High out-of-pocket costs for medications and other healthcare expenses can force older adults to choose between paying for their medical treatment and basic needs, like groceries and nutritious food. Food insecurity increases the chances that an individual may not be able to adhere to their medical treatment, even more so during the current pandemic, and research has also found that food insecurity can result in increased healthcare costs. This issue brief describes the growing problem of food insecurity among older adults and addresses the link between food insecurity, out-of-pocket healthcare costs, and individuals' ability to access their healthcare.
The importance of optimal nutrition in older adults

Professional societies, federal agencies, and other stakeholders have long highlighted the importance of good nutrition throughout an individual's lifespan, and improving nutrition has been a national public health objective for decades.\(^1\) In addition to promoting overall health, good nutrition helps individuals maintain a healthy weight and reduces their risk of developing chronic conditions, such as diabetes and heart disease. In older adults, a nutritious diet slows the rate of age-related muscle loss, reduces the risk of infection by maintaining immune function, and helps slow vision loss.\(^2,3,4\)

Although the benefits of maintaining optimal nutrition at older ages are well-known, there are numerous challenges that stand in the way of achieving this goal. These difficulties were explored in detail in a report by the Institute of Medicine.\(^5\) Their report pointed to several age-related issues that hinder the maintenance of optimal nutrition among the elderly, including:

- Sensory and physiological changes that accompany aging
- Varying levels of family support and an increasing number of older adults who live alone
- Decreasing oral health, including tooth loss and loss of taste and smell
- Memory and cognitive impairments that impact food shopping and meal planning
- Increased cost of, and decreased spending on food, especially among older adults with low or fixed incomes

The Institute of Medicine committee allocated considerable time to discussing economic and other factors that can have an unfavorable impact on older adults' nutritional status in their report. These factors fall under the general umbrella of “food insecurity.”
About food insecurity—a growing trend

Food insecurity refers to the availability of food and the ability of an individual or household to access it. As shown in figure 1, the U.S. Department of Agriculture defines several categories of food security and insecurity. Determining the presence and severity of food insecurity requires an understanding of the interplay of many individual and household characteristics over extended periods of time, which is why food insecurity is a dynamic characteristic.

**FIGURE 1**

Categories of food security and insecurity

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>High food security:</td>
<td>households had no problems, or anxiety about, consistently accessing adequate food</td>
</tr>
<tr>
<td>Marginal food security:</td>
<td>households had problems or anxiety at times about accessing adequate food, but the quality, variety, and quality of their food were not substantially reduced</td>
</tr>
<tr>
<td>Low food security:</td>
<td>households reduced the quality, variety, and desirability of their diets, but the quantity of food intake and normal eating patterns were not substantially disrupted</td>
</tr>
<tr>
<td>Very low food security:</td>
<td>at times during the year, eating patterns of one or more household members were disrupted and food intake reduced because the household lacked money or other resources for food.</td>
</tr>
</tbody>
</table>

Food insecurity is different from hunger. Whereas food insecurity refers to a lack of resources to access food, hunger is a physical discomfort that is experienced by an individual. However, food insecurity and hunger are closely related."
The number of older adults with food insecurity

A 2018 study on food insecurity among America's seniors offers insight on two important measures—food insecurity and very low food security. Results showed that:

- 7.3 percent of seniors—5.3 million people—were food insecure and 2.7 percent— translating to 2 million people—were experiencing very low food security.
- Food insecurity and very low food security increase dramatically as income decreases, as shown in table 1.
- Between 2001 and 2018, the proportion of seniors categorized as food insecure and very low food security increased by 38 percent and 94 percent, respectively.
- Food insecurity was greatest among seniors of color, those with lower incomes, and those who rent, as opposed to own their homes.

| Table 1 |
|-----------------|-----------------|-----------------|-----------------|
| **The relationship between food insecurity and income** |
| Food security category | Percent of older adults by Federal Poverty Level (FPL), 2018 |
| | Below 100% FPL | 100% - 200% FPL | >200% FPL |
| Food insecure | 29.5% | 17.3% | 2.7% |
| Very low food security | 14.2% | 6.1% | 0.8% |


A key finding from this report is that among older adults who were either food insecure or who had very low food security, almost two-thirds had incomes above the Federal Poverty Level. This is important because eligibility for many programs that help older adults access food are based on calculations that involve the Federal Poverty Level.

The impact of food insecurity on older adults

Older adults who have food insecurity consume fewer calories and nutrients and have lower dietary quality than their food secure counterparts. One study showed that compared to food secure adults aged 60 and older, those who were food insecure consumed fewer calories, protein, vitamin A, thiamin, riboflavin, vitamin B6, vitamin C, calcium, phosphorous, magnesium, and iron. For each of 11 nutrients, food insecure older adults had intakes that were between 9 percent and 26 percent lower than their food secure counterparts.
These nutritional decrements are linked to a wide array of unfavorable health characteristics. A study from the University of Michigan found that among adults aged 50–80, food insecurity was associated with lower physical and mental health, with 45 percent rating their physical health as fair or poor, compared to 14 percent among those who were food secure. Additionally, 24 percent of food insecure adults reported that their mental health was fair or poor, compared to five percent of those who were food secure.\textsuperscript{12}

**Programs to help older adults with food insecurity**

Some older adults with food insecurity can receive assistance if they meet certain eligibility criteria.

- **Supplemental Nutrition Assistance Program (SNAP):** SNAP is the country’s largest hunger program. Although about 4.7 million adults ages 60 and older are enrolled in SNAP, this group represents fewer than half of older adults who are eligible for this program.\textsuperscript{13} Some older adults don’t apply for SNAP because of a widely-held misperception that the benefits are low, or because of a perceived stigma associated with asking for help. Other seniors face barriers in the application process, such as lack of access to the internet to fill out the online application.\textsuperscript{14}

- **Commodity Supplemental Food Program (CSFP):** Through collaborations at the state-level, the CSFP program distributes monthly food packages to adults ages 60 and older with incomes at or below 130 percent of the Federal Poverty Level. CSFP is the only USDA nutrition program that provides monthly food assistance specifically targeted at low-income seniors, and it recently became available in all 50 states.\textsuperscript{15} The program serves more than 600,000 economically vulnerable older adults per month.\textsuperscript{17}

- **Senior Farmers’ Market Nutrition Program (SFMNP):** The SFMNP awards grants to states to provide low income seniors—defined as adults ages 60 and older—with coupons that can be exchanged for eligible foods at farmers’ markets, roadside stands, and community-supported agriculture programs. This program serves more than 800,000 people each year.\textsuperscript{18}

- **The Older Americans Act (OAA) Nutrition Program:** Operated by the U.S. Administration for Community Living, this program provides grants to states to support nutrition for older adults, serving more than 2.4 million people annually.\textsuperscript{19} Unlike some other federally funded food programs, the OAA Nutrition Program is not restricted to low-income older adults—the only federal eligibility criterion is that program recipients must be 60 years of age or older. However, because the programs are run by the states, there is considerable variation in how the program is implemented.\textsuperscript{20}
The connection between food insecurity and out-of-pocket healthcare costs

Multiple studies have shown that the economic vulnerabilities that characterize people with high out-of-pocket healthcare costs force them to make decisions between essential medical treatments and basic needs, like food and housing.

This research has shown that people who are food insecure also have problems covering their out-of-pocket healthcare costs, and vice versa.

A 2019 study by the Kaiser Family Foundation showed that 30 percent of American adults report having to choose between paying medical bills and basic necessities like food, heating, and housing.

Another report from 2018 by the West Health Institute and NORC University of Chicago indicated that 70 percent of Americans say they have cut back on basic household necessities to cover their out-of-pocket healthcare costs.\(^{21,22}\)

Less healthy older adults have higher out-of-pocket healthcare costs that put additional pressure on their household budgets. In this context, it is not surprising that among older adults, food insecurity increases in parallel with the number of chronic conditions that an older adult needs to manage.\(^{23}\) Moreover, as food insecurity becomes more acute, the likelihood that an older adult will engage in cost-related medication underuse increases.\(^{24}\)

In addition to the close relationship between food insecurity and high out-of-pocket medical costs, research published in *Preventing Chronic Disease* has shown that food insecurity results in higher healthcare costs among older adults.\(^{25}\) Not only is the prevalence of common chronic conditions like high blood pressure, arthritis, and diabetes higher among older adults who are food insecure, but the healthcare costs for specific chronic conditions among older, food insecure adults are higher than the costs for the same health conditions among older adults who are not food insecure.

However, the research also found that food insecurity added about 11 percent to healthcare costs, regardless of whether older adults had chronic conditions or not, underscoring the role of food insecurity in healthcare spending.

The authors concluded that addressing food insecurity in older adults could result in significant healthcare savings, while simultaneously relieving unnecessary burdens for vulnerable seniors.
The impact of the COVID-19 pandemic on older adults’ food security

To date, hundreds of thousands of Americans have died due to COVID-19 and millions of people have become somewhat or seriously ill due to the disease. Compared to Americans ages 18-29, COVID-19 mortality is 90 times higher in people ages 65-74; 220 times higher in people ages 75-84; and 630 times higher in people older than 85.26

In addition to the toll on the nation’s health, the pandemic has impacted businesses across the nation, forcing millions out of their jobs, and it continues to place pressure on vulnerable older adults that extends far beyond their risk of severe illness. Social distancing is among the main public health recommendations during COVID-19, particularly for older adults who have been disproportionately impacted by the virus.

However, social distancing is challenging for seniors who live in poverty; reside in dense residential settings like apartment buildings; need assistance with basic daily activities; or no longer drive and need to take public transportation.

Similarly, food shopping and picking up emergency food supplies can expose seniors to COVID-19, and senior centers that used to host Meals on Wheels have been temporarily closed. The choice between accessing food and being exposed to COVID-19 has left many seniors even more food insecure than they were before the pandemic, leading various groups to propose measures to address the special circumstances that older, food insecure adults are currently facing.27, 28, 29
Conclusion

Food insecurity is a growing issue, particularly among older adults, and it has been exacerbated by the global COVID-19 pandemic. Food insecurity is a predictor of higher out-of-pocket healthcare costs, access to healthcare, and overall physical and mental health. Additionally, public and private insurers should be encouraged to adopt policies that address social determinants of health and as well as individual needs, to mitigate barriers that prevent patients from adhering to their medications. In order to support older individuals and improve their healthcare, this important issue must be addressed.

The PAN Foundation is an independent, national 501 (c)(3) organization dedicated to helping underinsured people with life-threatening, chronic and rare diseases get the medications and treatments they need by assisting with their out-of-pocket costs and advocating for improved access and affordability.

For more information about this Issue Brief, contact Amy Niles, Executive Vice President, at aniles@panfoundation.org.
Supporting Literature


20 Administration for Community Living. Nutrition Services. Available at: https://acl.gov/programs/health-wellness/nutrition-services


