

**WHITE PAPER:**

**HEALTH IMPACT ASSESSMENT OF PROPOSED CHANGES TO THE  
SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM**

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

**TABLE OF CONTENTS:**

SUMMARY ..... 1

INTRODUCTION ..... 5

METHODS ..... 7

BACKGROUND ON POLICY AND PROGRAM PARTICIPANTS..... 12

HEALTH IMPACTS OF PROPOSED CHANGES IN SNAP ELIGIBILITY AND BENEFIT LEVELS ..... 18

CONCLUSION ..... 29

RECOMMENDATIONS ..... 29

APPENDICES..... 31

REFERENCES ..... 35

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

## SUMMARY

This brief summarizes findings from an ongoing health impact assessment (HIA) of proposed changes to the Supplemental Nutrition Assistance Program (SNAP). The HIA is being conducted by the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.

The intent of an HIA is to raise awareness of the potential impacts among policymakers, people affected by a decision, and others with an interest in the outcome. The methods used in this analysis include a systematic literature review; analysis by Mathematica Policy Research using a model developed for the United States Department of Agriculture to aid in SNAP administration; and interviews with SNAP administrators at the state and local levels.

SNAP is the federal government's principal program for helping low-income families purchase enough food. Federal spending on SNAP has grown from \$34.8 billion in FY 2007 to \$80.4 billion in FY 2012.<sup>1</sup> This growth in spending has been attributed to several factors, including the rise in poverty and unemployment during the recent recession (leading to higher participation rates); changes in state eligibility practices; and a temporary increase in benefit amounts conferred by the American Recovery and Reinvestment Act (ARRA).<sup>2</sup> The Congressional Budget Office (CBO) predicts that under current policies, SNAP spending will fall in coming years as the ARRA benefit increase expires in November 2013 and the economy continues to recover.<sup>3</sup>

Both Senate- and House-introduced bills (S. 954 and H.R. 1947) seek to reduce spending on SNAP by making changes to both the procedures states use to determine eligibility for the program and the amount of benefits that some participating households receive.<sup>4</sup> The changes to SNAP proposed by these bills are the subject of this health impact assessment. The key findings of our analysis thus far are summarized here.

### Health impacts of proposed changes in SNAP eligibility and benefit amounts

**Under current legislative proposals, changes to the way states determine who is eligible for SNAP could increase food insecurity, with important implications for health.** It is well established in the literature that food insecurity (defined as difficulty in obtaining enough to eat) increases the risk of diabetes, heart disease, and depression or anxiety in adults; and asthma, cognitive impairment, or behavioral problems in children.<sup>5</sup> Children in food-insecure families are more likely to be hospitalized in early childhood than those from food-secure households.<sup>6</sup> Medical costs related to food insecurity in the United States amount to as much as \$67 billion per year in 2005 dollars.<sup>7</sup>

Our analysis finds that under the changes proposed in H.R. 1947, more than half a million food-insecure people currently receiving SNAP benefits would lose eligibility due to changes in the way states determine who is eligible for the program. In addition, as many as 160,000<sup>8</sup> to 305,000<sup>9</sup> more individuals could become food

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

insecure. Moreover, as many as 1.2 million school-age children in households that could lose SNAP eligibility would no longer be able to directly certify for the school meal program through receipt of SNAP benefits, which could exacerbate food insecurity for some children by making it more complicated for low-income children to access school meals.<sup>10</sup>

**Increases in poverty due to the changes proposed in H.R. 1947 could have important implications for state and federal government health care costs.** Poverty increases the risk of many illnesses. Under the proposed changes, the U.S. poverty rate could increase by over half a percent, according to recent research.<sup>11</sup> Our analysis found that based on current rates of diabetes in relation to poverty in U.S. communities, this increase in poverty could translate to a growth in government and private-sector medical costs for diabetes alone of nearly \$15 billion over 10 years.<sup>12</sup> Thus, diabetes costs alone could nearly equal CBO’s estimate of \$20 billion in savings over 10 years from implementing proposed SNAP changes in H.R. 1947, in addition to any costs associated with other diseases.<sup>13</sup> These figures must be interpreted with caution: the fact that rates of diabetes correlate with poverty rates does not necessarily prove that a policy that increases poverty will cause an increase in diabetes. Nevertheless, the body of evidence is strong enough to support considering the health-related cost implications of these proposed changes as part of the policy discussion.

**Losing access to SNAP or receiving lower benefits could increase the risk of many illnesses for low-income Americans affected by the proposed changes.** Using a model employed by the U.S. Department of Agriculture to administer SNAP, Mathematica Policy Research conducted an analysis of how many people could lose eligibility or receive lower benefits under the proposed policy changes in H.R. 1947 and S. 954. Under the changes proposed in H.R. 1947, as many as 5.1 million people could lose eligibility for the program.<sup>14</sup> These impacts would occur because of changes to a policy known as “categorical eligibility,” which currently allows states to adopt similar enrollment criteria for SNAP and other assistance programs such as Temporary Assistance for Needy Families (TANF) in order to streamline their administration of these programs. Changes proposed in H.R. 1947 would eliminate states’ ability to enroll a person in SNAP based on the applicant’s eligibility for certain “non-cash” TANF benefits, such as childcare or counseling services. Under this proposal, states would instead use strict federal SNAP income and asset eligibility standards to determine eligibility.<sup>15</sup> The people affected by these changes are mainly low-income Americans and, therefore, already at high risk for many illnesses: 83 percent of those who would lose eligibility have a net income below the poverty line (\$15,130 annual gross income for a family of two, or \$23,050 for a family of four) even when counting their SNAP benefits as income. Among subgroups that are at particularly high risk, roughly 1.4 million children and 876,000 older adults would lose benefits entirely.<sup>16</sup> Those who lose benefits would lose an average of 38 percent of their income.<sup>17</sup>

Beyond these changes in eligibility, both bills would also reduce monthly benefits for certain low-income households that remain in the program. For example, S. 954 proposed changes to the “Heat and Eat” program that links SNAP benefit amounts to the Low Income Home Energy Assistance Program (LIHEAP) would reduce monthly benefits for between 300,000<sup>18</sup> and 500,000 households,<sup>19</sup> all of which have net incomes below the poverty line, and a majority of which have either children or a disabled or older adult family member.<sup>20</sup> Similar changes would occur under H.R. 1947, resulting in nearly 500,000 low-income people receiving lower benefits.<sup>21</sup>

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

These changes are likely to increase health risks for low-income Americans. Children in families receiving SNAP are less likely to have poor health outcomes<sup>22</sup> and more likely to be classified by their parents as being in good health and developing normally, compared to children from low-income families that are not receiving SNAP benefits.<sup>23</sup> One study found that people who had previous access to the food stamp program (the predecessor to SNAP) in childhood have a lower risk of obesity, diabetes, high blood pressure, and heart disease as adults.<sup>24</sup>

Many seniors and disabled persons receiving nominal energy assistance would receive lower SNAP benefits. These households frequently subsist on fixed monthly incomes with limited cost-of-living increases and can have difficulty keeping pace with rising energy prices or rent increases. Challenges in paying for housing and energy, and food insecurity, increase the risk that low-income people will postpone needed medical care, ration or skip taking prescription medications, and rely more on emergency department visits and hospitalizations. For example, among low-income households receiving energy assistance, 32 percent with a senior report going without medical or dental care as a result of high home energy bills.<sup>25</sup>

## Conclusion

The findings of this ongoing research and analysis suggest that the policy changes proposed to the SNAP program would likely place the health of many low-income Americans at risk. In comparison to S. 954, the changes proposed under H.R. 1947 would affect far more people—as many as 5.1 million individuals. The proposed changes in both bills have been scored by the Congressional Budget Office to reduce spending on the SNAP program. Yet, as shown in the analysis in this report, the health risks identified could also increase health care costs with implications for state and federal medical spending. This possibility should be considered as well in interpreting the projected spending reductions.

## Recommendations

Final decisions on changes to SNAP should take into account the health risks and related potential costs that have been identified in this analysis. Should Congress decide to adopt any or all of the provisions of either H.R. 1947 or S. 954, the Health Impact Project offers the following recommendations to help address and mitigate some of the health risks identified in this HIA. We note, however, that that these actions would not fully mitigate the health risks identified in this analysis.

**1. Raise the asset limit for SNAP eligibility.** This analysis found that a majority of families with incomes below the poverty line who currently receive SNAP benefits could lose benefits because of their level of assets (such as personal savings). Allowing low-income families to build a small amount of savings or other assets can contribute to better overall health by helping families to move out of poverty.

**2. Extend the phase-in period for changes to nominal LIHEAP benefit.** Should the nominal LIHEAP benefit minimum amount be increased to more than \$10 (explained in detail later in this paper), Congress should allow an extended phase-in period of 180 days and adjust the SNAP performance measures to provide state SNAP

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

administrators time to implement the policy change in a staged manner, which will permit states to maintain SNAP program integrity.

**3. Monitor health effects.** If any proposed policy changes to the SNAP program, including current eligibility or benefit levels, are enacted, it will be important to conduct evaluation research to aid efforts to improve the effectiveness and efficiency of the program. USDA should consider including health effects and related health care costs in implementing current monitoring such as that mandated under the National Nutrition Monitoring and Related Research Act of 1990.

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

## INTRODUCTION

The Health Impact Project—a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts—summarizes here findings from an ongoing health impact assessment (HIA). The intent of an HIA is to provide a rigorous, objective, and nonpartisan analysis of the potential health risks and benefits of policy proposals, and to provide information regarding the risks and benefits identified to a wide range of stakeholders, including policymakers, policy implementers, and the general public. This HIA is being conducted to provide nonpartisan analysis and research of the Supplemental Nutrition Assistance Program (SNAP) and proposed changes to SNAP found in two bills, S. 954 and H.R. 1947. SNAP, authorized under Title IV of the U.S. farm bill, is the federal government’s principal mechanism for helping low-income families purchase enough food. The program provides recipients with a benefit card that can be redeemed specifically for food purchases. The benefits are intended to lessen the risk of food insecurity (difficulty obtaining enough to eat) and hunger for low-income families, and to support a more nutritious diet by encouraging people to buy foods that can be prepared at home.<sup>26</sup>

Federal spending on SNAP has grown from \$34.8 billion in FY 2007 to \$80.4 billion in FY 2012.<sup>27</sup> This growth in SNAP spending has been attributed to several factors, including the recent rise in poverty and unemployment during the recession; changes to state eligibility practices; and a temporary increase in benefit amounts conferred by the American Recovery and Reinvestment Act (ARRA).<sup>28</sup> The Congressional Budget Office (CBO) predicts that even under current policies, SNAP spending will fall due to the expiration of the ARRA benefit increase in November 2013 and continued improvement in the economy.<sup>29</sup> Both bills reviewed as part of this analysis propose to further reduce spending on SNAP by making changes to both the procedures states use to determine eligibility for the program and the amount of benefits that participating households receive.

To add more information and another dimension to the debate, the Health Impact Project is conducting a rigorous analysis to identify any unintended potential health risks or benefits of the proposed changes to SNAP. The findings presented here reflect a detailed process that included a systematic literature review; a quantitative analysis using models employed by the United States Department of Agriculture to administer SNAP; and interviews with state and local SNAP administrators to understand how the proposed eligibility and benefit level changes would affect the health of low-income Americans, with an emphasis on three issues:

1. Food insecurity, or difficulty obtaining enough to eat and its impact on the risk of illnesses such as diabetes.
2. Diet and nutrition, and the risk of illnesses related to a poor diet, such as obesity and heart disease.

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

3. The impact of poverty on health and people's ability to afford essentials related to health, including housing, home energy, and medical care.

Because health care is now a leading budget item for states and the federal government, this report also analyzes the potential for the proposed policy changes to have unanticipated implications for health care costs.

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299



## METHODS

The analysis presented here represents the interim findings from a health impact assessment currently in progress. As defined in 2011 by the National Research Council of the National Academies, HIA is a systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program, or project on the health of a population and the distribution of those effects within the population. HIA provides recommendations on monitoring and managing those effects.<sup>30</sup>

This section describes the HIA process and summarizes the current status of the analysis at each step.

### HIA process

An HIA is conducted in six steps, which are briefly described in Figure 1.<sup>31</sup> Engaging stakeholders—including those potentially affected by a decision, policy makers, and others with an interest in the outcome—is essential to conducting an HIA and occurs throughout the HIA process.

### HIA steps completed to date

**HIA Step 1—Screening.** The screening phase determines which policy proposal(s) the HIA will assess. The HIA team sought to pilot the use of HIAs for a major federal policy decision. The farm bill reauthorization was chosen because of the anticipated timing of the reauthorization, its potential importance to health, and the relevant subject matter and policy expertise available among Health Impact Project staff and collaborators.

Because the farm bill is omnibus legislation comprising a wide range of distinct policy topics, it was beyond the available staff resources and funding to consider the entire bill. Consequently, the second stage of screening involved selecting appropriate topic areas within the bill. Three topics were initially identified based on early Congressional proposals in 2012: changes to initiatives that support local food production and seek to increase consumer demand for fruits and vegetables; changes to the Conservation title, which provides funding for farm environmental stewardship through programs that improve farm management practices, retire land, and protect farmland and other natural resources; and proposed changes to income and eligibility for SNAP.

In June 2012, the Senate passed its version of the farm bill during the 112th Congress. The House Agriculture Committee passed a different version in July 2012. Among the three topics under consideration for the HIA, the most



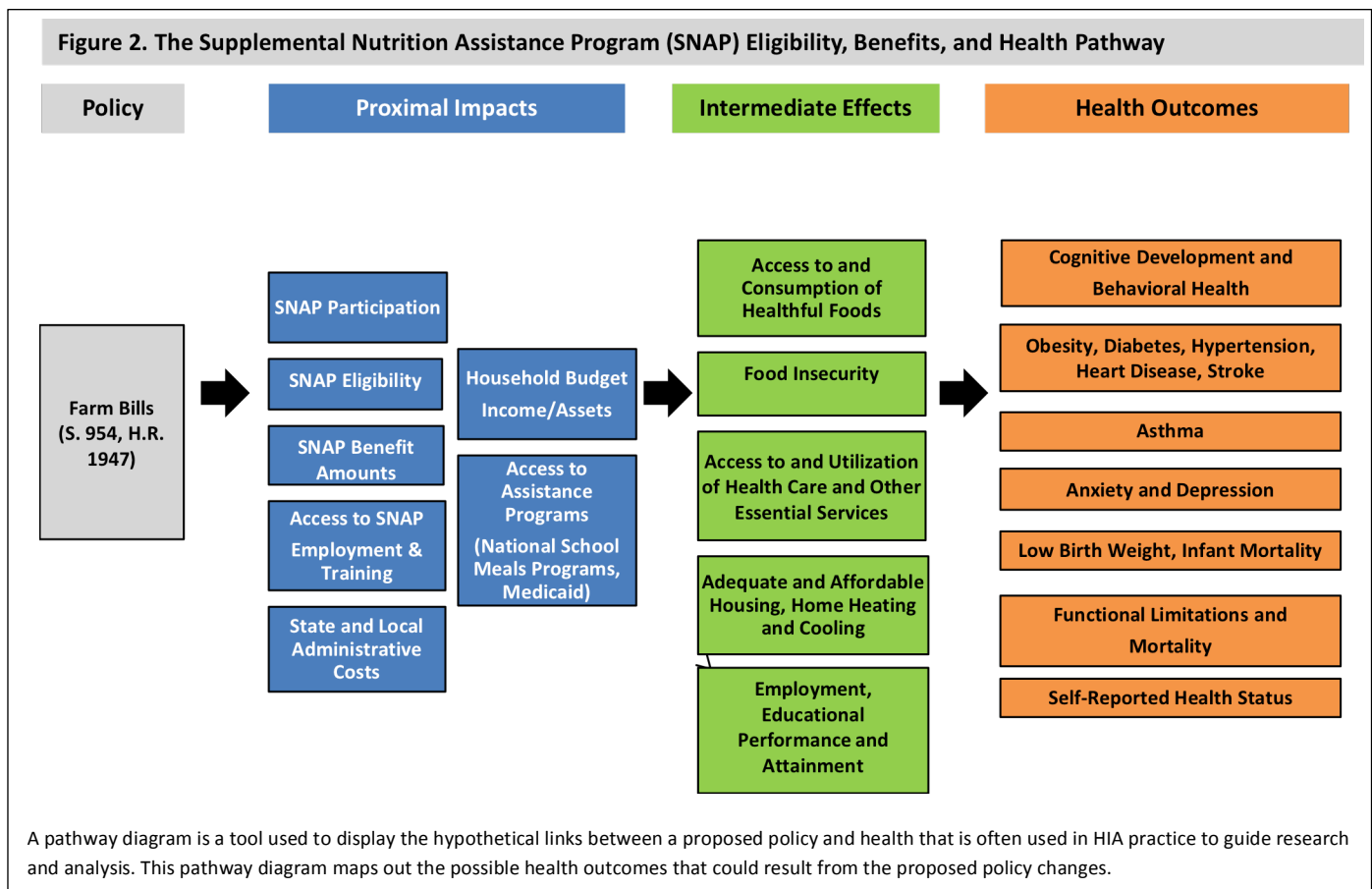
A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

substantial differences between these two bills were the proposed changes in how states determine eligibility and benefit levels for SNAP. An advisory committee (AC) was assembled and met to discuss the appropriate focus for the HIA. On the basis of the input received, the HIA team decided to focus on the proposed changes to SNAP eligibility and benefit levels.

**HIA Step 2—Scoping.** The scoping phase determines which potential health effects will be considered in the assessment. Scoping generally begins with a broad consideration of all potential impacts, and then narrows to focus on those deemed most likely to have significant effects on health. Scoping for the farm bill HIA began with identification of factors important to health that could be affected by SNAP eligibility and benefit changes. In consultation with the AC and key informants, the HIA team identified three core factors, or health determinants: food insecurity, nutrition, and income. These factors were then used to develop a set of hypothetical pathways through which the proposed SNAP policy changes could affect health (see Figure 2), and from these pathways, a set of detailed research questions were developed (Appendix A).



**HIA Step 3—Assessment.** The assessment phase determines the most likely health impacts by relying on a range of data sources, analytic methods, and stakeholder input to analyze the research questions identified in scoping. Methods used in this assessment include:

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.

### A. *Microsimulation models to estimate impacts on eligibility and benefit determination*

To estimate impacts on the number of people eligible for SNAP and the benefits they receive, we contracted with Mathematica Policy Research (Mathematica) to conduct analysis employing two models used by USDA: 1) the Quality Control (QC) Minimodel, which draws on a statistical sample of monthly state participants to assess the accuracy of eligibility determinations and benefit calculations, and 2) the MATH SIPP+ microsimulation model, which references data from the Survey of Income and Program Participation (SIPP). Mathematica contracts with USDA to develop and maintain these models, which USDA uses to administer SNAP.

Both models can produce estimates of the cost and participation effects of proposed changes to SNAP. The QC Minimodel estimates are based on QC data from actual participants and are compiled for the administrative purpose of tracking eligibility, benefit levels, and error rates for state programs. Therefore, QC data includes only information on asset values counted under state SNAP rules. Because many states do not currently impose an asset test for many or most applicants, QC data do not include comprehensive information on assets. The MATH SIPP+ database simulates eligibility and participation based on state rules and includes monthly information about assets, regardless of whether the assets are used to determine SNAP eligibility.

We rely on the MATH SIPP+ microsimulation model to predict impacts from S. 954 because it includes up-to-date state rules for energy assistance programs. For H.R. 1947, we rely on estimates generated by the QC Minimodel and the MATH SIPP+ model to represent the range of potential impacts on eligibility under the proposed changes. Under H.R. 1947, applicants for SNAP benefits would be subject to current federal asset requirements: the QC Minimodel lacks complete asset information and may, therefore, underestimate how many people would be affected by the elimination of non-cash categorical eligibility. The MATH SIPP+ database may offer a more accurate estimate because it includes information on assets. Therefore, we use the MATH SIPP+ estimates to assess the specific characteristics of households and individuals that could be affected by the proposed changes. Of note, the CBO also estimates changes in eligibility and participation for the policy proposals under consideration in Congress. CBO's methodology for obtaining these estimates is not publicly available. CBO estimates are provided for comparison where available.

Appendix B provides detailed information on the methods, data sources, and findings for this HIA.

### B. *Expedited systematic review of the literature to estimate health impacts*

Our analysis draws upon an expedited systematic review of the literature. A brief description of the search strategy, inclusion and exclusion criteria, and approach to reviewing the literature is below.

The PubMed, Cochrane, and Campbell databases were searched for literature published between January 1, 2000, and May 1, 2013 for systematic reviews or meta-analyses of studies that investigated an association between key constructs in our pathways and addressed a specific research question. If systematic reviews or meta-analyses were published within the last five years, the data were summarized for our analysis. If the review was published prior to January 1, 2008, then the databases were searched for recent research studies subsequent to the end date of the published systematic review search.

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

If no systematic reviews or meta-analyses were identified, then a systematic search was conducted as follows: PubMed and Google Scholar databases were searched for extant literature published between January 2000 and May 2013. For specific content areas, additional relevant databases were also searched, including USDA National Agricultural Library and SciVerse Scopus (SCOPUS). We also searched bibliographies of identified reports and reviews for additional references. We considered articles published in both gray literature and peer-reviewed journals, as well as research on a hypothesis directly relevant to the pathway under investigation and among a study population within the United States. A study was excluded from the literature review if it was an editorial work, if the article had been withdrawn or citation information was incorrect, if the study involved non-human animal models, or if it was not published in English.

In total, 884 sources were reviewed. They consisted of 308 reports; 564 peer-reviewed articles, conference papers, and books (including 35 systematic reviews or meta-analyses and 12 reviews). These sources were reviewed, and key findings related to the specific research questions were extracted. No attempt was made to critically analyze the quality of the included studies; all studies were included that met the criteria, even if they presented conflicting evidence.

### *C. Key informant interviews to assess potential administrative impacts*

We conducted key informant interviews with state and local SNAP administrators regarding the impacts on program administration.

A purposeful sample of administrative staff from seven state and local SNAP programs participated in semi-structured interviews by phone. State and local (county or city) SNAP programs were selected for the sample based on the following criteria: the SNAP programs utilize the categorical eligibility policy option and/or have a LIHEAP program, and represent programs operating in a range of geographic regions in the United States. Semi-structured interviews were conducted by two HIA team members whenever possible, and notes were taken during each interview. The notes were de-identified and read, and a codebook was developed using an iterative process where codes were applied, revised, and then finalized. Thematic data analysis was conducted to identify the key themes and constructs across the entire sample. A summary of the data and individual quotes that were extracted were reviewed by participating SNAP administrators to verify the accuracy of key findings. The findings were also fact-checked by a member of the Pew Research Team. The Johns Hopkins Bloomberg School of Public Health Institutional Review Board approved these procedures.

***HIA Step 4—Recommendations.*** The recommendations phase identifies possible actions to minimize any identified risk and maximize potential benefits. Based on the impacts identified in the assessment phase, the HIA team consulted with the AC and key informants to identify actions to minimize the health risks identified with changes to the SNAP program.

### ***Components of stakeholder engagement carried out to date***

- a. Advisory Committee.** The HIA team convened an advisory committee. Participants were selected for their relevant expertise in public health and farm policy, and for their ability to speak to a diverse range

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

of political perspectives on food and agricultural policy. The AC met in person during screening and scoping. Thereafter, the HIA team sought input from the AC at key points in the process as described below.

- b. Expert consultation.** The project consulted a range of key informants on food and farm policy. Participants were selected because of their research and expertise in these areas, and were engaged via in-person and/or telephone conversations.
- c. Policymaker consultation.** The HIA team consulted Congressional staff involved in the farm bill. Legislative staff from both Democratic and Republican offices in the House and Senate were consulted. The HIA team also consulted staff in USDA's Food and Nutrition Service.
- d. State and Local SNAP administrator interviews.** Institutional Review Board approval was obtained to conduct key informant interviews with SNAP administrators. Administrative staff from seven state and local SNAP programs were interviewed. Notes from the interviews were assembled, read, and coded by two members of the team to enhance reliability. Thematic data analysis was conducted to identify the key themes and constructs across the entire sample of SNAP administrative staff.

### **HIA steps and tasks not yet completed**

A majority of the HIA research, analysis, and stakeholder engagement is complete. Work that will be completed after publication of this white paper includes the following:

**HIA Step 5—Reporting.** The reporting phase involves creation of an HIA report and broad dissemination of information from the HIA to a wide range of stakeholders. Reporting occurs throughout the HIA process and is not limited to dissemination of the final HIA report: according to the National Research Council guidance on HIAs, it is “in the interest of decision-makers and the HIA team to keep in constant communication throughout the HIA process so that emerging results can be incorporated into the policy.”<sup>32</sup> The HIA team has engaged in these efforts through interactions with the advisory committee, key informants, and other stakeholders throughout the HIA, and by making initial findings publicly available.

**HIA Step 6—Monitoring and Evaluation.** The monitoring and evaluation phase includes evaluating the HIA according to accepted standards of practice, and monitoring and evaluating the impact of the HIA on the decision it seeks to inform. To date, the HIA team has established evaluation criteria; the evaluation will be completed after the reporting step.

**Stakeholder Engagement.** Stakeholder engagement continues throughout an HIA. The HIA team recently received institutional review board (IRB) approval to conduct key informant interviews and focus groups with SNAP participants to better understand the impact that the proposed changes may have on their diet, food security, income, and health. Because the HIA team has reviewed other similar qualitative research, the key informant interviews and focus groups are expected to add a more personal dimension to the findings presented here, but it is unlikely that they will result in substantial changes to the main findings and recommendations. The HIA team will update the assessment, however, based on the information obtained from the interviews and focus groups.

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

## BACKGROUND ON POLICY AND PROGRAM PARTICIPANTS

### 1. Policy context

SNAP has become a point of contention in the current farm bill reauthorization debate. Some members of Congress have expressed concern that growth of the program has been unchecked.<sup>33</sup> Categorical eligibility rules, which allow states to enroll people in SNAP based on a determination of eligibility for other public support programs such as Temporary Assistance for Needy Families (TANF), have come under particular scrutiny as a reason for the expansion.<sup>34</sup>

Within the proposed SNAP changes in S. 954<sup>35</sup> and H.R. 1947,<sup>36</sup> the largest spending adjustments come from two modifications to the rules used by states to determine SNAP eligibility and benefit levels:

- Low Income Home Energy Assistance Program (LIHEAP)<sup>37</sup> nominal benefit.** Fourteen states and the District of Columbia provide a nominal LIHEAP benefit of \$1 to \$5 per year to low-income residents so that SNAP participants may receive higher SNAP benefits.<sup>38</sup> This mechanism—commonly referred to as the “Heat and Eat” program—works by allowing SNAP participants who receive this nominal LIHEAP amount to lower their calculated net income—the measure used to determine SNAP benefit amounts—by claiming a higher standard utility allowance (SUA), which results in a larger shelter deduction. The minimum LIHEAP benefit required to claim a higher SUA would be raised to \$10 per year under S. 954 and \$20 per year under H.R. 1947.
- Non-cash categorical eligibility.** Households in which all members receive cash TANF, Supplemental Security Income (SSI), or state General Assistance are categorically eligible for SNAP. In addition, under current law, states may confer SNAP eligibility on households receiving non-cash TANF-funded benefits. Non-cash benefits could include information in the form of a brochure, or the receipt of childcare or counseling services. States have various gross income thresholds for non-cash TANF benefits, ranging from 130 percent of the federal poverty level (consistent with federal income eligibility standards) to as high as 200 percent; 12 states apply an asset test while 38 states do not. Regardless of state eligibility criteria to receive benefits, in most cases households must have a net income (income after offsetting for allowable deductions) below 100 percent of the federal poverty level.<sup>39</sup> There are some federal and state exceptions for adults ages 60 or older and the disabled.<sup>40</sup> H.R. 1947 would eliminate non-cash categorical eligibility, which would effectively result in eligibility reverting to the federal income and asset limits; S. 954 does not include changes to categorical eligibility.

According to the CBO, the changes to the nominal LIHEAP benefit in S. 954 would result in a SNAP spending reduction of \$4.1 billion over 10 years. Together, the LIHEAP and categorical eligibility changes in H.R. 1947 would result in a SNAP spending reduction of \$20.5 billion over 10 years.<sup>41</sup>

### 2. Characteristics of SNAP recipients

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

Under federal rules, households are eligible for SNAP if their gross incomes are at or below 130 percent of the federal poverty level (except elderly or disabled households).<sup>42</sup> Approximately 97.3 percent of SNAP households actually have net incomes at or below the poverty line.<sup>43</sup> More than 42 percent of SNAP households live in deep poverty, meaning their gross monthly incomes were at or below 50 percent of the federal poverty level; for a family of four in 2012, that equaled *\$960 or less per month*.<sup>44</sup> Table 1 shows the monthly income of families at different levels of poverty according to the federal definition.<sup>45</sup>

On average, SNAP provided benefits to more than 43.2 million people living in more than 20.1 million households each month in 2012.<sup>46</sup>

Of these recipients, more than 18 million (42 percent) were children and nearly 4 million (9 percent) were seniors.<sup>47</sup> Fifty-three percent of households self-identified as White, 22 percent as African American, 19 percent as Hispanic, and 6 percent as from other racial and ethnic categories.<sup>48</sup> More than 45 percent of participating households included children; about half of these households were headed by a single parent.<sup>49</sup> Seventeen percent of households included a disabled nonelderly adult family member, and 18 percent had an elderly family member.<sup>50</sup>

**Table 1: Monthly Income According to 2012 Federal Poverty Guidelines**

Percent of federal poverty level	Gross Monthly Income			
	1 person	2 people	3 people	4 people
50 ("deep poverty")	\$465	\$630	\$795	\$960
100	\$931	\$1,261	\$1,591	\$1,921
130	\$1,211	\$1,640	\$2,069	\$2,498

#### *Other health-related costs for SNAP recipients*

SNAP households have limited monthly budgets and spend a large share of their income on basic needs such as food, housing, and home heating and cooling. More than a third of SNAP households spend greater than 50 percent of their gross income on these expenses.<sup>51</sup> Evidence shows that a substantial proportion of SNAP households face high housing costs in excess of the current cap on the shelter deduction (capped at \$459 a month in FY 2012), which results in overestimation of the income participants have available to purchase food.<sup>52</sup> Medical expenses constitute a significant budget item for many households as well. For example, among SNAP households with seniors or disabled members, more than 1.4 million spend more than 10 percent of their gross income on medical expenses.<sup>53</sup>

#### *Participation in the National School Meals Programs and Medicaid among SNAP recipients*

Children in households that receive SNAP benefits are directly enrolled in the National School Lunch Program (NSLP) and School Breakfast Program to ensure that they receive adequate nutrition during the school day. The ability to directly certify these children for the school meal programs streamlines state administration of these programs and ensures timely access to school meals. In 2012, 12.1 million SNAP recipients were school-age children.<sup>54</sup> Nearly all of these children (99.9 percent) also qualified for a free or reduced-price school meal based on their households' gross incomes.<sup>55</sup>

Currently, more than 40 states have implemented a similar administrative mechanism to simplify enrollment for adults who qualify for both SNAP and Medicaid. Congressional decisions around implementation of the Patient

Protection and Affordable Care Act are likely to affect how and whether states continue to utilize cross-program eligibility determination.<sup>56</sup>

**3. How much do people on SNAP receive?**

SNAP benefit amounts are based on the cost of the Thrifty Food Plan,<sup>57</sup> a prototype meal plan defined by USDA as “a national standard for a nutritious diet at a minimal cost.”<sup>58</sup> To calculate monthly SNAP benefit amounts, the net monthly income of a household is multiplied by 0.3. This figure represents the 30 percent of household resources that SNAP households are expected to spend on food.<sup>59</sup> The 30 percent is then subtracted from the maximum monthly allotment for a household of that size. For example, a four-person household with a net monthly income of \$960 would receive a monthly SNAP benefit of \$380 as calculated in Table 2, or roughly \$1.50 per person, per meal.<sup>60</sup> USDA recently asked the Institute of Medicine (IOM) and the National Research Council (NRC) to consider the adequacy of the SNAP benefit amount.<sup>61</sup> The IOM/NRC committee concluded that certain factors, such as shelter or medical costs, time to prepare purchased food, barriers to accessing food outlets, or geographic food price variation, may not be adequately accounted for in the current benefit allotment.<sup>62</sup> Thus, for many SNAP households, benefit amounts may not be sufficient.

**Table 2: Example monthly SNAP benefit calculation for a four-person household in the contiguous U.S. in FY 2013**

Household gross income	\$1120
Household net income*	\$960
Max. allotment for a household of 4	\$668
Subtract 30% of net income (.3 x \$960)	-\$288
Household monthly SNAP benefit	= \$380

\*Net income is calculated by subtracting certain deductions from a household’s countable gross income.

**4. Who would lose benefits and who would lose eligibility under the proposed changes?**

**S. 954 (Raising the Nominal LIHEAP Benefit to \$10)**

According to Mathematica’s analysis using the SIPP+ database, raising the nominal LIHEAP benefit to \$10 as proposed in S. 954 would reduce monthly benefits for an estimated 304,000 current SNAP households.<sup>63</sup> Under CBO’s estimate—the methodology for which is not public—approximately 500,000 households would receive lower benefits.<sup>64</sup> These impacts would all occur in the 14 states (and the District of Columbia) currently implementing the “Heat and Eat” program.<sup>65</sup>

- The monthly SNAP benefit for households in those states would decrease by an average of \$67 according to Mathematica’s estimate,<sup>66</sup> or \$90 according to CBO.<sup>67</sup> On average, the benefit reduction would be 6.7 percent of the household’s monthly income, inclusive of SNAP benefits.
- A majority of households that would receive lower benefits have children (31 percent), or a nonelderly

<b>Raising the LIHEAP Nominal Benefit (S. 954): Which households would see benefits reduced? (per SIPP+ model)</b>	
<b>Total individuals</b>	499,000
<b>Total households</b>	304,000
<b>Share of SNAP households</b>	1.5%
<b>Households with:</b>	
Children	93,000 (31%)
Elderly individuals	88,000 (29%)
Disabled nonelderly	98,000 (32%)
Gross income at or below poverty	268,000 (88%)
Net income at or below poverty	304,000 (100%)
Any earned income	67,000 (22%)





disabled (32 percent) or senior member (29 percent). Households receiving Supplemental Security Income (SSI) in the affected states would lose 7.8 percent of their income when including their SNAP benefit, while households receiving Social Security would lose 7.4 percent.

- All of the households that would see a benefit reduction have take-home pay (net income) below the poverty line, and most (88 percent) are in deep poverty (below 50 percent of the poverty line).

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

**H.R. 1947 (Eliminating non-cash categorical eligibility and raising the nominal LIHEAP benefit to \$20)**

As proposed under H.R. 1947, the elimination of the use of non-cash categorical eligibility could cause between 1.6 million and 5.1 million individuals to lose eligibility for SNAP. Under the proposed changes, households with gross income above 130 percent of the federal poverty level (except elderly or disabled households)<sup>68</sup>, more than \$2,000 in assets (\$3,250 for those with a disabled member or adult age 60 or older), or more than one car per adult would be ineligible, as these federal thresholds defined under SNAP law would replace state limits allowed when states use non-cash categorical eligibility.<sup>69</sup> Using a model that does not account for household assets (QC), Mathematica estimates that as many as 686,000 households or 1.6 million individuals could lose benefits, mainly due to exceeding the income threshold.<sup>70</sup> Using a model that accounts for SNAP participants’ assets (SIPP+), however, Mathematica estimates that as many as 2.7 million households, or 5.1 million individuals, could lose benefits. For comparison, the CBO has estimated that 1.8 million individuals could lose benefits.<sup>71</sup> These impacts would all occur in the 43 states currently utilizing a non-cash categorical eligibility policy.<sup>72</sup>

<b>Eliminating Non-Cash Categorical Eligibility (H.R. 1947): Which households would lose eligibility? (per SIPP+ model)</b>	
<b>Total individuals</b>	5.1 million
<b>Total households</b>	2.7 million
<b>Share of SNAP households</b>	13%
<b>Households with:</b>	
Children	810,000 (30%)
Elderly individuals	771,000 (29%)
Disabled nonelderly	318,000 (12%)
Gross income at or below poverty	1,660,000 (62%)
Net income at or below poverty	2,207,000 (82%)
Any earned income	952,000 (36%)
<b>Reason for ineligibility:</b>	
Fail the asset test	2,024,000 (76%)
Fail the income test	561,000 (21%)
Fail both	90,000 (3%)

Of the households projected to lose SNAP benefits using the SIPP+ model, most (76 percent) would lose eligibility for exceeding the assets threshold; 21 percent would lose eligibility due to having income over the federal limit (a gross income higher than 130 percent of poverty or a net income higher than 100 percent of poverty), while 3 percent would lose eligibility for having both income and assets over the federal limits.

- Ineligible households would lose an average of \$228 a month in benefits, approximately 38.1 percent of their monthly income, inclusive of SNAP benefits.<sup>73</sup>
- Of the 5.1 million individuals projected to lose eligibility, roughly 83 percent live in households that have take-home pay (net income) below the poverty line. Indeed, more than two-thirds (69 percent) have a take-home pay less than half of the poverty line (\$465/month). Of these 2.2 million households with net income below the poverty line, approximately:
  - 75 percent have gross income below poverty.
  - 38 percent have earnings (in most cases, indicating that they are working).
  - 18 percent have an able-bodied adult not currently employed and expected to work under SNAP requirements.
  - 65 percent have household heads with educational attainment beyond a high school or general equivalency diploma.
  - 59 percent pay more than half of their total monthly income on housing and utilities.

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

- 10 percent receive insufficient SNAP benefits to fully alleviate food insecurity.

H.R. 1947 also includes revisions to the LIHEAP “Heat and Eat” program, but raises the nominal LIHEAP benefit to \$20, as opposed to \$10 in S. 954. CBO estimates that this change will reduce benefit amounts by an average of \$90 a month for an additional 850,000 low-income households.<sup>74</sup>

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

## HEALTH IMPACTS OF PROPOSED CHANGES IN SNAP ELIGIBILITY AND BENEFIT LEVELS

The following sections consider the available evidence to determine how the proposed changes under S. 954 and H.R. 1947 could affect the health of SNAP recipients through three principal pathways: 1) food insecurity (not having enough to eat), 2) diet and nutrition, and 3) poverty and the ability to afford essentials important to health, such as housing, home heating and cooling, medications, and medical care. Finally, the analysis also briefly considers the impact of the proposed changes on health through implications for employment and program administration.

### 1. How would the proposed changes in SNAP eligibility and benefit levels affect health through their impacts on food insecurity?

#### *Background and current conditions*

Food insecurity refers to difficulty getting enough to eat. Rates of food insecurity are measured by answers to a standard questionnaire developed by the federal government. Questions seek to identify households that are having difficulty meeting basic food needs over the course of a year, and ask about going hungry, running out of food, and/or not having money to buy more.<sup>75</sup> In 2011, almost 15 percent of U.S. households (17.9 million) were classified as food insecure on the basis of this national survey.<sup>76</sup>

**Receiving SNAP benefits reduces the prevalence of food insecurity.** Studies have shown that SNAP reduces household food insecurity between 18 percent and 30 percent and reduces the likelihood of a household having very low food security (meaning that members of the household do not have enough to eat at times) by 20 percent or more.<sup>77</sup> Nevertheless, nearly half of the households participating in SNAP will still qualify as food insecure at some point in the year.<sup>78</sup> These estimates suggest that even at present levels, SNAP benefits are not sufficient.

**Food insecurity puts people at risk for a range of serious illnesses.** A wide range of research has shown food insecurity increases the risk of diabetes, heart disease, and depression or anxiety in adults; and asthma, cognitive impairment, or behavioral problems in children.<sup>79</sup> The total cost for mental health services and poor health related to hunger and food insecurity has been conservatively estimated at \$67 billion per year in 2005 dollars.<sup>80</sup> Evidence suggests that those who have experienced episodes of food insecurity may change their diets to avoid future episodes of having trouble getting enough to eat. Specifically, there is evidence to suggest that food insecurity may increase an individual's preference for less nutritious "junk foods", which may contain more calories but less nutritional value; in turn, some who are food insecure may have higher body fat and face diet-related health risks.<sup>81</sup> Adults living with the most severe levels of food insecurity have more than twice the risk of diabetes compared to adults who have access to enough food.<sup>82</sup> Diabetic adults who don't have enough to eat reported needing more medical attention, having fair or poor health, and having more difficulty following a diabetic diet than those who have enough to eat.<sup>83</sup> Further, compared to diabetic adults who have enough to eat, those who are food insecure are twice as likely to delay paying for testing supplies and diabetes medications, and more than twice as likely to report having low blood sugar.<sup>84</sup>

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

Food insecurity places children at particularly high risk. For example, food-insecure children have significantly higher odds of being hospitalized in early childhood than those from food-secure households.<sup>85</sup> Research has also shown that food insecurity affects children’s mental health and well-being, as measured by educational performance, rates of behavior problems, aggression, and anxiety.<sup>86</sup> Kindergarteners from food-insecure households experienced smaller gains in reading and math scores over time, relative to children from food-secure households.<sup>87</sup> For example, children in kindergarten whose families were not food-insecure had an average gain of 84 points in reading scores by the third grade, compared with a 73-point gain among children who were food-insecure.<sup>88</sup> These impacts are relevant, since education is an important influence on health later in life.<sup>89</sup>

**Receiving SNAP benefits lessens the risk of illnesses related to food insecurity.** Because of the well-demonstrated improvements in food security among SNAP recipients, there is strong evidence that SNAP benefits health, particularly among children.<sup>90</sup> A study of families during the recent recession highlights this conclusion: in the two years following the increase to SNAP benefits contained in the American Recovery and Reinvestment Act, children in families receiving SNAP were nearly one and a quarter times more likely to be classified by their parents as being in good health and developing normally as compared to children from families eligible for, but not receiving, SNAP.<sup>91</sup>

#### *Impacts of proposed changes to SNAP*

**The changes proposed in H.R. 1947 and S. 954 could increase food insecurity among low-income Americans.** At present, roughly 357,000 households that would lose benefits under S. 954 or lose eligibility under H.R. 1947 are food insecure.<sup>92</sup> These food-insecure households would lose as much as \$310 per month—a third of their monthly income inclusive of SNAP benefits.<sup>93</sup> USDA estimates of how SNAP households adjust their food purchases with a change in SNAP benefits indicate that households losing benefits under the proposed policy changes would likely spend 17 percent to 47 percent less on food, and therefore have a higher risk of food insecurity.<sup>94</sup> Our analysis finds that more than half a million food-insecure individuals would lose eligibility, and as many as 160,000<sup>95</sup> to 305,000<sup>96</sup> more individuals could become food insecure because of the elimination of non-cash categorical eligibility.

**Under the changes proposed in H.R. 1947, school-age children could face additional food insecurity risks.** Mathematica projects that as many as 1.2 million school-age children eligible for free or reduced-price school meals would lose SNAP eligibility. An estimated 1.04 million of these children in households that could lose SNAP eligibility would still qualify for a free lunch (because their household income is at or below 130 percent of the federal poverty line) but would no longer be able to directly certify for the school meal program through receipt of SNAP benefits.<sup>97</sup> Requiring additional documentation of income with school meal program applications is likely to reduce access to the program among eligible households.<sup>98</sup> Therefore, if categorical eligibility is eliminated, an estimated 156,000<sup>99</sup> to approximately 210,000 (based on CBO estimates)<sup>100</sup> school-age children would not receive free school meals despite being eligible.

## 2. How would the proposed changes to SNAP eligibility and benefit levels affect health through their impacts on diet and nutrition?

### *Background and current conditions*

Policymakers and researchers have wondered whether receiving SNAP affects how people eat, and some have raised concerns that SNAP may contribute to diet-related illnesses such as obesity because recipients can purchase “junk” foods with their benefits. The research on how SNAP affects diet and diet-related health problems is complex: our systematic literature review found that studies have sometimes produced inconclusive or conflicting results. People make food choices based on many factors, including food price, personal preferences, social norms, and the types of food most readily available in the neighborhood. While the cost of eating a healthy diet has received much attention, the available research suggests that other considerations, such as taste or convenience, may play a more important role. The findings of our research support the following conclusions and potential impacts:

**The majority of Americans, including SNAP recipients, fail to meet the federal guidelines for a healthful diet.** Most research finds that SNAP recipients have an overall diet quality comparable to people with similar income and demographic characteristics who do not participate in SNAP.<sup>101</sup> Failure to meet dietary guidelines can increase the likelihood of obesity and related health risks such as certain cancers, diabetes, high blood pressure, and cardiovascular disease. Some studies have found that for certain components of the diet, such as fruits and vegetables, SNAP participants fare worse than the general population.<sup>102</sup>

**Many low-income Americans, including SNAP recipients, live in areas that lack easy access to fresh, healthy, and affordable food.** More than 29.7 million Americans live in low-income neighborhoods without a supermarket or grocery store within a mile of their homes.<sup>103</sup> These neighborhoods are also more likely to have higher concentrations of fast food restaurants and convenience stores that may not stock fruits and vegetables.<sup>104</sup> Though there are limitations to assessing how these environments may affect health, most studies report that living in an environment with limited access to healthful foods can increase the risk for diet-related illnesses.<sup>105</sup> An Institute of Medicine committee exploring the adequacy of SNAP benefits reported that limited availability of healthy foods, greater availability of highly processed foods, and limited access to outlets that offer a variety of food choices may all be important environmental influences on food purchasing power for SNAP recipients.<sup>106</sup>

### *Impacts of proposed changes to SNAP*

**With reduced benefits, SNAP households would be even less likely to achieve a recommended diet.** Like a majority of Americans, most SNAP recipients fail to meet dietary guidelines.<sup>107</sup> Those who would receive lower benefits or lose benefits altogether would have less money available for adequate and healthful food purchases and a higher likelihood of experiencing food insecurity. Research studies suggest that this can have harmful effects on the quality of people’s diets.<sup>108</sup> Data also suggest that low-income neighborhoods are less likely to have stores that stock a full range of nutritious foods;<sup>109</sup> transportation time and cost have also been suggested

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

as barriers to accessing foods necessary to meet dietary guidelines for a healthy diet.<sup>110</sup> Considering the fact that roughly two out of three adults and one out of three children receiving SNAP benefits are currently overweight or obese,<sup>111</sup> this impact could exacerbate the already substantial risk of diet-related health problems for this sub-population of SNAP recipients.

**New standards proposed in S. 954 and H.R. 1947 for retailers that accept SNAP present an opportunity to improve the quality of food available to recipients.** New requirements proposed in S. 954 and H.R. 1947 would require SNAP retailers to offer at least three categories of perishable foods (previously two). This could have a favorable impact on diet and nutrition for SNAP recipients by increasing the number of retail outlets in underserved communities with the capacity to provide both perishable and staple foods.<sup>112</sup>

### **3. How would the proposed changes to SNAP eligibility and benefit levels affect health through their impacts on poverty and budgeting for essentials?**

It has long been recognized that hardships such as poor quality and overcrowded housing, insufficient heating, dangerous work conditions, and hunger and malnutrition contribute to higher rates of illness and death among the poor.<sup>113</sup> Although SNAP benefits may only be used for food purchases, they add to the overall income available to support other basic needs and cover essential expenses as well. This section explores three aspects of poverty as they relate to the changes proposed in S. 954 and H.R. 1947 and the implications for public health. Section A considers the relationship between income and health, and forecasts how the proposed policy changes would affect poverty rates, the risks of illness, and certain medical costs. Section B focuses on “material hardship”, or the tradeoffs that low-income families make between food, heating, medical expenses, and housing. Finally, section C analyzes the links between “asset poverty”—defined as not having enough savings to allow a household to subsist at the federal poverty line for three months—and health.

#### **A. SNAP and Poverty**

##### *Background and current conditions*

Poverty is common: nearly half of all Americans have experienced being poor at some point.<sup>114</sup> Studies suggest that a majority of poor individuals in the United States actually remain poor for only short periods of time.<sup>115</sup> Nearly one in five Americans has received SNAP benefits in his or her lifetime.<sup>116</sup> The average length of time a new participant receives SNAP benefits is eight to 10 months.<sup>117</sup> Therefore, it is important to consider not only how SNAP can affect diet and food security, but also how receiving benefits may influence health through supporting income.

**Poverty is linked to a number of negative outcomes for children, with life-long impacts on health.** Research has shown that low-income children are likely to complete fewer years of school, work fewer hours, and earn lower wages as adults, and these impacts translate into a greater likelihood of being in poor health.<sup>118</sup> With almost one in five American children living in households that have income below the federal poverty line, it is estimated that living in poverty as a child costs our nation at least \$170 billion per year in lost productivity and

poorer health.<sup>119</sup> The deleterious effects of poverty on health are evident even for those above the federal poverty line: even middle-income people are less healthy than those with high incomes.<sup>120</sup>

**Receiving SNAP benefits improves health by reducing poverty.** SNAP benefits, when counted as income, reduce the number of Americans in poverty by more than 4 percent according to a recent USDA study.<sup>121</sup> In 2011, SNAP lifted more children—1.5 million—out of severe poverty than any other federal program.<sup>122</sup> Research has shown direct health benefits related to SNAP’s anti-poverty effects. One study found that low birth weight and infant mortality were less probable for infants whose low-income mothers received food stamps (SNAP’s predecessor) during pregnancy.<sup>123</sup> In another study, children whose mothers received food stamps or SNAP benefits while pregnant or while those children were very young were shown to have less risk of obesity, diabetes, high blood pressure, and heart disease as adults.<sup>124</sup>

#### *Impacts of proposed changes to SNAP*

**Under changes proposed in H.R. 1947, the number of Americans in poverty could increase.** If SNAP benefits are included in the poverty measure, eliminating non-cash categorical eligibility could increase the U.S. poverty rate by more than half a percent overall, and increase the poverty rate for children by nearly 1 percent among the 43 states implementing this eligibility policy according to a recent study.<sup>125</sup> This is equivalent to at least 237,000 more individuals in poverty, including at least 140,000 more children.<sup>126</sup>

**Under changes proposed in H.R. 1947, the changes in poverty rates may increase health care expenditures substantially.** The following analysis presents an example of the potential impact on medical costs of the proposed changes to categorical eligibility drawn from a single disease—diabetes. Because poverty increases the rates of many diseases, the total impact on medical spending could be substantially higher.

As stated earlier, people with lower incomes have higher rates of diabetes. A model based on current state and county diabetes rates predicts how diabetes cases and associated costs might change over time as the poverty rate changes.<sup>127</sup>

***According to this model, an increase in the U.S. poverty rate of one half percent, as predicted under H.R. 1947, would correlate with approximately \$1.5 billion in additional diabetes-related government and private-sector medical costs per year, or nearly \$15 billion over ten years.***

According to this model, an increase in the U.S. poverty rate of half a percent, as predicted under the enactment of H.R. 1947, would correlate with approximately \$1.5 billion in additional diabetes-related public sector and private sector medical costs per year, or nearly \$15 billion over 10 years.

Given that an increase of \$15 billion in health care costs on diabetes alone approaches the CBO’s projection of \$20 billion in savings, and that poverty and food insecurity affect the rates of many diseases beyond diabetes, the health-related costs could well exceed estimated program savings.<sup>128</sup> That said, these figures must be interpreted with caution: the fact that rates of diabetes correlate with poverty rates does not necessarily prove that a policy that could increase poverty in the United States will cause an increase in diabetes. These limitations make it difficult to state conclusively that the proposed SNAP legislation would increase diabetes-related or

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299



other medical costs, but the body of evidence strongly supports considering health and related cost implications of these proposed policy changes.

## **B. SNAP and Household Budget Tradeoffs**

### *Background and current conditions*

**Poor households must make tradeoffs between basic needs important to health, such as food, housing, and home heating and cooling.** This problem—known as “material hardship”—can require low-income households to make tradeoffs in a range of contexts. For example, low-income families eat less food during seasonal spikes in home energy costs,<sup>129</sup> and seniors and children in low-income households are at greater risk of going hungry during the winter or summer months when home energy bills are highest.<sup>130</sup> Beyond these nutritional impacts, being poor also increases the risk of dying during heat waves or cold snaps because people may not be able to afford adequate home heating or cooling. Seniors and the very young are at particularly high risk for this problem.<sup>131</sup> High housing costs, home energy costs, and food insecurity also increase the risk that low-income people will postpone needed medical care, ration or skip taking prescription medications, and rely more on emergency department visits and hospitalizations.<sup>132</sup> More than half of SNAP households are considered housing cost burdened (spending more than 30 percent of their income on housing).<sup>133</sup> Adults who have unstable housing (who are behind on their mortgages, in foreclosure, or homeless) are more likely to report being in fair or poor health and to experience anxiety or depression than those who have stable housing.<sup>134</sup> Food insecurity among children who are not stably housed is linked to delaying medical care, postponing taking medications, and not receiving recommended well-child care visits.<sup>135</sup> Among households receiving energy assistance, 32 percent of those that have an elderly member report going without medical or dental care as a result of high home energy bills.<sup>136</sup>

### *Impacts of proposed changes to SNAP*

**Losses in income under both S. 954 and H.R. 1947 could increase material hardship.** According to Mathematica’s estimates, those affected by the policies proposed in S. 954 would lose an average of \$67 per month; those affected by H.R. 1947 would lose an average of \$228 per month. These changes translate to losses of 6.7 percent and 38.1 percent of household income inclusive of SNAP benefits, respectively.<sup>137</sup> The implications for spending changes on categories important to health are significant: for example, SNAP household spending on housing and utilities could decrease by as much as \$75 per month.<sup>138</sup> This is nearly equivalent to an average monthly electric bill in the Midwest.<sup>139</sup> Losing SNAP benefits could make it harder for households to afford basic needs. Specifically, the proposed changes in H.R. 1947 could increase the risk of falling behind on the rent or mortgage by more than 41 percent; the risk of falling behind on utility bills by more than 53 percent; and the risk of medical hardship (inability to meet medical care expenditures) by more than 73 percent.<sup>140</sup> Households losing SNAP eligibility could therefore face immediate health risks, ranging from increased food insecurity, anxiety, and depression to more emergency department visits and hospitalizations.

**The benefit reduction as anticipated under the proposed SNAP changes in both bills would affect a population already at risk for poor health due to material hardship.** A majority of households receiving nominal energy

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

assistance that would see reduced benefits would be vulnerable to both economic hardship and health risks, including those with children, nonelderly disabled, or seniors.<sup>141</sup> Many seniors and disabled persons at risk subsist on fixed monthly incomes with limited cost-of-living increases that may not keep pace with rising energy prices or rent increases. Nearly 10 percent of affected households would have housing and utility costs amounting to more than half of the household's income, and twice as many would be housing cost burdened.<sup>142</sup> High housing and home energy costs increase the risk that low-income people will experience food insecurity, and may postpone needed medical care, ration or skip taking prescription medications, or experience greater health risks during heat waves or cold weather.<sup>143</sup>

### **C. SNAP and Household Assets**

#### *Background and current conditions*

**Financial assets can help households weather financial emergencies, and are also important to health.** Research shows that families with fewer assets are at greater risk for homelessness, hunger, and not being able to pay for essential expenses such as home heating and cooling and medications.<sup>144</sup> Assets protect families from becoming food insecure or losing housing in case of an income shock,<sup>145</sup> such as the loss of a job or a serious illness.<sup>146</sup> Research also shows that people with higher assets—independent of their incomes—have better self-rated health and are at lower risk of mortality as well as many medical problems, including obesity, stroke, and functional limitations.<sup>147</sup> Assets are a particularly important factor in health outcomes among seniors, because they are likely to have less income.<sup>148</sup>

“Asset poverty” is defined by not having enough resources, such as bank and retirement accounts and home equity to live at the federal poverty level for three months.<sup>149</sup> For a family of four in 2012, this amounted to \$5,763. Financial experts recommend that households save at least three months of basic living expenses in case of an emergency, such as losing a job.

Black and Latino households may be at particularly high risk because they have, on average, fewer assets.<sup>150</sup> Among white households that experienced a period of unemployment between 1999 and 2009, for example, the median level of wealth<sup>151</sup> was at least seven times greater than that of unemployed black households during the same period.<sup>152</sup>

**Building assets can contribute to better overall health by allowing families to move out of poverty.** Since poverty is a risk factor for many diseases, as detailed above, it is relevant to consider the role that assets such as personal savings and retirement accounts play in alleviating the risk of poverty. Research suggests that having assets promotes upward economic mobility of low-income households.<sup>153</sup> For example, adults who were in the bottom income quartile from 1984 to 1989 were more likely to move into a higher income quartile by 2003–2005 if their initial savings were high in comparison to those adults who had low initial savings.<sup>154</sup> Furthermore, children in low-income families with minimal resources are less likely to move out of poverty than children of low-income families with higher assets.<sup>155</sup> For low-income families, upward economic mobility can mean opportunities and resources for socioeconomic, occupational, or educational advancement that are fundamental to health.<sup>156</sup>

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

*Impacts of changes proposed in H.R. 1947*

**Under the changes proposed in H.R. 1947, as many as 3.9 million individuals would lose eligibility for SNAP because of federal asset limits.** Under H.R. 1947, federal asset requirements would supersede current state policies regarding assets. Using the SIPP+ model, Mathematica estimates that these changes could result in as many as 2 million current SNAP households, or nearly 3.9 million individuals, losing eligibility for SNAP because they have countable assets over the federal limit. An additional 90,000 households (172,000 individuals) would lose eligibility based on both income and assets.<sup>157</sup>

According to interviews with SNAP administrators, many households that lose eligibility due to the asset test would have assets that are not far above the current limit. Similar findings were reported by the Government Accountability Office (GAO) based on data collection among SNAP administrators regarding household assets of SNAP recipients.<sup>158</sup> SNAP administrators noted that reinstating the asset test would cause many working families who have some savings and are currently eligible to become ineligible.

Requiring people with savings or other resources in excess of \$2,000 (\$3,250 for households with seniors) to deplete them in order to qualify for SNAP would also increase the chance of problems that create health risks, such as losing one’s home, going hungry, having the electricity turned off, or having to skip medications, in case of a financial emergency.<sup>159</sup>

Recent reforms have attempted to remove a disincentive to save by excluding certain categories of assets from consideration under the asset test, such as education and retirement accounts that limit a household’s tax liability (e.g., 403b Retirement or 529 College Savings accounts). The degree to which these changes will affect SNAP recipients is not known, although some evidence suggests that in general these types of accounts are not commonly used among low-income households because they have no need to pursue ways to limit their tax liability and unlike checking and savings, such accounts are not easily accessed during financial emergencies.<sup>160</sup>

**Effectively reinstating the federal asset test as proposed in H.R. 1947 may create health risks by providing a disincentive for people to save.** Because eliminating non-cash categorical eligibility would effectively reinstate federal asset standards, the bill may create a disincentive for low-income households to save. As reviewed above, multiple studies have shown that having assets contributes to better overall health and lower risk for

<b>Eliminating Non-Cash Categorical Eligibility (H.R. 1947): Which households would fail the asset test vs. the income test? (per SIPP+ model)</b>	
<b>Income ineligible</b>	
<b>Total individuals</b>	1 million
<b>Total households</b>	0.5 million
<b>Share of SNAP households</b>	3%
<b>Households with:</b>	
Children	142,000 (25%)
Elderly individuals	142,000 (25%)
Disabled nonelderly	214,000 (38%)
No countable assets	342,000 (61%)
Any earned income	258,000 (46%)
<b>Asset ineligible</b>	
<b>Total individuals</b>	3.9 million
<b>Total households</b>	2 million
<b>Share of SNAP households</b>	10%
<b>Households with:</b>	
Children	647,000 (32%)
Elderly individuals	592,000 (29%)
Disabled nonelderly	78,000 (4%)
Gross income below poverty	1,660,000 (82%)
Any earned income	664,000 (33%)

\*Tabulations do not include an estimated 90,000 households that would fail both the income and asset tests



many illnesses. Moreover, having low assets limits access to resources and opportunities for socioeconomic, occupational, or educational advancement, all of which are important to good health.<sup>161</sup>

While many low-income households could be affected, our research suggests that this issue could disproportionately impact low-income seniors. Reinstatement of the asset test, as proposed in pending legislation, would make seniors with accumulated assets over \$3,250 ineligible for SNAP benefits. In interviews with SNAP administrators, several respondents reported that seniors who would be asset ineligible live on a fixed income. Seniors with net incomes below poverty that become ineligible because of assets would lose \$227 in SNAP benefits on average — as much as a quarter of their average incomes, inclusive of SNAP.<sup>162</sup> For seniors with fixed income, assets may be the only source of funds available to cover unanticipated expenses such as high utility bills or costly medical events.

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

## Other health-related considerations related to policy changes proposed in S. 954 and H.R. 1947

This section considers two additional issues that bear on the health of current SNAP recipients: workforce education and training for SNAP recipients, and the impacts on how states administer the program.

### A. Workforce education and training for SNAP able-bodied adults

#### *Background and current conditions*

Employment is a critically important path out of poverty. Having a stable job with safe working conditions may generate income and benefits that positively contribute to health.<sup>163</sup> In turn, education and training can improve an individual's opportunities for finding a good job and moving out of poverty; this is particularly true in the current job market, in which many well-paying jobs require at least some postsecondary education or training.<sup>164</sup> A GAO report found that limited education and work histories make it hard for some SNAP participants to obtain employment.<sup>165</sup> In 2012, roughly half of SNAP household heads did not have education beyond high school.<sup>166</sup>

#### *Impacts of proposed changes to SNAP*

**S. 954 and H.R. 1947 would fund pilot employment and training programs that could improve opportunities for current SNAP recipients to find work.** Fewer than 30 percent of SNAP recipients are considered eligible for work (defined as nondisabled adults age 18 to 49 not living with children under 5). Data indicate that an estimated one-third of these recipients, or more than half of SNAP households with a work-eligible adult, are currently employed.<sup>167</sup> The employment rates are higher for households with children—more than 60 percent work while receiving SNAP, and almost 90 percent work in the prior or subsequent year.<sup>168</sup> The existing SNAP Employment & Training (SNAP E&T) program promotes self-sufficiency and assists SNAP recipients in obtaining employment. This program is particularly important because of the lingering effects of the recession. People who are considered eligible for work (i.e., able-bodied adults without dependents) must comply with program work requirements in order to maintain eligibility for SNAP benefits.<sup>169</sup> For SNAP recipients considered eligible for work, both bills propose to allocate funds for USDA to work with states to pilot innovative practices in the SNAP E&T program, as well as monitor the program's impact and return on investment. Given the well-established links between employment and health, if these pilot programs prove successful in helping SNAP recipients secure employment, they would also be expected to contribute to better health for SNAP recipients.

Current SNAP recipients who lose eligibility for SNAP under the changes proposed in H.R. 1947, however, would no longer be eligible for SNAP E&T. According to Mathematica's estimate, as many as 1.2 million individuals considered eligible for work would no longer have access to this program.<sup>170</sup>

### B. Impact on SNAP administration

#### *Background and current conditions*

**According to SNAP administrators, categorical eligibility improves efficiency and reduces bureaucracy.** SNAP administrators interviewed for this research reported that states chose to adopt categorical eligibility to create

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

consistency across programs, especially between SNAP and Medicaid (which does not have an asset test). Every SNAP administrator interviewed for this assessment reported that currently, not having an asset test for SNAP (because of the use of non-cash categorical eligibility) significantly reduces application processing time. This was especially important when the number of applications rose during the recession. One administrator stated that in his/her state, productivity rose approximately 5 percent annually once options to simplify eligibility were implemented, which amounted to an estimated two work weeks of time saved per case worker. SNAP administrators also noted that streamlining programs shortened the time for applicants to receive needed help.

*Impacts of changes proposed in H.R. 1947*

**The changes proposed under H.R. 1947 could lead to longer delays in receiving benefits.** Under these changes, SNAP administrators would have to determine eligibility for SNAP separately from other programs, such as TANF, Medicaid, and the National School Meals Programs. Reintroducing administrative procedures, such as an asset test, could delay the start of benefits for people who need them, and, in turn, could increase food insecurity, particularly among children eligible for free meals at school. Delaying the receipt of benefits could also increase the risk of families experiencing other material hardships, such as falling behind on the rent or utility bills, or an inability to pay for necessary medications.

## CONCLUSION

The findings of this analysis suggest that many of the SNAP policy changes proposed in S. 954 and H.R. 1947 would likely place the health of low-income Americans at greater risk. The changes proposed under H.R. 1947 would affect far more people—as many as 5.1 million individuals, most of whom would have net incomes below the federal poverty line. The proposed changes in both bills are intended to contribute to deficit reduction and reduced federal spending. It is possible, however, as shown in the analysis above, the health risks identified could also increase health care costs, and ultimately have implications for state and federal medical spending as well: this possibility should be considered in interpreting the projected budget savings.

## RECOMMENDATIONS

Final decisions on changes to SNAP should take into account the health risks and related potential costs that have been identified in this analysis. Should Congress decide to include any or all of the provisions proposed in either H.R. 1947 or S. 954 in its reauthorization of SNAP, the Health Impact Project offers the following recommendations to help address and mitigate some of the health risks identified in this HIA. We note, however, that there is no evidence that these actions would fully mitigate the health risks discussed in this analysis.

1. **Raise the asset limit for SNAP eligibility.** The asset limit of \$2,000 for SNAP participation has not been adequately adjusted for inflation in more than two decades and has fallen 48 percent in inflation-adjusted terms since 1986. The analysis found that a majority of families with incomes below the poverty line could lose benefits because of modest assets. A limited amount of personal savings is an effective way to prevent poverty and reduce the need for public assistance. Raising the current asset limit would remove disincentives to save and promote economic mobility and self-sufficiency for low-income families. The asset limit should be raised to a level that allows SNAP recipients to save enough to weather a financial emergency, to make it easier for people to move out of poverty over the longer term.
2. **Extend the phase-in period for changes to the nominal LIHEAP benefit.** Should the nominal LIHEAP benefit minimum amount be increased to more than \$10, Congress should allow an extended phase-in period of 180 days and adjust the SNAP performance measures to provide state SNAP administrators time to implement the standard utility allowance policy change in a staged manner, which will permit states to maintain SNAP program integrity. USDA should compile best practices and provide technical assistance to states and localities regarding 1) methodology for calculating the Standard Utility Allowance deduction amount and 2) application questions for identifying households that have high utility costs and legitimately qualify for a higher standard utility deduction.
3. **Monitor health effects.** If any proposed policy changes to the SNAP program, including current eligibility or benefit levels, are enacted, it will be important to conduct evaluation research to aid efforts to

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

improve the effectiveness and efficiency of the program. USDA should consider including health effects and related health care costs in implementing current monitoring such as that mandated under the National Nutrition Monitoring and Related Research Act of 1990.

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299



## APPENDICES

**Appendix A. Research Questions for the Health Impact Assessment of Proposed Changes to SNAP Eligibility and Benefit Determination**

**Appendix B. Mathematica Policy Research Report: Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants**

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

## Appendix A. Research Questions for the Health Impact Assessment of Proposed Changes to SNAP Eligibility and Benefit Determination

### Overarching questions on health and SNAP policy changes

- How does participation in SNAP affect the health of low-income children, seniors, nonelderly disabled individuals, and families?
- How does reduced access to SNAP (i.e., changes in eligibility or benefit levels) affect health? What is the distribution of these health impacts?
- What might be the implications of access to SNAP in early childhood for development and health outcomes over the life course?
- What are the societal or health care costs associated with the potential health impacts?

### Food Insecurity

- How does participation in SNAP affect the prevalence of food insecurity? How might reduced access to SNAP or a change in household income affect food insecurity?
- How does food insecurity relate to health conditions including self-rated health, life expectancy, mortality, birth outcomes (birth weight, infant mortality), mental or behavioral health, and cognitive development among children?
- How does food insecurity influence the purchase/consumption of healthful foods?
- What is the correlation between food insecurity and chronic illnesses such as obesity and diabetes, or the physiological precursors for these illnesses (e.g., hypertension)?
- What are the societal or health care costs associated with these outcomes linked to food insecurity?

### Access to and consumption of healthful foods

- How does SNAP affect access to, and consumption of, an adequate and nutritious/healthful diet (including fruit and vegetables)?
- How do SNAP-eligible and participating households compare with regard to food purchasing behaviors? How might a benefit/income reduction influence food purchases among SNAP-eligible or participating households?
- What is the relationship among SNAP-eligible or participating individuals between diet and chronic illnesses such as obesity and diabetes, or the physiological precursors for these illnesses (e.g., hypertension)?

### Income and asset poverty and household budget: Economic tradeoffs

- How does participation in SNAP affect the prevalence or severity of income or asset poverty? How might reduced access to SNAP affect these measures of poverty and opportunity for economic mobility?
- How do SNAP-eligible or participating households budget for basic needs such as food, rent, utilities, transportation, and medical care? How might reduced SNAP access change the way low-income families budget for these basic needs?

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

- How do SNAP participating or eligible households manage their assets? How might this change with benefit or income loss?
- What are the societal or health care costs associated with health outcomes linked to poverty?

### **Housing and home energy**

- How does participation in SNAP affect a household's ability to attain stable and adequate housing or home heating and cooling? How might reduced access to SNAP or a reduction in monthly income change this relationship?
- How does inadequate or unstable housing, or unsafe heating/cooling practices, affect the likelihood of health risks and related health outcomes, including asthma, mental health, self-rated health, hypo/hyperthermia, cardiac events, and death?
- What kind of health care utilization (hospitalizations, ER visits) is associated with these health risks?

### **Access to and utilization of healthcare, and other programs and services (NSLP, Medicaid)**

- How does participation in SNAP affect the likelihood of underutilized or inadequate health care? How might reduced access to SNAP or a reduction in monthly expenditures affect this relationship?
- How does the likelihood of underutilized or inadequate health care affect health conditions, including self-rated health, disability, life expectancy, or mortality?
- How does underutilized, inadequate, or forgone health care affect the development or maintenance of illnesses such as diabetes or cardiovascular disease?
- How does participation in SNAP affect access to other federal programs (NSLP, Medicaid, LIHEAP) or state-level ancillary services? How might reduced access to SNAP change access to these programs?
- How does the NSLP affect access to, and consumption of, an adequate and nutritious/healthful diet?

### **Employment**

- What types of employment and training resources do states provide to SNAP recipients?
- How does employment affect economic mobility and health of SNAP recipients?

### **SNAP administration**

- How might the proposed changes to eligibility or benefit policies affect the efficiency and program integrity of state and local SNAP administration?
- What might be the health implications for SNAP applicants or current recipients resulting from these administrative impacts?

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

**Appendix B. Mathematica Policy Research Draft Report:**

**Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill  
and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income  
Nonparticipants (Final Report forthcoming August 8<sup>th</sup>, 2013)**

**Available at: <http://www.healthimpactproject.org/news/project/health-impact-project-releases-white-paper-examining-proposed-changes-to-food-stamps>**

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

## REFERENCES

- <sup>1</sup> U.S. Treasury, *Final Monthly Treasury Statement of Receipts and Outlays of the United States Government for Fiscal Year 2012 Through September 30, 2012, and Other Periods*, <http://www.fms.treas.gov/mts/mts0912.pdf>; U.S. Treasury, *Final Monthly Treasury Statement of Receipts and Outlays of the United States Government for Fiscal Year 2012 Through September 30, 2007, and Other Periods*, <http://www.fms.treas.gov/mts/mts0907.pdf>.
- <sup>2</sup> United States Government Accountability Office. GAO-12-670. *Supplemental Nutrition Assistance Program. Improved Oversight of State Eligibility Expansions Needed* (Washington, D.C.: August 2, 2012).
- <sup>3</sup> Congressional Budget Office, *The Supplemental Nutrition Assistance Program* (Washington, D.C.: Congressional Budget Office, April 2012), <http://www.cbo.gov/sites/default/files/cbofiles/attachments/04-19-SNAP.pdf>.
- <sup>4</sup> On July 11, 2013, the House passed its new version of the Farm Bill (H.R. 2642) that did not include a nutrition title—as a result, the bill did not include reauthorizations of a number of federal nutrition programs, most notably SNAP. It is not clear what steps Congress may take to reconcile differences in the various bills.
- <sup>5</sup> C. Gundersen and B. Kreider, “Bounding the Effects of Food Insecurity on Children’s Health Outcomes,” *Journal of Health Economics* 28 (2009): 971–983; H. K. Seligman, A. M. Bindman, E. Vittinghoff, A. M. Kanaya, M. B. Kushel, “Food insecurity is associated with diabetes mellitus: results from the National Health Examination and Nutrition Examination Survey (NHANES) 1999–2002,” *Journal of General Internal Medicine* 22, no. 7 (2007): 1018–1023; H. K. Seligman, B. A. Laraia, M. B. Kushel, “Food insecurity is associated with chronic disease among low-income (NHANES participants),” *Journal of Nutrition* 140, no. 2 (Feb. 2010): 304–310; S. I. Kirkpatrick, L. McIntyre, M. L. Potestio, “Child hunger and long-term adverse consequences for health,” *Archives of Pediatric and Adolescent Medicine* 164, no. 8 (2010): 754–762; R. C. Whitaker, S. M. Phillips, S. M. Orzol, “Food Insecurity and the Risks of Depression and Anxiety in Mothers and Behavior Problems in their Preschool-Aged Children,” *Pediatrics* 118, no. 3 (2006): e859–e868; K. Alaimo, C. M. Olson, E. A. Frongillo Jr., “Food insufficiency and American school-aged children’s cognitive, academic, and psychosocial development,” *Pediatrics* 108, no. 1 (2001): 44–53; J. T. Cook, D. A. Frank, C. Berkowitz, M. M. Black, P. H. Casey, D. B. Cutts, A. F. Meyers, N. Zaldivar, A. Skalicky, S. Levenson, T. Hereen, M. Nord, “Food insecurity is associated with adverse health outcomes among human infants and toddlers,” *Journal of Nutrition* 134, no. 6 (2004): 1432–1438; M. Nord, “Food Insecurity in Households with Children: Prevalence, Severity, and Household Characteristics,” *USDA ERS*, no. 56 (September 2009); J. Huang, K. Mata Oshima, Y. Kim, “Does household food insecurity affect parenting and children’s behaviors? Evidence from the Panel Study of Income Dynamics (PSID),” *Social Service Review* 84, no. 3 (2010): 381–401.
- <sup>6</sup> J. T. Cook, D. A. Frank, C. Berkowitz, M. M. Black, P. H. Casey, D. B. Cutts, A. F. Meyers, N. Zaldivar, A. Skalicky, S. Levenson, T. Hereen, M. Nord, “Food insecurity is associated with adverse health outcomes among human infants and toddlers,” *Journal of Nutrition* 134, no. 6 (2004): 1432–1438.
- <sup>7</sup> J. L. Brown, D. Shepard, T. Martin, J. Orwat, “The economic costs of domestic hunger,” Sodexo Foundation, 2007.
- <sup>8</sup> Estimates based on tabulations using MATH SIPP+ microsimulation model and calculated as follows: the prevalence of food insecurity among individuals who would lose eligibility is approximately 11%. Based on the literature review, SNAP reduces the prevalence of food insecurity by 18–30%. Thus, the share of individuals that might increase would be: 18–30% of 11% = 1.98% to 3.3% more individuals newly ineligible that could be food insecure = 95,200 to 159,000 individuals.
- <sup>9</sup> Estimate based on C. Gundersen, B. Kreider, J. Pepper, “The Economics of Food Insecurity in the United States,” *Applied Economic Perspectives and Policy* 33, no. 3 (2011): 281–303, doi:10.1093/aep/pper022. Food insecurity rates are estimated at 20% for those with income between 100–200% FPL and assuming a similar rate among those newly ineligible, the change in the number of food insecure individuals is calculated as follows: 20% of 5.1 million is approximately 1.02 million individuals and 18–30% of 1.02 million = 183,000 to 305,000 newly ineligible that could be food insecure.
- <sup>10</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyngnam, “Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013),” Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica’s initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.
- <sup>11</sup> L. Tiehen, D. Jolliffe, and C. Gundersen, “How State Policies Influence the Efficacy of the Supplemental Nutrition Assistance Program in Reducing Poverty.” Paper presented at the American Economic Association Annual Conference, San Diego, CA, January 2013. Citation with author permission.
- <sup>12</sup> S. H. Woolf, P. Braveman, and B. F. Evans, “The Health Implications of Reduced Food Stamp Eligibility” (January 2013). Rapid-Cycle report produced by the Virginia Commonwealth University Center on Human Needs.
- <sup>13</sup> Congressional Budget Office, updated cost estimates of the farm bills that were considered in the Senate and House during the 112<sup>th</sup> Congress, [http://www.cbo.gov/sites/default/files/cbofiles/attachments/hr1947\\_LucasLtr.pdf](http://www.cbo.gov/sites/default/files/cbofiles/attachments/hr1947_LucasLtr.pdf).
- <sup>14</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyngnam, “Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

Nonparticipants (2013),” Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica’s initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>15</sup> To receive benefits, in most cases, households must have a gross income at or below 130 percent of the federal poverty level and net income (income after deductions) at or below 100 percent of the federal poverty level. Households may have \$2,000 in countable resources, such as a bank account or at least the fair market value of one vehicle (\$4,650). There are some federal and state exceptions for adults aged 60 or older and the disabled. For example, there is no federal gross income test for these households and the countable resource limit is \$3,250 if at least one person is age 60 or older, or is disabled. U.S. Department of Agriculture, Food and Nutrition Service. *Fact Sheet on Resources, Income, and Benefits*, [http://www.fns.usda.gov/snap/applicant\\_recipients/fs\\_Res\\_Ben\\_Elig.htm](http://www.fns.usda.gov/snap/applicant_recipients/fs_Res_Ben_Elig.htm) (accessed June 2013).

<sup>16</sup> J. Leftin, A. Dodd, K. Fillion, R. Wang, A. Gothro, K. Cunyningham, “Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013),” Appendix B. Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica’s initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>17</sup> Ibid.

<sup>18</sup> J. Leftin, A. Dodd, K. Fillion, R. Wang, A. Gothro, K. Cunyningham, “Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013),” Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica’s initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>19</sup> Congressional Budget Office, updated cost estimates of the farm bills that were considered in the Senate and House during the 112<sup>th</sup> Congress, [http://www.cbo.gov/sites/default/files/cbofiles/attachments/s954\\_StabenowLtr\\_0.pdf](http://www.cbo.gov/sites/default/files/cbofiles/attachments/s954_StabenowLtr_0.pdf); CBO has not yet released updated eligibility impacts for S. 954. Congressional Budget Office, “The Supplemental Nutrition Assistance Program,” April 2012, <http://www.cbo.gov/sites/default/files/cbofiles/attachments/04-19-SNAP.pdf>.

<sup>20</sup> J. Leftin, A. Dodd, K. Fillion, R. Wang, A. Gothro, K. Cunyningham, “Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013),” Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica’s initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>21</sup> Ibid.

<sup>22</sup> B. Kreider, J. V. Pepper, C. Gundersen, D. Jolliffe, “Identifying the Effects of SNAP (Food Stamps) on Child Health Outcomes When Participation is Endogenous and Misreported,” *Journal of the American Statistical Association* 107, no. 499 (2012), Applications and Case Studies. DOI: 10.1080/01621459.2012.682828.

<sup>23</sup> Children’s Health Watch, “The SNAP Vaccine” (2012), [http://www.childrenshealthwatch.org/upload/resource/snapvaccine\\_report\\_feb12.jpg.pdf](http://www.childrenshealthwatch.org/upload/resource/snapvaccine_report_feb12.jpg.pdf); E. March, et al., “Boost to SNAP Benefits Protected Young Children’s Health,” *Children’s Health Watch*, October 2011, [http://www.childrenshealthwatch.org/upload/resource/snapincrease\\_brief\\_oct11.pdf](http://www.childrenshealthwatch.org/upload/resource/snapincrease_brief_oct11.pdf).

<sup>24</sup> D. Almond, H. W. Hoynes, D. Whitmore Schanzenbach, “Inside the War on Poverty: The impact of food stamps on birth outcomes,” *The Review of Economics and Statistics* 93, no. 2 (May 2011): 3874–903; H. W. Hoynes, D. Whitmore Schanzenbach, and D. Almond, “Long Run Impacts of Childhood Access to the Safety Net,” National Bureau of Economic Research, November 2012, NBER Working Paper No. 18535.

<sup>25</sup> L.P. Snyder and C.A. Baker, “Affordable Home Energy and Health: Making the Connections.” Washington, D.C.: AARP Public Policy Institute, 2010.

<sup>26</sup> U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, *Building a Healthy America: A Profile of the Supplemental Nutrition Assistance Program*, April 2012.

<sup>27</sup> U.S. Treasury, *Final Monthly Treasury Statement of Receipts and Outlays of the United States Government For Fiscal Year 2012 Through September 30, 2012, and Other Periods*, <http://www.fms.treas.gov/mts/mts0912.pdf>; U.S. Treasury, *Final Monthly Treasury Statement of Receipts and Outlays of the United States Government For Fiscal Year 2012 Through September 30, 2007, and Other Periods*, <http://www.fms.treas.gov/mts/mts0907.pdf>.

<sup>28</sup> United States Government Accountability Office. GAO-12-670. *Supplemental Nutrition Assistance Program. Improved Oversight of State Eligibility Expansions Needed* (Washington, D.C.: August 2, 2012).

<sup>29</sup> Congressional Budget Office, “The Supplemental Nutrition Assistance Program,” April 2012, <http://www.cbo.gov/sites/default/files/cbofiles/attachments/04-19-SNAP.pdf>.

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299

<sup>30</sup> *Improving Health in the United States: The Role of Health Impact Assessment*. Washington, D.C.: National Academies Press, [www.nap.edu](http://www.nap.edu).

<sup>31</sup> Ibid.

<sup>32</sup> Ibid.

<sup>33</sup> U.S. House Budget Committee, *The Path to Prosperity: A Blueprint for American Renewal* (March 2012), <http://budget.house.gov/uploadedfiles/pathtoprosperity2013.pdf>; M. Andrews and D. Smallwood, "What's Behind the Rise in SNAP Participation?" in *Amber Waves*, USDA Economic Research Service, March 2012, <http://www.ers.usda.gov/amber-waves/2012-march/what's-behind-the-rise-in-snap-participation.aspx>.

<sup>34</sup> United States Government Accountability Office. GAO-12-670. *Supplemental Nutrition Assistance Program. Improved Oversight of State Eligibility Expansions Needed* (Washington, D.C.: August 2, 2012).

<sup>35</sup> Senate Farm Bill: <http://www.gpo.gov/fdsys/pkg/BILLS-113s954pcs/pdf/BILLS-113s954pcs.pdf>.

<sup>36</sup> House Farm Bill: <http://www.gpo.gov/fdsys/pkg/BILLS-113hr1947ih/pdf/BILLS-113hr1947ih.pdf>.

<sup>37</sup> The Low Income Home Energy Assistance Program (LIHEAP) is a federal block grant that assists eligible low-income households with their heating and cooling energy costs.

<sup>38</sup> LIHEAP states (and DC): California (passed a law requiring implementation by October 2013), Connecticut, Delaware (no nominal payment issued in FY2012), District of Columbia, Maine, Massachusetts, Michigan, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, and Wisconsin, <http://www.acf.hhs.gov/programs/ocs/programs/liheap>; R. A. Aussenberg and L. Perl, "The Next Farm Bill: Changing the Treatment of LIHEAP Receipt in the Calculation of SNAP Benefits," Congressional Research Service: CRS Report for Congress 7-5700, May 13, 2013.

<sup>39</sup> U.S. Department of Agriculture, Food and Nutrition Service. *Fact Sheet on Resources, Income, and Benefits*, [http://www.fns.usda.gov/snap/applicant\\_recipients/fs\\_Res\\_Ben\\_Elig.htm](http://www.fns.usda.gov/snap/applicant_recipients/fs_Res_Ben_Elig.htm) (accessed June 2013). Some states do not use a net income test for determining eligibility, however, participants do not receive benefits unless their net income is low enough to qualify for a positive benefit, effectively a net income below 100% of the federal poverty level.

<sup>40</sup> There is no federal gross income test for households with elderly or disabled adults. Some states implementing categorical eligibility also do not require a gross income test for elderly or disabled households.

<sup>41</sup> Congressional Budget Office, updated cost estimates of the farm bills that were considered in the Senate and House during the 112<sup>th</sup> Congress, [http://www.cbo.gov/sites/default/files/cbofiles/attachments/s954\\_StabenowLtr\\_0.pdf](http://www.cbo.gov/sites/default/files/cbofiles/attachments/s954_StabenowLtr_0.pdf); [http://www.cbo.gov/sites/default/files/cbofiles/attachments/hr1947\\_LucasLtr.pdf](http://www.cbo.gov/sites/default/files/cbofiles/attachments/hr1947_LucasLtr.pdf).

<sup>42</sup> There is no federal gross income test for households with elderly or disabled adults. Some states implementing categorical eligibility also do not require a gross income test for elderly or disabled households.

<sup>43</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyningham, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>44</sup> Ibid. and *DHHS 2012 Poverty Guidelines*.

<sup>45</sup> U.S. Department of Health and Human Services *2012 Poverty Guidelines*, <http://aspe.hhs.gov/poverty/12fedreg.shtml>. Calculation for adjusted figures available upon request. Note: USDA is using the 2012 Guidelines through September 2013.

<sup>46</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyningham, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>47</sup> Ibid.

<sup>48</sup> Ibid.

<sup>49</sup> Ibid.

<sup>50</sup> Ibid.

<sup>51</sup> Ibid.

<sup>52</sup> Institute of Medicine of the National Academies. *Supplemental Nutrition Assistance Program: Examining the Evidence to Define Benefit Adequacy*. Washington, D.C.: National Academies Press, 2013, [http://www.iom.edu/~media/Files/Report%20Files/2013/SNAP/SNAP\\_RB.pdf](http://www.iom.edu/~media/Files/Report%20Files/2013/SNAP/SNAP_RB.pdf).

<sup>53</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyningham, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates

available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>54</sup> Ibid.

<sup>55</sup> Ibid.

<sup>56</sup> D. Rosenbaum, S. Gonzales, D. Trisi, "A Technical Assessment of SNAP and Medicaid Financial Eligibility Under the Affordable Care Act (ACA)." Center on Budget and Policy Priorities, June 2013, <http://www.cbpp.org/cms/?fa=view&id=3939>.

<sup>57</sup> U.S. Department of Agriculture, Center for Nutrition Policy and Promotion, *USDA Food Plans: Cost of Food*, <http://www.cnpp.usda.gov/usdafoodplanscostoffood.htm>.

<sup>58</sup> A. Carlson, M. Lino, W. Y. Juan, K. Hanson, and P. Basiotis, *Thrifty Food Plan, 2006* (Alexandria, VA: U.S. Department of Agriculture, Center for Nutrition Policy and Promotion, 2007).

<sup>59</sup> U.S. Department of Agriculture, Food and Nutrition Service, *Supplemental Nutrition Assistance Program*, [http://www.fns.usda.gov/snap/applicant\\_recipients/eligibility.htm](http://www.fns.usda.gov/snap/applicant_recipients/eligibility.htm).

<sup>60</sup> Deductions used to calculate net income include a standard deduction, an earned income deduction, and deductions for specific expenses, such as medical expenses for elderly or disabled household members, child or dependent care, and shelter costs. The deductions used to calculate net income for SNAP benefits are different than those used to calculate net income for federal tax purposes. Shelter deductions were capped at \$459 a month in FY 2012 unless the household had an elderly or disabled member. Calculations in the table reflect a standard deduction for a family of four (\$160) in FY2013. The Congressional Budget Office estimated \$4.30 per person per day in FY 2011, which amounts to \$1.43 per person per meal. Congressional Budget Office, "An Overview of the Supplemental Nutrition Assistance Program," accessed June 2013, <http://www.cbo.gov/publication/43175>.

<sup>61</sup> Institute of Medicine of the National Academies. *Supplemental Nutrition Assistance Program: Examining the Evidence to Define Benefit Adequacy*. Washington, D.C.: National Academies Press, 2013, [http://www.iom.edu/~/media/Files/Report%20Files/2013/SNAP/SNAP\\_RB.pdf](http://www.iom.edu/~/media/Files/Report%20Files/2013/SNAP/SNAP_RB.pdf).

<sup>62</sup> Ibid.

<sup>63</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyngnam, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>64</sup> Congressional Budget Office, updated cost estimates of the farm bills that were considered in the Senate and House during the 112<sup>th</sup> Congress, [http://www.cbo.gov/sites/default/files/cbofiles/attachments/s954\\_StabenowLtr\\_0.pdf](http://www.cbo.gov/sites/default/files/cbofiles/attachments/s954_StabenowLtr_0.pdf); CBO has not yet released updated eligibility impacts for S. 954. Congressional Budget Office, "The Supplemental Nutrition Assistance Program," April 2012, <http://www.cbo.gov/sites/default/files/cbofiles/attachments/04-19-SNAP.pdf>.

LIHEAP states (and DC): California (passed a law requiring implementation by October 2013), Connecticut, Delaware (no nominal payment issued in FY2012), District of Columbia, Maine, Massachusetts, Michigan, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, and Wisconsin, <http://www.acf.hhs.gov/programs/ocs/programs/liheap>; R. A. Aussenberg and L. Perl, "The Next Farm Bill: Changing the Treatment of LIHEAP Receipt in the Calculation of SNAP Benefits," Congressional Research Service: CRS Report for Congress 7-5700, May 13, 2013.

<sup>66</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyngnam, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Appendix B. Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>67</sup> Congressional Budget Office, "The Supplemental Nutrition Assistance Program," April 2012, <http://www.cbo.gov/sites/default/files/cbofiles/attachments/04-19-SNAP.pdf>.

<sup>68</sup> There is no federal gross income test for households with elderly or disabled adults. Some states implementing categorical eligibility also do not require a gross income test for elderly or disabled households.

<sup>69</sup> U.S. Department of Agriculture, Food and Nutrition Service, *Supplemental Nutrition Assistance Program*, [http://www.fns.usda.gov/snap/applicant\\_recipients/eligibility.htm#Resources](http://www.fns.usda.gov/snap/applicant_recipients/eligibility.htm#Resources). Note: States have the option of substituting the vehicle rules used in their TANF assistance programs for SNAP vehicle rules when it results in a lower attribution of household assets. A number of states exclude the entire value of the household's primary vehicle as an asset. In states that count the value of vehicles, the fair market value of each licensed vehicle that is not excluded is evaluated. Currently 39 states exclude the value of all vehicles entirely. Eleven states totally exclude the value of at least one vehicle per household. The three remaining states exempt an amount higher than the SNAP's standard auto exemption (currently set at \$4,650) from the fair market value to determine the countable resource value of a vehicle.



<sup>70</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyningham, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>71</sup> Congressional Budget Office, updated cost estimates of the farm bills that were considered in the Senate and House during the 112<sup>th</sup> Congress, [http://www.cbo.gov/sites/default/files/cbofiles/attachments/hr1947\\_LucasLtr.pdf](http://www.cbo.gov/sites/default/files/cbofiles/attachments/hr1947_LucasLtr.pdf); CBO has not yet released updated eligibility impacts for H.R. 1947. Congressional Budget Office, "The Supplemental Nutrition Assistance Program," April 2012, <http://www.cbo.gov/sites/default/files/cbofiles/attachments/04-19-SNAP.pdf>.

<sup>72</sup> USDA, FNS. *Broad-based Categorical Eligibility*, accessed July 2013, <http://www.fns.usda.gov/snap/rules/Memo/BBCE.pdf>.

<sup>73</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyningham, "Analysis of Proposed Changes to SNAP Eligibility Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Appendix B. Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>74</sup> Center on Budget and Policy Priorities report of CBO estimates, <http://www.cbpp.org/files/5-13-13fa.pdf>.

<sup>75</sup> A. Coleman-Jensen, M. Nord, M. Andrews, S. Carlson, *Household Food Security in the United States, 2011*, USDA ERS Report Number 141, September 2012.

<sup>76</sup> *Ibid.*

<sup>77</sup> M. Nord, "How much does the Supplemental Nutrition Assistance Program alleviate food insecurity? Evidence from recent program leavers," *Public Health Nutrition* 15, no. 5 (2012): 811–817; E. Mykerezzi, B. Mills, "The impact of food stamp program participation on household food insecurity," *American Journal of Agricultural Economics* 92, no. 5 (2010): 1379–1391; C. Ratcliffe, S. McKernan, "How much does SNAP reduce food insecurity?" Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture, Contractor and Cooperator Report No. 60, 2010; C. Ratcliffe, S. McKernan, S. Zhang, "How much does the Supplemental Nutrition Assistance Program reduce food insecurity?" *American Journal of Agricultural Economics* 93, no. 4 (2011): 1082–1098.

<sup>78</sup> A. Coleman-Jensen, M. Nord, M. Andrews, S. Carlson, *Household Food Security in the United States, 2011*, USDA ERS Report Number 141, September 2012.

<sup>79</sup> C. Gundersen and B. Kreider, "Bounding the Effects of Food Insecurity on Children's Health Outcomes," *Journal of Health Economics* 28 (2009): 971–983; H. K. Seligman, A. M. Bindman, E. Vittinghoff, A. M. Kanaya, M. B. Kushel, "Food insecurity is associated with diabetes mellitus: results from the National Health Examination and Nutrition Examination Survey (NHANES) 1999–2002," *Journal of General Internal Medicine* 22, no. 7 (2007): 1018–1023; H. K. Seligman, B. A. Laraia, M. B. Kushel, "Food insecurity is associated with chronic disease among low-income (NHANES participants)," *Journal of Nutrition* 140, no. 2 (Feb. 2010): 304–310; S. I. Kirkpatrick, L. McIntyre, M. L. Potestio, "Child hunger and long-term adverse consequences for health," *Archives of Pediatric and Adolescent Medicine* 164, no. 8 (2010): 754–762; R. C. Whitaker, S. M. Phillips, S. M. Orzol, "Food Insecurity and the Risks of Depression and Anxiety in Mothers and Behavior Problems in their Preschool-Aged Children," *Pediatrics* 118, no. 3 (2006): e859–e868; K. Alaimo, C. M. Olson, E. A. Frongillo Jr., "Food insufficiency and American school-aged children's cognitive, academic, and psychosocial development," *Pediatrics* 108, no. 1 (2001): 44–53; J. T. Cook, D. A. Frank, C. Berkowitz, M. M. Black, P. H. Casey, D. B. Cutts, A. F. Meyers, N. Zaldivar, A. Skalicky, S. Levenson, T. Hereen, M. Nord, "Food insecurity is associated with adverse health outcomes among human infants and toddlers," *Journal of Nutrition* 134, no. 6 (2004): 1432–1438; M. Nord, "Food Insecurity in Households with Children: Prevalence, Severity, and Household Characteristics," *USDA ERS*, no. 56 (September 2009); J. Huang, K. Mata Oshima, Y. Kim, "Does household food insecurity affect parenting and children's behaviors? Evidence from the Panel Study of Income Dynamics (PSID)," *Social Service Review* 84, no. 3 (2010): 381–401.

<sup>80</sup> J. L. Brown, D. Shepard, T. Martin, J. Orwat, "The economic costs of domestic hunger," Sodexo Foundation, 2007.

<sup>81</sup> K. Seligman, D. Schillinger, "Hunger and socioeconomic disparities in chronic disease," *New England Journal of Medicine* 363, no. 1 (2010): 6–9.

<sup>82</sup> H. K. Seligman, A. M. Bindman, E. Vittinghoff, A. M. Kanaya, M. B. Kushel, "Food insecurity is associated with diabetes mellitus: results from the National Health Examination and Nutrition Examination Survey (NHANES) 1999–2002," *Journal of General Internal Medicine* 22, no. 7 (2007): 1018–1023.

<sup>83</sup> K. Nelson, W. Cunningham, R. Andersen, G. Harrison, L. Gelberg, "Is food insufficiency associated with health status and health care utilization among adults with diabetes?" *Journal of General Internal Medicine* 16 (2001): 404–11; H. K. Seligman, E. A. Jacobs, A. Lopez, J. Tschann, A. Fernandez, "Food insecurity and glycemic control among low-income patients with type 2 diabetes," *Diabetes Care* 35, no. 2 (2012): 233–238.

<sup>84</sup> H. K. Seligman, T. C. Davis, D. Schillinger, M. S. Wolf, "Food Insecurity Is Associated with Hypoglycemia and Poor Diabetes Self-Management in a Low-Income Sample with Diabetes," *Journal of Health Care for the Poor and Underserved* 21, no. 4 (2010): 1227–1233.

- <sup>85</sup> J. T. Cook, D. A. Frank, C. Berkowitz, M. M. Black, P. H. Casey, D. B. Cutts, A. F. Meyers, N. Zaldivar, A. Skalicky, S. Levenson, T. Hereen, M. Nord, "Food insecurity is associated with adverse health outcomes among human infants and toddlers," *Journal of Nutrition* 134, no. 6 (2004): 1432–1438.
- <sup>86</sup> R. C. Whitaker, S. M. Phillips, S. M. Orzol, "Food Insecurity and the Risks of Depression and Anxiety in Mothers and Behavior Problems in their Preschool-Aged Children," *Pediatrics* 118, no. 3 (2006): e859–e868.
- K. Alaimo, C. M. Olson, E. A. Frongillo Jr., "Food insufficiency and American school-aged children's cognitive, academic, and psychosocial development," *Pediatrics* 108, no. 1 (2001): 44–53.
- <sup>87</sup> D. F. Jyoti, E. A. Frongillo Jr., S. J. Jones, "Food insecurity affects school children's academic performance, weight gain, and social skills," *Journal of Nutrition* 135, no. 12 (2005): 2831–2839.
- <sup>88</sup> J. Cook and K. Jeng, "Child Food Insecurity: The Economic Impact on our Nation," 2009, <http://feedingamerica.org/SiteFiles/child-economy-study.pdf>.
- <sup>89</sup> I. Kawachi, N. E. Adler, W. H. Dow, "Money, Schooling, and Health: Mechanisms and causal evidence," in *The Biology of Disadvantage*, Annals of the New York Academy of Sciences 1186 (2010).
- <sup>90</sup> B. Kreider, J. V. Pepper, C. Gundersen, D. Jolliffe, "Identifying the Effects of SNAP (Food Stamps) on Child Health Outcomes When Participation is Endogenous and Misreported," *Journal of the American Statistical Association* 107, no. 499 (2012), Applications and Case Studies. DOI: 10.1080/01621459.2012.682828; C. Gundersen and B. Kreider, "Bounding the Effects of Food Insecurity on Children's Health Outcomes," *Journal of Health Economics* 28 (2009): 971–983.
- <sup>91</sup> Children's Health Watch, "The SNAP Vaccine" (2012), [http://www.childrenshealthwatch.org/upload/resource/snapvaccine\\_report\\_feb12.jpg.pdf](http://www.childrenshealthwatch.org/upload/resource/snapvaccine_report_feb12.jpg.pdf); E. March, et al., "Boost to SNAP Benefits Protected Young Children's Health," *Children's Health Watch*, October 2011, [http://www.childrenshealthwatch.org/upload/resource/snapincrease\\_brief\\_oct11.pdf](http://www.childrenshealthwatch.org/upload/resource/snapincrease_brief_oct11.pdf).
- <sup>92</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyngnam, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.
- <sup>93</sup> Ibid.
- <sup>94</sup> E. Frazao, M. Andrews, D. Smallwood, M. Prell, *Food Spending Patterns of Low-Income Households: Will Increasing Purchasing Power Result in Healthier Food Choices?* Economic Information Bulletin Number 29-4, U.S. Department of Agriculture, Economic Research Service, September 2007.
- <sup>95</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyngnam, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013. Estimates based on tabulations using MATH SIPP+ microsimulation model and calculated as follows: the prevalence of food insecurity among individuals who would lose eligibility is approximately 11%. Based on the literature review, SNAP reduces the prevalence of food insecurity by 18–30%. Thus, the share of individuals that might increase would be: 18–30% of 11% = 1.98% to 3.3% more individuals newly ineligible that could be food insecure = 95,200 to 159,000 individuals.
- <sup>96</sup> Estimate based on C. Gundersen, B. Kreider, J. Pepper, "The Economics of Food Insecurity in the United States," *Applied Economic Perspectives and Policy* 33, no. 3 (2011): 281–303, doi:10.1093/aep/ppr022. Food insecurity rates are estimated at 20% for those with income between 100–200% FPL and assuming a similar rate among those newly ineligible, the change in the number of food insecure individuals is calculated as follows: 20% of 5.1 million is approximately 1.02 million individuals and 18–30% of 1.02 million = 183,000 to 305,000 newly ineligible that could be food insecure.
- <sup>97</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyngnam, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.
- <sup>98</sup> P. Gleason, "Direct certification in the national school lunch program expands access for children," *Journal of Policy Analysis and Management* 27(2008): 82–103; and Zoe Neuberger, "USDA Study Shows States Failing to Connect Many Needy Children to Free School Meals," Center on Budget and Policy Priorities (March 2009), <http://www.cbpp.org/cms/index.cfm?fa=view&id=2701>.
- <sup>99</sup> Calculations based on J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyngnam, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates

available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013; and Zoe Neuberger, "USDA Study Shows States Failing to Connect Many Needy Children to Free School Meals," Center on Budget and Policy Priorities (March 2009), <http://www.cbpp.org/cms/index.cfm?fa=view&id=2701>.

Estimates calculated as follows: 1.04 million school-age children would reside in households eligible for free meals; based on the literature review, participation rate for National School Meals Programs is approximately 85% under direct certification. Thus, non-participation rate among children eligible for free meals is approximately 15% and would be anticipated among children from SNAP households that lose eligibility.  $1.04 \text{ million} \times 15\% = 156,000$  children.

<sup>100</sup> Center on Budget and Policy Priorities report of CBO estimate, <http://www.cbpp.org/cms/index.cfm?fa=view&id=3965>. CBO methodology is not available.

<sup>101</sup> C. Gregory, M. Ver Ploeg, M. Andrews, and A. Coleman-Jensen, "Supplemental Nutrition Assistance Program (SNAP) Participation Leads to Modest Changes in Diet Quality," Report 147 (Washington, D.C.: United States Department of Agriculture Economic Research Service, 2013).

<sup>102</sup> Ibid.

M. K. Fox, W. Hamilton, and B. H. Lin, eds. *Effects of Food Assistance and Nutrition Programs on Nutrition and Health: Volume 3, Literature Review*: Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture, 2004.

C. W. Leung, S. J. Blumenthal, E. E. Hoffnagle, H. H. Jensen, S. B. Foerster, M. Nestle, L. W. Cheung, D. Mozaffarian, and W. C. Willett, "Associations of Food Stamp Participation with Dietary Quality and Obesity in Children," *Pediatrics* 131, no. 3 (Mar 2013): 463–72.

H. Stewart and N. Blisard, "Are Lower Income Households Willing and Able to Budget for Fruits and Vegetables?" In *Economic Research Report* (Washington, D.C.: United States Department of Agriculture Economic Research Service, 2008).

H. Stewart, N. Blisard, and D. Jolliffe, "Low-Income Households' Expenditures on Fruits and Vegetables," In *Agricultural Economic Report* (Washington, D.C.: United States Department of Agriculture Economic Research Service, 2004).

<sup>103</sup> M. Ver Ploeg, V. Breneman, P. Dutko, R. Williams, S. Snyder, C. Dicken, P. Kaufman, *Access to Affordable and Nutritious Food: Updated Estimates of Distance to Supermarkets Using 2010 Data* (Washington, D.C.: United States Department of Agriculture, Economic Research Service, 2012).

<sup>104</sup> P. B. Ford and D. A. Dzewaltowski, "Disparities in Obesity Prevalence Due to Variation in the Retail Food Environment: Three Testable Hypotheses," *Nutr Rev* 66, no. 4 (Apr. 2008): 216–228; K. Giskes, F. van Lenthe, M. Avendano-Pabon, and J. Brug, "A Systematic Review of Environmental Factors and Obesogenic Dietary Intakes among Adults: Are We Getting Closer to Understanding Obesogenic Environments?" *Obesity Reviews* 12, no. 5 (May 2011): e95–e106.

<sup>105</sup> Ibid.; and C. E. Caspi, G. Sorensen, S. V. Subramanian, I. Kawachi, "The local food environment and diet: A systematic review," *Health and Place* (2012), <http://dx.doi.org/10.1016/j.healthplace.2012.05.006>.

<sup>106</sup> Institute of Medicine of the National Academies. *Supplemental Nutrition Assistance Program: Examining the Evidence to Define Benefit Adequacy*. Washington, D.C.: National Academies Press, 2013, [http://www.iom.edu/~media/Files/Report%20Files/2013/SNAP/SNAP\\_RB.pdf](http://www.iom.edu/~media/Files/Report%20Files/2013/SNAP/SNAP_RB.pdf).

<sup>107</sup> C. Gregory, M. Ver Ploeg, M. Andrews, and A. Coleman-Jensen, "Supplemental Nutrition Assistance Program (SNAP) Participation Leads to Modest Changes in Diet Quality," Report 147 (Washington, D.C.: United States Department of Agriculture Economic Research Service, 2013).

<sup>108</sup> K. Seligman, D. Schillinger, "Hunger and socioeconomic disparities in chronic disease," *New England Journal of Medicine* 363, no. 1 (2010): 6–9; H. Stewart and N. Blisard, "Are Lower Income Households Willing and Able to Budget for Fruits and Vegetables?" In *Economic Research Report* (Washington, D.C.: United States Department of Agriculture Economic Research Service, 2008); H. Stewart, N. Blisard, and D. Jolliffe, "Low-Income Households' Expenditures on Fruits and Vegetables," In *Agricultural Economic Report* (Washington, D.C.: United States Department of Agriculture Economic Research Service, 2004); S. Stark Casagrande, Y. Wang, C. Anderson, T. C. Gary, "Have Americans Increased their Fruit and Vegetable Intake? The Trends Between 1988 and 2002," *American Journal of Preventive Medicine* 32 no. 4 (2007):257–263.

<sup>109</sup> P. B. Ford and D. A. Dzewaltowski, "Disparities in Obesity Prevalence Due to Variation in the Retail Food Environment: Three Testable Hypotheses," *Nutr Rev* 66, no. 4 (Apr. 2008): 216–228; K. Giskes, F. van Lenthe, M. Avendano-Pabon, and J. Brug, "A Systematic Review of Environmental Factors and Obesogenic Dietary Intakes among Adults: Are We Getting Closer to Understanding Obesogenic Environments?" *Obesity Reviews* 12, no. 5 (May 2011): e95–e106.

<sup>110</sup> Institute of Medicine of the National Academies. *Supplemental Nutrition Assistance Program: Examining the Evidence to Define Benefit Adequacy*. Washington, D.C.: National Academies Press, 2013, [http://www.iom.edu/~media/Files/Report%20Files/2013/SNAP/SNAP\\_RB.pdf](http://www.iom.edu/~media/Files/Report%20Files/2013/SNAP/SNAP_RB.pdf).

<sup>111</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyngnam, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates

available in Appendix B based on Mathematica’s initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>112</sup> Senate Farm Bill: <http://www.gpo.gov/fdsys/pkg/BILLS-113s954pcs/pdf/BILLS-113s954pcs.pdf> and House Farm Bill: <http://www.gpo.gov/fdsys/pkg/BILLS-113hr1947ih/pdf/BILLS-113hr1947ih.pdf>.

<sup>113</sup> B.G. Link and J. Phelan, “Social conditions as fundamental causes of disease,” *J Health Soc Behav*, Spec. No. (1995): 80–94, <http://homeoint.ru/pdfs/socialconditions.pdf>.

<sup>114</sup> D. A. Sandoval, M. R. Rank, T. A. Hirschl, “The Increasing Risk of Poverty Across the American Life Course,” *Demography* 46 no. 4 (November 2009): 717–737; M. R. Rank & T. A. Hirschl, “The likelihood of poverty across the American adult lifespan,” *Social Work* 44 (1999): 201–216; M. R. Rank & T. A. Hirschl, “The occurrence of poverty across the life cycle: Evidence from the PSID,” *Journal of Policy Analysis and Management* 20 (2001): 737–755.

<sup>115</sup> M. R. Rank & T. A. Hirschl, “The occurrence of poverty across the life cycle: Evidence from the PSID,” *Journal of Policy Analysis and Management* 20 (2001): 737–755; M. J. Bane & D. T. Ellwood, “Slipping Into and Out of Poverty: The Dynamics of Spells,” *Journal of Human Resources* 21 (1986):1–23; A. H. Stevens, “The Dynamics of Poverty Spells: Updating Bane and Ellwood,” *Journal of Human Resources* 84 (1999):34–37.

<sup>116</sup> P. Taylor, R. Morin, K. Parker, E. Patten, S. Motel, “A Bipartisan Nation of Beneficiaries,” Pew Social & Demographic Trends, Pew Research Center (2012).

<sup>117</sup> James Mabli, Stephen Tordella, Laura Castner, Thomas Godfrey, Priscilla Foran, Jenny Laster Genser, *Dynamics of Supplemental Nutrition Assistance Program Participation in the Mid-2000s* (Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, 2011).

<sup>118</sup> A. Case, D. Lubotsky, & C. Paxson, “Economic Status and Health in Childhood: The Origins of the Gradient,” *American Economic Review* 92 (2002): 1308–1334; J. Currie, M. Stabile, “Socioeconomic Status and Health: Why is the Relationship Stronger for Older Children?” *American Economic Review* 93, no. 5 (2003): 1813–1823.

<sup>119</sup> H. J. Holzer, D. Whitmore Schanzenbach, G. J. Duncan, J. Ludwig, “The Economic Costs of Poverty in the United States: Subsequent Effects of Children Growing Up Poor.” Report prepared for Center for American Progress (January 2007).

<sup>120</sup> S. H. Woolf, P. Braveman, and B. F. Evans, “The Health Implications of Reduced Food Stamp Eligibility” (January 2013). Rapid-Cycle report produced by the Virginia Commonwealth University Center on Human Needs.

<sup>121</sup> L. Tiehen, D. Jolliffe, and C. Gundersen, “Alleviating Poverty in the United States: The Critical Role of SNAP Benefits.” In *Economic Research Report*. Washington, D.C.: USDA Economic Research Service, 2012.

<sup>122</sup> A. Sherman, S. Parrott, I. Dutta-Gupta, J. Charite, “Deficit Reduction Should Not Increase Poverty and Hardship.” Center on Budget and Policy Priorities, March 2013, <http://www.cbpp.org/cms/?fa=view&id=3918>.

<sup>123</sup> D. Almond D, H. W. Hoynes, D. Whitmore Schanzenbach, “Inside the War on Poverty: The impact of food stamps on birth outcomes,” *The Review of Economics and Statistics* 93, no. 2 (May 2011): 3874–903.

<sup>124</sup> H. W. Hoynes, D. Whitmore Schanzenbach, and D. Almond, “Long Run Impacts of Childhood Access to the Safety Net,” National Bureau of Economic Research, November 2012, NBER Working Paper No. 18535.

<sup>125</sup> L. Tiehen, D. Jolliffe, and C. Gundersen, “How State Policies Influence the Efficacy of the Supplemental Nutrition Assistance Program in Reducing Poverty.” Paper for presentation at the American Economic Association Annual Conference, San Diego, CA, January 2013. Citation with author permission.

<sup>126</sup> Calculation based on L. Tiehen, D. Jolliffe, and C. Gundersen, “How State Policies Influence the Efficacy of the Supplemental Nutrition Assistance Program in Reducing Poverty.” Paper for presentation at the American Economic Association Annual Conference, San Diego, CA, January 2013; and state-level poverty rates of the population and among children in 2011 (American Community Survey 1-Year Estimates, Table S1701—Poverty Status in the Past 12 Months). The change in poverty rate was calculated by multiplying the state-level poverty rate by 0.554 percent and the child state-level poverty rate by 0.969 percent. State-level estimates were summed for a national estimate. Analyses were limited to the 43 states utilizing categorical eligibility as of 2012. Data available upon request.

<sup>127</sup> S. H. Woolf, P. Braveman, and B. F. Evans, “The Health Implications of Reduced Food Stamp Eligibility” (January 2013). Rapid-Cycle report produced by the Virginia Commonwealth University Center on Human Needs.

<sup>128</sup> Ibid.

<sup>129</sup> J. Bhattacharya, T. DeLeire, S. Haider, and J. Currie, “Heat or Eat? Cold-Weather Shocks and Nutrition in Poor American Families,” *Am J Public Health* 93, no. 7 (Jul 2003): 1149–54.

<sup>130</sup> D. A. Frank, N. B. Neault, A. Skalicky, J. T. Cook, J. D. Wilson, S. Levenson, A. F. Meyers, *et al.*, “Heat or Eat: The Low Income Home Energy Assistance Program and Nutritional and Health Risks among Children Less Than 3 Years of Age,” *Pediatrics* 118, no. 5 (Nov. 2006): e1293–302; M. Nord & L. S. Kantor, “Seasonal Variation in Food Insecurity Is Associated with Heating and Cooling Costs among Low-Income Elderly Americans,” *J Nutr* 136, no. 11 (Nov. 2006): 2939–44.

- <sup>131</sup> P. Howden-Chapman, "Housing Standards: A Glossary of Housing and Health," *J Epidemiol Community Health* 58, no. 3 (Mar. 2004): 162–8; and L.P. Snyder and C.A. Baker, "Affordable Home Energy and Health: Making the Connections." Washington, D.C.: AARP Public Policy Institute, 2010.
- <sup>132</sup> M. B. Kushel, R. Gupta, L. Gee, and J. S. Haas, "Housing Instability and Food Insecurity as Barriers to Health Care among Low-Income Americans," *J Gen Intern Med* 21, no. 1 (Jan. 2006): 71–7.
- <sup>133</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyngnam, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.
- <sup>134</sup> S. A. Burgard, K. S. Seefeldt, and S. Zelner, "Housing Instability and Health: Findings from the Michigan Recession and Recovery Study," *Soc Sci Med* 75, no. 12 (Dec. 2012): 2215–24.
- <sup>135</sup> C. T. Ma, L. Gee, and M. B. Kushel, "Associations between Housing Instability and Food Insecurity with Health Care Access in Low-Income Children," *Ambul Pediatr* 8, no. 1 (Jan.–Feb. 2008): 50–7.
- <sup>136</sup> L.P. Snyder and C.A. Baker, "Affordable Home Energy and Health: Making the Connections." Washington, D.C.: AARP Public Policy Institute, 2010.
- <sup>137</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyngnam, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.
- <sup>138</sup> Calculations based on L. Castner and J. Mabli, *Low-Income Household Spending Patterns and Measures of Poverty*. Prepared by Mathematica Policy Research for USDA, FNS. Report No. 6408-600 (2010), <http://www.fns.usda.gov/ora/MENU/Published/snap/FILES/Participation/SpendingPatterns.pdf>. Data available upon request.
- <sup>139</sup> U.S. Energy Information Administration. Table 5. Residential Average Monthly Bill by Census Division and State (2011), [http://www.eia.gov/electricity/sales\\_revenue\\_price/pdf/table5\\_a.pdf](http://www.eia.gov/electricity/sales_revenue_price/pdf/table5_a.pdf). Accessed June 2013.
- <sup>140</sup> H. L. Shaefer, I. Gutierrez, "The Supplemental Nutrition Assistance Program and Material Hardship among Low- Income Households with Children," *Social Service Review* (July 2013), in press.
- <sup>141</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyngnam, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.
- <sup>142</sup> Ibid.
- <sup>143</sup> M. B. Kushel, R. Gupta, L. Gee, and J. S. Haas, "Housing Instability and Food Insecurity as Barriers to Health Care among Low-Income Americans," *J Gen Intern Med* 21, no. 1 (Jan. 2006): 71–7; C. T. Ma, L. Gee, and M. B. Kushel, "Associations between Housing Instability and Food Insecurity with Health Care Access in Low-Income Children," *Ambul Pediatr* 8, no. 1 (Jan.–Feb. 2008): 50–7.
- <sup>144</sup> D. Slesnick, "Gaining Ground: Poverty in the Postwar United States," *Journal of Political Economy*, 101(1993): 1–38; C. Gundersen and J. Gruber, "The Dynamic Determinants of Food Insufficiency," in Margaret S. Andrews and Mark A. Prell (eds.), *Second Food Security Measurement and Research Conference, Vol. 2: Papers* (Food Assistance and Nutrition Research Report No. 11-2. U.S. Department of Agriculture, Economic Research Service, July 2001), 91–109, [www.ers.usda.gov/publications/fanrr11-2/](http://www.ers.usda.gov/publications/fanrr11-2/); C. Gundersen, B. Kreider, J. Pepper, "The Economics of Food Insecurity in the United States," *Applied Economic Perspectives and Policy* 33, no. 3 (2011): 281–303, doi:10.1093/aep/ppr022; Signe-Mary McKernan, Caroline Ratcliffe, Katie Vinopal, "Do Assets Help Families Cope with Adverse Events?" The Urban Institute, Brief 10, November 2009 (accessed June 2013), [http://www.urban.org/uploadedpdf/411994\\_help\\_family\\_cope.pdf](http://www.urban.org/uploadedpdf/411994_help_family_cope.pdf).
- <sup>145</sup> C. Gundersen and J. Gruber, "The Dynamic Determinants of Food Insufficiency," in Margaret S. Andrews and Mark A. Prell (eds.), *Second Food Security Measurement and Research Conference, Vol. 2: Papers* (Food Assistance and Nutrition Research Report No. 11-2. U.S. Department of Agriculture, Economic Research Service, July 2001), 91–109, [www.ers.usda.gov/publications/fanrr11-2/](http://www.ers.usda.gov/publications/fanrr11-2/); C. Gundersen, B. Kreider, J. Pepper, "The Economics of Food Insecurity in the United States," *Applied Economic Perspectives and Policy* 33, no. 3 (2011): 281–303, doi:10.1093/aep/ppr022.
- <sup>146</sup> D. Slesnick, "Gaining Ground: Poverty in the Postwar United States," *Journal of Political Economy*, 101(1993): 1–38.
- <sup>147</sup> A. Hajat, J. S. Kaufman, K. M. Rose, A. Siddiqi, J. C. Thomas, "Do the wealthy have a health advantage? Cardiovascular disease risk factors and wealth," *Soc Sci Med* 71(2010): 1935–42; M. Avendano & M.M. Glymour, "Stroke disparities in older Americans: is wealth a more powerful indicator of risk than income and education?" *Stroke* 39(2008): 1533–40; A. Hajat, J. S. Kaufman, K. M. Rose, A. Siddiqi, J. C. Thomas, "Long-term effects of wealth on mortality and self-rated health status," *Am J Epidemiol* 173(2011): 192–200 C. E. Pollack, S.

Chideya, C. Cubbin, B. Williams, M. Dekker, P. Braveman, "Should health studies measure wealth? A systematic review," *Am J Prev Med*, 33(2007): 250–64.

<sup>148</sup> C. E. Pollack, S. Chideya, C. Cubbin, B. Williams, M. Dekker, P. Braveman, "Should health studies measure wealth? A systematic review," *Am J Prev Med*, 33(2007): 250–64.

<sup>149</sup> Robert H. Haveman & Edward N. Wolff. "The Concept and Measurement of Asset Poverty: Levels, Trends and composition for the U.S., 1983–2001," *Journal of Economic Inequality* 2, no. 2 (2004): 145–169.

<sup>150</sup> Ibid.

<sup>151</sup> Family wealth includes total assets minus total debts and includes home equity.

<sup>152</sup> The Pew Charitable Trusts, "Hard Choices: Navigating the Economic Shock of Unemployment," The Pew Charitable Trusts, 2013.

<sup>153</sup> S-M. McKernan, C. Ratcliffe, K. Vinopal, "Do Assets Help Families Cope with Adverse Events?" The Urban Institute, Brief 10, November 2009 (accessed June 2013), [http://www.urban.org/uploadedpdf/411994\\_help\\_family\\_cope.pdf](http://www.urban.org/uploadedpdf/411994_help_family_cope.pdf); R. Cramer, R. O'Brien, D. Cooper, and M. Luengo-Prado, "A Penny Saved Is Mobility Earned: Advancing Economic Mobility Through Savings," The Pew Charitable Trusts, 2009, [http://www.pewstates.org/uploadedFiles/PCS\\_Assets/2009/EMP\\_Savings\\_Report.pdf](http://www.pewstates.org/uploadedFiles/PCS_Assets/2009/EMP_Savings_Report.pdf).

<sup>154</sup> R. Cramer, R. O'Brien, D. Cooper, and M. Luengo-Prado, "A Penny Saved Is Mobility Earned: Advancing Economic Mobility Through Savings," The Pew Charitable Trusts, 2009, [http://www.pewstates.org/uploadedFiles/PCS\\_Assets/2009/EMP\\_Savings\\_Report.pdf](http://www.pewstates.org/uploadedFiles/PCS_Assets/2009/EMP_Savings_Report.pdf).

<sup>155</sup> Ibid.

<sup>156</sup> P. Braveman, S. Egerter, D. Williams, "The Social Determinants of Health: Coming of Age," *Annu. Rev. Public Health* 32 (2011): 381–98.

<sup>157</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyningham, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>158</sup> United States Government Accountability Office. GAO-12-670. *Supplemental Nutrition Assistance Program. Improved Oversight of State Eligibility Expansions Needed* (Washington, D.C.: August 2, 2012).

<sup>159</sup> S-M. McKernan, C. Ratcliffe, K. Vinopal, "Do Assets Help Families Cope with Adverse Events?" The Urban Institute, Brief 10, November 2009 (accessed June 2013), [http://www.urban.org/uploadedpdf/411994\\_help\\_family\\_cope.pdf](http://www.urban.org/uploadedpdf/411994_help_family_cope.pdf).

<sup>160</sup> R. Black and M. Huelsman, "Overcoming Obstacles to College Attendance and Degree Completion" (Washington, D.C.: New America Foundation, 2012); A. Sprague & R. Black, "State Asset Limit Reforms and Implications for Federal Policy" (Washington, D.C.: New America Foundation, 2012).

<sup>161</sup> P. Braveman, S. Egerter, D. Williams, "The Social Determinants of Health: Coming of Age," *Annu. Rev. Public Health* 32 (2011): 381–98.

<sup>162</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyningham, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>163</sup> Robert Wood Johnson Foundation, "How Does Employment, or Unemployment, Affect Health?" Health Policy Snapshot Series, March 2013, <http://www.rwjf.org/en/research-publications/find-rwjf-research/2012/12/how-does-employment--or-unemployment--affect-health-.html>. Accessed June 25, 2013.

<sup>164</sup> A. P. Carnevale, J. Strohl, and N. Smith, "Help Wanted: Postsecondary Education and Training Required," in *New Directions for Community Colleges*. Wiley Periodicals, 2009, <http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/HelpWanted.pdf>.

<sup>165</sup> United States General Accounting Office, *Food Stamp Employment and Training Program: Better Data is Needed to Understand Who Is Served and What the Program Achieves*, GAO (March 2003), <http://www.gao.gov/new.items/d03388.pdf>.

<sup>166</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunyningham, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

<sup>167</sup> Ibid.; D. Rosenbaum, "The Relationship Between SNAP and Work Among Low-Income Households." Center on Budget and Policy Priorities, January 2013.

<sup>168</sup> D. Rosenbaum, "The Relationship Between SNAP and Work Among Low-Income Households." Center on Budget and Policy Priorities, January 2013.

<sup>169</sup> The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) limits the receipt of SNAP benefits to three months in a three-year period for able-bodied adults without dependents (ABAWDs) who are not working, participating in, and complying with the requirements of a work program for 20 hours or more each week, or a workfare program. Individuals are exempt from this

---

provision if they are: under 18 or 50 years of age or older, responsible for the care of a child or incapacitated household member, medically certified as physically or mentally unfit for employment, pregnant, or already exempt from the work requirements of the Food Stamp Act. "Supplemental Nutrition Assistance Program: Able-bodied Adults Without Dependents (ABAWDs)," ["http://www.fns.usda.gov/snap/rules/memo/PRWORA/abawds/abawdspage.htm"](http://www.fns.usda.gov/snap/rules/memo/PRWORA/abawds/abawdspage.htm)

<sup>170</sup> J. Leftin, A. Dodd, K. Filion, R. Wang, A. Gothro, K. Cunnyngham, "Analysis of Proposed Changes to SNAP Eligibility and Benefit Determination in the 2013 Farm Bill and Comparison of Cardiometabolic Health Status for SNAP Participants and Low-Income Nonparticipants (2013)," Prepared by Mathematica Policy Research for The Pew Charitable Trusts. Report No. 40181.700. Estimates available in Appendix B based on Mathematica's initial analysis, nearly identical to estimates in the final report forthcoming on August 8, 2013.

---

A collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.



901 E Street, NW, 10<sup>th</sup> Floor  
Washington, DC 20004  
Tel 202.540.6012 | fax 202.552.2299