients in the United States. *Journal of Consumer Affairs*, 51(3), 501-518.
- <sup>26</sup> Waxman, E. (2017). US Commentary: The Family Options Study and food insecurity. *Cityscape*. 19(2), 235-244.
- <sup>27</sup> See Nord *et al.*, 2014.
- <sup>28</sup> Waxman, E., Gundersen, C., & Thompson, M. (2018). How far do SNAP benefits fall short of covering the cost of a meal? Urban Institute. Available online at: [https://www.urban.org/sites/default/files/publication/96661/how\\_far\\_do\\_snap\\_benefits\\_fall\\_short\\_of\\_covering\\_the\\_cost\\_of\\_a\\_meal\\_4.pdf](https://www.urban.org/sites/default/files/publication/96661/how_far_do_snap_benefits_fall_short_of_covering_the_cost_of_a_meal_4.pdf)
- <sup>29</sup> Tuttle, C., & Beatty, T.K. (2017). The effects of energy price shocks on household food security in low-income households (No. 1477-2017-2572). US Department of Agriculture Economic Research Service. Available online at: [https://www.ers.usda.gov/webdocs/publication/s/43953/eib138\\_errata.pdf?v=2948.4](https://www.ers.usda.gov/webdocs/publication/s/43953/eib138_errata.pdf?v=2948.4)
- <sup>30</sup> See Waxman, 2017.
- <sup>31</sup> ver Ploeg, M., Mancino, L., Todd, J.E., Clay, D.M., & Schardin, B. (2015). Where do Americans usually shop for food and how do they travel to get there? Initial Findings from the National Household Food Acquisition and Purchase Survey. US Department of Agriculture Economic Research Service. Available online at: <https://www.ers.usda.gov/webdocs/publication/s/85442/eib-180.pdf?v=0>
- <sup>32</sup> ver Ploeg, M., Larimore, E., & Wilde, P.E. (2017). The influence of food store access on grocery shopping and food spending. EIB-180. US Department of Agriculture Economic Research Service. Available online at: <https://www.ers.usda.gov/webdocs/publication/s/85442/eib-180.pdf?v=0>
- <sup>33</sup> Denney, J.T., Kimbro, R.T., & Sharp, G. (2017). Neighborhoods and food insecurity in households with young children: a disadvantage paradox? *Social Problems*, 65(3), 342-359.
- <sup>34</sup> Morrissey, T.W., Oellerich, D., Meade, E., Simms, J., & Stock, A. (2016). Neighborhood poverty and children's food insecurity. *Children and Youth Services Review*, 66, 85-93.
- <sup>35</sup> Fiese, B., Gundersen, C., Koester, B., & Jones, B. (2016). Family chaos and lack of mealtime planning is associated with food insecurity in low-income households. *Economics and Human Biology* 21: 147-55.
- <sup>36</sup> Pinard, C.A., Calloway, E.E., Fricke, H.E., & Yaroch, A.L. (2015). A cross-sectional exploration of food security, depression, and chaos in low-income households with children. *Journal of Applied Research on Children: Informing Policy for Children at Risk*, 6(2).
- <sup>37</sup> Cutler-Triggs, C., Fryer, G., Miyoshi, T., & Weitzman, M. (2008). Increased rates and severity of child and adult food insecurity in households with adult smokers. *Archives of Pediatrics and Adolescent Medicine* 162: 1056-62.



- <sup>38</sup> Kim-Mozeleski, J.E., Seligman, H.K., Yen, I.H., Shaw, S.J., Buchanan, D.R., & Tsoh, J.Y. (2019). Changes in food insecurity and smoking status over time: analysis of the 2003 and 2015 panel study of income dynamics. *American Journal of Health Promotion*, 33(5), 698-707.
- <sup>39</sup> Seligman, H.K., & Schillinger, D. (2010). Hunger and socioeconomic disparities in chronic disease. *New England Journal of Medicine* 363(1), 6-9.
- <sup>40</sup> Berkowitz, S.A., Basu, S., Meigs, J.B., & Seligman, H.K. (2018). Food insecurity and health care expenditures in the United States, 2011-2013. *Health Services Research*, 53(3), 1600.
- <sup>41</sup> Basu, S., Berkowitz, S.A., & Seligman, H.K. (2017). The monthly cycle of hypoglycemia: an observational claims-based study of emergency room visits, hospital admissions, and costs in a commercially-insured population. *Medical Care*, 55(7), 639.
- <sup>42</sup> Gregory, C.A., & Coleman-Jensen, A. (2017) Food insecurity, chronic disease, and health among working-age adults, ERR-235, U.S. Department of Agriculture, Economic Research Service. Available online at: <https://www.ers.usda.gov/webdocs/publications/84467/err-235.pdf?v=0>
- <sup>43</sup> Gundersen, C.G., & Garasky, S.B. (2012). Financial management skills are associated with food insecurity in a sample of households with children in the United States. *The Journal of Nutrition*; 142:1865-1870.
- <sup>44</sup> See Coleman-Jensen *et al.*, 2019.
- DePolt, R.A., Moffitt, R.A., & Ribar, D.C. (2009). Food stamps, temporary assistance for needy families and food hardships in three American cities. *Pacific Economic Review*, 14(4), 445-473
- Gundersen, C., Kreider, B., & Pepper, J.V. (2017). Partial identification methods for evaluating food assistance programs: A case study of the causal impact of SNAP on food insecurity. *American Journal of Agricultural Economics*, 99(4), 875-893.
- Han, J. (2016). The impact of SNAP on material hardships: Evidence from Broad-Based Categorical Eligibility expansions. *Southern Economic Journal*, 83(2), 464-486.
- Kreider, B., Pepper, J. V., Gundersen, C., & Jolliffe, D. (2012). Identifying the effects of SNAP (food stamps) on child health outcomes when participation is endogenous and misreported. *Journal of the American Statistical Association*, 107(499), 958-975.
- Li, Y., Mills, B., Davis, G.C., & Mykerezi, E. (2014). Child food insecurity and the food stamp program: What a difference monthly data make. *Social Service Review*, 88(2), 322-348.
- Mabli, J., & Worthington, J. (2014). Supplemental Nutrition Assistance Program participation and child food security. *Pediatrics*, peds-2013.
- Nord, M. (2012). How much does the Supplemental Nutrition Assistance Program alleviate food insecurity? Evidence from recent program leavers. *Public Health Nutrition*, 15(5), 811-817.
- Ratcliffe, C., McKernan, S.M., & Zhang, S. (2011). How much does the Supplemental Nutrition Assistance Program reduce food insecurity? *American Journal of Agricultural Economics*, 93(4), 1082-1098.
- Schmidt, L., Shore-Sheppard, L., & Watson, T. (2016). The effect of safety-net programs on food insecurity. *Journal of Human Resources*, 51(3), 589-614.
- Shaefer, H.L., & Gutierrez, I.A. (2013). The Supplemental Nutrition Assistance Program and material hardships among low-income households with children. *Social Service Review*, 87(4), 753-779.

## WHAT WORKS - RESULTS

In the following pages, the citations used to reach each intervention's rating are listed alphabetically in the order they appear in the review.

## FEDERAL NUTRITION PROGRAMS

### The Supplemental Nutrition Assistance Program (SNAP)<sup>45</sup>

Collins, A.M., & Klerman, J.A. (2017). Improving nutrition by increasing supplemental nutrition assistance program benefits. *American Journal of Preventive Medicine*, 52(2), S179-S185.

## The National School Lunch Program (NSLP) <sup>46</sup>

---

Arteaga, I., & Heflin, C. (2014). Participation in the National School Lunch Program and food security: An analysis of transitions into kindergarten. *Children and Youth Services Review*, 47, 224-230.

Gundersen, C., Kreider, B., & Pepper, J. (2012). The impact of the National School Lunch Program on child health: A nonparametric bounds analysis. *Journal of Econometrics*, 166(1), 79-91.

Huang, J., Barnidge, E., & Kim, Y. (2015). Children receiving free or reduced-price school lunch have higher food insufficiency rates in summer. *The Journal of Nutrition*, 145(9), 2161-2168.

Huang, J., & Barnidge, E. (2016). Low-income children's participation in the National School Lunch Program and household food insufficiency. *Social Science & Medicine*, 150, 8-14.

Ishdorj, A., & Higgins, L. (2015). Children's food security and participation in the National School Lunch Program. *Applied Economics and Finance*, 2(1), 119-128.

Gao, X., Ishdorj, A., & Higgins, L.M. (2012). Impact of the National School Lunch Program on Children's Food Security. Southern Agricultural Economics Association Annual Meeting. (No. 1372-2016-109028).

Kabbani, N.S., & Kmeid, M.Y., (2005). The role of food assistance in helping food insecure households escape hunger. *Review of Agricultural Economics*, 27(3), 439-445.

## The School Breakfast Program (SBP) <sup>47</sup>

---

Bartfeld, J., & Dunifon, R. (2006). State-level predictors of food insecurity among households with children. *Journal of Policy Analysis and Management* 25.4: 921-942.

Bartfeld, J., Kim, M., Ryu, J.H., & Ahn, H. (2009). The School Breakfast Program participation and impacts. Cooperator/Contractor Report. Prepared by The University of Wisconsin-Madison for U.S. Department of Agriculture, Economic Research Service, Project Officer: Katherine Ralston. July.

Bartfeld, J.S., & Ahn, H.M. (2011a). The School Breakfast Program strengthens household food security among low-income households with elementary school children. *The Journal of Nutrition*, 141(3), 470-475.

Bartfeld, J., & Ryu, J.H. (2011b). The School Breakfast Program and breakfast-skipping among Wisconsin elementary school children. *Social Service Review* 85(4):619-634.

Larson, N., Wang, Q., Grannon, K., Wei, S., Nanney, M. S., & Caspi, C. (2018). A low-cost, grab-and-go breakfast intervention for rural high school students: Changes in School Breakfast Program participation among at-risk students in Minnesota. *Journal of Nutrition Education and Behavior*, 50(2), 125-132.

## The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) <sup>48</sup>

---

Arteaga, I., Heflin, C., & Gable, S. (2016). The impact of aging out of WIC on food security in households with children. *Children and Youth Services Review*, 69, 82-96.

Gordon, A.R., Briefel, R.R., Collins, A.M., Rowe, G.M., & Klerman, J.A. (2017). Delivering summer electronic benefit transfers for children through the Supplemental Nutrition Assistance Program or the Special Supplemental Nutrition Program for Women, Infants, and Children: Benefit use and impacts on food security and foods consumed. *Journal of the Academy of Nutrition and Dietetics*, 117(3), 367-375.

Kreider, B., Pepper, J. V., & Roy, M. (2016). Identifying the effects of WIC on food insecurity among infants and children. *Southern Economic Journal*, 82(4), 1106-1122.

## The Summer Food Service Program (SFSP) <sup>49</sup>

---

Cabili, C., Caronongan, P., Gleason, P., Briefel, R., Redel, N., Forrestal, S., Chojnacki, G., & Wakar, B. (2019). Evaluation of Demonstration Projects to

End Childhood Hunger (EDECH): The Virginia 365 Project. Mathematica Policy Research.

Collins, A.M., Klerman, J.A., Briefel, R., Rowe, G., Gordon, A.R., Logan, C.W., ... & Bell, S.H. (2018). A summer nutrition benefit pilot program and low-income children's food security. *Pediatrics*, *141*(4), e20171657

Miller, D.P. (2016). Accessibility of summer meals and the food insecurity of low-income households with children. *Public Health Nutrition*, *19*(11), 2079-2089.

Bartfeld, J., & Dunifon, R. (2006). State-level predictors of food insecurity among households with children. *Journal of Policy Analysis and Management* *25*.4: 921-942.

Nord, M., & Romig, K., (2006). Hunger in the summer: seasonal food insecurity and the National School Lunch and Summer Food Service programs. *Journal of Children and Poverty*, *12*(2), 141-158.

### The Supplemental Nutrition Assistance Program Education (SNAP-Ed) <sup>50</sup>

---

Rivera, R.L., Dunne, J., Maulding, M.K., Wang, Q., Savaiano, D.A., Nickols-Richardson, S.M., & Eicher-Miller, H.A. (2018). Exploring the association of urban or rural county status and environmental, nutrition-and lifestyle-related resources with the efficacy of SNAP-Ed (Supplemental Nutrition Assistance Program-Education) to improve food security. *Public Health Nutrition*, *21*(5), 957-966.

Farrell, J.A., Cordeiro, L.S., Qian, J., Sullivan-Werner, L., & Nelson-Peterman, J.L. (2018). Food affordability, food security, and the Expanded Food and Nutrition Education Program. *Journal of Hunger & Environmental Nutrition*, *13*(2), 180-191.

Kaiser, L., Chaidez, V., Algert, S., Horowitz, M., Martin, A., Mendoza, C., ... & Ginsburg, D. C. (2015). Food resource management education with SNAP participation improves food security. *Journal of Nutrition Education and Behavior*, *47*(4), 374-378.

### The Child and Adult Food Program (CACFP)<sup>51</sup>

---

Heflin, C., Arteaga, I., & Gable, S. (2015). The Child and Adult Care Food Program and food insecurity. *Social Service Review* *89*(1):77.

Korenman, S., Abner, K.S., Kaestner, R., & Gordon, R.A. (2013). The Child and Adult Care Food Program and the nutrition of preschoolers. *Early Childhood Research Quarterly*, *28*(2), 325-336.

### CHARITABLE FOOD PROGRAMS

#### Food Pantries <sup>52</sup>

---

Mabli, J., & Jones, D. (2012). Food security and food access among emergency food pantry households. Mathematica Policy Research.

Martin, K.S., Wu, R., Wolff, M., Colantonio, A.G., & Grady, J. (2013). A novel food pantry program: food security, self-sufficiency, and diet-quality outcomes. *American Journal of Preventive Medicine*, *45*(5), 569-575.

#### Food Pantries & Diabetes Self-Management <sup>53</sup>

---

Seligman, H.K., Smith, M., Rosenmoss, S., Marshall, M.B., & Waxman, E., (2018). Comprehensive diabetes self-management support from food banks: a randomized controlled trial. *American Journal of Public Health*, *108*(9), 1227-1234.

#### Food Pantries & Case Management <sup>54</sup>

---

Martin, K.S., Colantonio, A.G., Picho, K., & Boyle, K.E., (2016). Self-efficacy is associated with increased food security in novel food pantry program. *SSM Population Health*, *2*, 62-67.

#### BackPack Programs <sup>55</sup>

---

Wright, L., & Epps, J.B. (2018). BackPack: A program for improving children's readiness to learn and family food security. *Topics in Clinical Nutrition*, *33*(1), 16-22.

## Meal Delivery Programs <sup>56</sup>

---

Wright, L., Vance, L., Sudduth, C., & Epps, J. B. (2015). The impact of a home-delivered meal program on nutritional risk, dietary intake, food security, loneliness, and social well-being. *Journal of nutrition in gerontology and geriatrics*, 34(2), 218-227.

## Mobile Pantries <sup>57</sup>

---

Bradley, S., Vitous, C.A., Walsh-Felz, A., & Himmelgreen, D. (2018). Food insecurity and healthcare decision making among mobile food pantry clients in Tampa Bay. *Ecology of Food and Nutrition*, 57(3), 206-222.

## School Pantries <sup>58</sup>

---

Snelling, A., Maroto, M., Jackowitz, A., & Waxman, E. (2014). Key factors for school-based food pantries: Perspectives from food bank and school pantry personnel. *Journal of Hunger & Environmental Nutrition*, 9:3, 350-361.

## CAR OR TRANSIT ACCESS

### Access to Public Transit <sup>59</sup>

---

Baek, D., (2016). The effect of public transportation accessibility on food insecurity. *Eastern Economic Journal*, 42(1), 104-134.

## FINANCIAL STABILITY

### Financial Education/Financial Management Training <sup>60</sup>

---

Birkenmaier, J., Huang, J., & Kim, Y. (2016). Food insecurity and financial access during an economic recession: Evidence from the 2008 SIPP. *Journal of Poverty*, 20(2), 194-213.

Barnow B., & Smith, J. (2016). Employment and training programs. In, *The Economics of Means-Tested Transfer Programs in the United States*, Volume 2 (Ed. Moffitt, R). University of Chicago Press.

Gjertson, L. (2016). Emergency saving and household hardship. *Journal of Family and Economic Issues*, 37(1), 1-17.

Gundersen, C.G., & Garasky, S.B. (2012). Financial management skills are associated with food insecurity in a sample of households with children in the United States. *The Journal of Nutrition*, 142(10), 1865-1870.

Kennedy, S., Fitch, C.A., Warren, J.R., & Rivera Drew, J.A. (2013). Food insecurity during childhood: Understanding persistence and change using linked Current Population Survey Data. University of Kentucky Center for Poverty

Research Discussion Paper Series, DP2013-03. University of Kentucky Center for Poverty Research.

Leete, L., & Bania, N. (2010). The effect of income shocks on food insufficiency. *Review of Economics of the Household*, 8(4), 505-526.

## Payday Lenders <sup>61</sup>

---

Fitzpatrick, K., & Coleman-Jensen, A. (2014). Food on the fringe: Food insecurity and the use of payday loans. *Social Service Review*, 88(4), 553-593.

Zaki, M. (2016). Access to short-term credit and consumption smoothing within the paycycle. FEEM Working Paper No. 007.2016. University of Maryland.

## HOUSEHOLD INCOME SUPPORTS

### Earned Income Tax Credit (EITC) <sup>62</sup>

---

Lenhart, O. (2019). Safety net against hunger? The effects of the Earned Income Tax Credit on food insecurity. Available online at: <https://dx.doi.org/10.2139/ssrn.3389709>

Rehkopf, D.H., Strully, K.W., & Dow, W.H. (2014). The short-term impacts of Earned Income Tax Credit disbursement on health. *International Journal of Epidemiology*, 43(6), 1884-1894. doi:10.1093/ije/dyu172

Schmidt, L., Shore-Sheppard, L., & Watson, T. (2016). The effect of safety-net programs on food insecurity. *Journal of Human Resources*, 51(3):589-614.

## Child Tax Credits <sup>63</sup>

---

Marr, C., Huang, C.C., Sherman, A., & Debot, B. (2015). EITC and Child Tax Credit promote work, reduce poverty, and support children's development, research finds. Washington, DC: Center on Budget and Policy Priorities.

Center on Budget and Policy Priorities. (2019). Policy basics: The Child Tax Credit.

Available online at:

<https://www.cbpp.org/sites/default/files/atoms/files/policybasics-ctc.pdf>

## Low Income Home Energy Assistance Program (LIHEAP) <sup>64</sup>

---

Hernández, D. (2016). Understanding 'energy insecurity' and why it matters to health. *Social Science & Medicine*, 167, 1-10.

Murray, A.G., & Mills, B.F. (2012). The Impact of Low Income Home Energy Assistance Program (LIHEAP) participation on household energy insecurity. *Contemporary Economic Policy*. 32:4, 811-825.

Nord, M., & Kantor, L.S. (2006). Seasonal variation in food insecurity is associated with heating and cooling costs among low-income elderly Americans. *Journal of Nutrition*.136(11):2939-2944.

## Cash Transfers <sup>65</sup>

---

Bastagli, F., Hagen-Zanker, J., Harman, L., Barca, V., Sturge, G., Schmidt, T., & Pellerano, L. (2016). Cash transfers: what does the evidence say. A rigorous review of programme impact and the role of design and implementation features. London: ODI.

Reynolds, T., Anderson, C.L., Biscaye, P., Coomes, D., Madsen, T., Ebeling, E., & Favreau, A.R., (2017). Review of long-term impacts of cash transfer programs. University of Washington Evans School of Public Policy and Governance. Available online at: <https://evans.uw.edu>

## Workforce Development Programs <sup>66</sup>

---

Barnow, B.S., & Smith, J. (2016). Employment and training programs. The economics of means-tested transfer programs in the United States (ed. Moffitt, R.A.) vol. 2. pp.127-134. *The National*

*Bureau of Economic Research*. ISBN 0-226-374047-X.

## HOUSING STABILITY

### Permanent Housing Subsidies <sup>67</sup>

---

Waxman, E. (2017). US Commentary: The Family Options Study and food insecurity. *Cityscape*, 19(3), 235-244.

### Temporary Housing Subsidies <sup>68</sup>

---

See Waxman, 2017.

### Foreclosure and Eviction Prevention Programs <sup>69</sup>

---

King, C. (2018). Food insecurity and housing instability in vulnerable families. *Review of Economics of the Household*, 16(2), 255-273.

Mykyta, L. (2015). Housing crisis and family well-being: Examining the effects of foreclosure on families. U.S. Census Bureau. SEHSD Working Paper #2015-07. Available online at: <https://www.census.gov>

## HEALTHCARE & HEALTH PROMOTION

### Fruit and Vegetable Vouchers/Prescriptions <sup>70</sup>

---

Cavanagh M, Jurkowski J, Bozlak C, Hastings J, Klein A. Veggie Rx: an outcome evaluation of a healthy food incentive programme. *Public Health Nutr*. 2017;20(14):2636-2641.

Chrisinger, A., & Wetter, A. (2016). Fruit and vegetable prescription program: design and evaluation of a program for families of varying socioeconomic status. *Journal of Nutrition Education and Behavior*. 48(7)(suppl):S57.

Durward, C.M., Savoie-Roskos, M., Atoloye, A., Isabella, P., Jewkes, M.D., Ralls, B., ... & LeBlanc, H. (2019). Double Up Food Bucks participation is associated with increased fruit and vegetable consumption and food security among low-income adults. *Journal of Nutrition Education and Behavior*, 51(3), 342-347.

Goddu, A.P., Roberson, T.S., Raffel, K.E., Chin, M.H., & Peek, M.E. (2015). Food Rx: a community-university partnership to prescribe healthy eating on the South Side of Chicago. *Journal of Prevention & Intervention in the Community*, 43(2), 148-162.

Hulbrock, E., Otten, J. J., Quinn, E., Johnson, D. B., & Lerman, S. (2017). Exploring the use of Seattle's farmers' market incentive program ("Fresh Bucks") by household food security levels. *Journal of Hunger & Environmental Nutrition*, 12(3), 362-374.

Joshi, K., Smith, S., Trapl, E., & Bolen, S. (2016). Implementing a clinic-community partnership to promote fruit and vegetable consumption among food insecure patients with hypertension in safety net clinics. *J Gen Intern Med*. 31(suppl 2):S884-S885.

Savoie-Roskos, M., Durward, C., Jeweks, M., & LeBlanc, H. (2016). Reducing food insecurity and improving fruit and vegetable intake among farmers' market incentive program participants. *Journal of Nutrition Education and Behavior*, 48(1), 70-76.

### Expansions in Medicaid <sup>71</sup>

---

Moellman, N. (2017). Healthcare and Hunger: Impacts of the Affordable Care Act on food insecurity in America. The University of Kentucky. Available online at: <https://www.gatton.uky.edu>

### Free Clinics at Pantries/Pantries in Healthcare Settings <sup>72</sup>

---

Friedman, D.B., Freedman, D.A., Choi, S.K., Anadu, E.C., Brandt, H.M., Carvalho, N., ... & Hebert, J. (2014). Provider communication and role modeling related to patients' perceptions and use of a federally qualified health center-based farmers' market. *Health Promotion Practice*, 15(2), 288-297.

### Screen and Intervene Programs <sup>73</sup>

---

Cullen, D., Woodford, A., & Fein, J. (2019). Food for Thought: A randomized trial of food insecurity screening in the emergency department. *Academic Pediatrics*. 19(6) 646-651.

De Marchis, E.H., Torres, J.M., Fichtenberg, C., & Gottlieb, L.M. (2019). Identifying food insecurity in health care settings: A systematic scoping review of the evidence. *Family & Community Health*, 42(1), 20-29.

Lane, W.G., Dubowitz, H., Feigelman, S., & Poole, G. (2014). The effectiveness of food insecurity screening in pediatric primary care. *International Journal of Child Health and Nutrition*, 3(3), 130.