

# Health, Disability and Food Insecurity



Food insecurity has been widely accepted as a key social determinant of health, recognizing that healthy bodies and minds require access to nutritious meals at every age. Inconsistent access to adequate amounts of nutritious food has a negative impact on the health of individuals at all ages. There is a growing body of literature that demonstrates that living with a disability is a key risk factor for food insecurity, adding another layer to our understanding of the dynamic relationship between food insecurity and health.<sup>1-8</sup> The USDA estimates that as of 2018, 37 million people, including more than 11 million children, in the United States were food insecure.<sup>9</sup>

An analysis of county data on health indicators, disability prevalence, and food insecurity shows that communities with the highest rates of food insecurity face a higher prevalence for diseases and other measures that are tied to health. Additionally, communities with higher proportions of households with a member who is disabled often have higher rates of food insecurity. For the tenth consecutive year, Feeding America has conducted the *Map the Meal Gap* study to estimate the prevalence of food insecurity for every county and congressional district in the United States. The following focuses on the intersections between food insecurity, health outcomes and disability status at the local level and is one of four related topics that make up the *Map the Meal Gap 2020* [report briefs](#).

**37 million**

-or-

**1/9**

people are food insecure.

In counties with high food insecurity:

**1/5**

people have a disability.

**1/7**

people have diabetes.

**1/4**

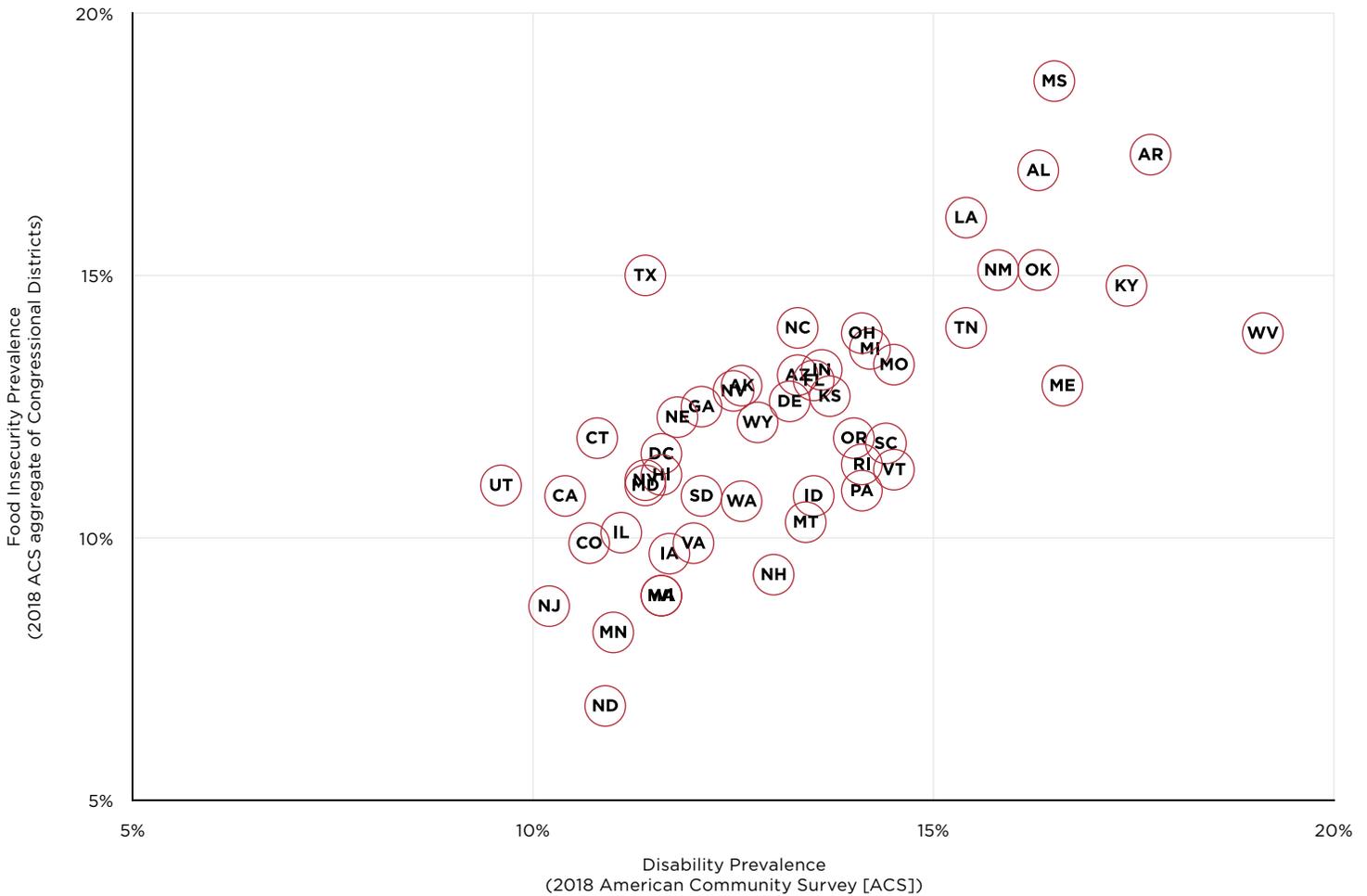
report poor or fair health.



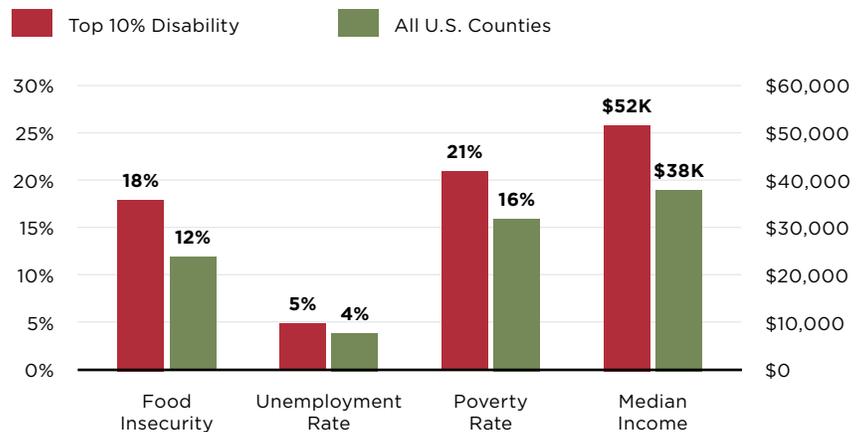
# The Impact of Disability on Food Insecurity

In response to the growing body of research that demonstrates disability as a key risk factor for food insecurity, *Map the Meal Gap* estimates now account for disability status. This measure includes individuals that report any of the following disability types: hearing, visual, cognitive, ambulatory, self-care or independent living.<sup>10</sup> States with a higher prevalence of individuals living with one or more disabilities also have higher rates of food insecurity.

## Food Insecurity and Disability Status by State, 2018



**The relationship between high rates of disability and high food insecurity is present in counties across the United States.** The prevalence of individuals living with a disability ranges from less than 4% in Pitkin County, Colorado to nearly 34% in Breathitt County, Kentucky. In counties with the highest rates of disability, one in six individuals is food insecure, compared to the national average of one in nine individuals. These counties also have higher poverty and unemployment rates than the national average and median incomes 26% lower than the national average.

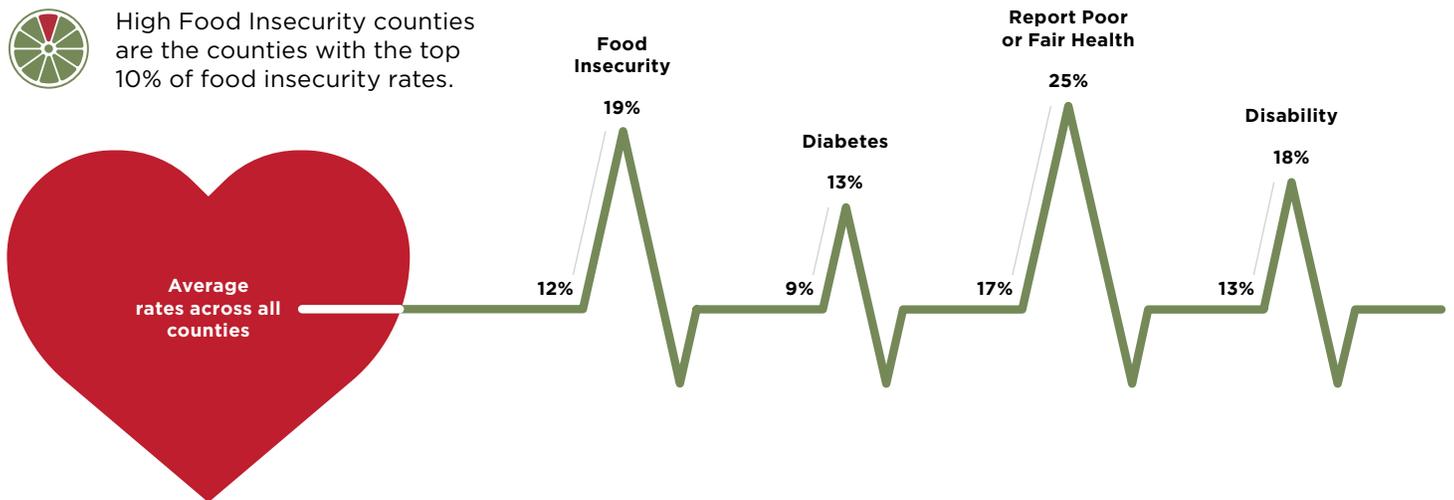


# Key Findings

## Food Insecurity and Health Implications at the County Level

A significant number of households served by the Feeding America network have members living with a chronic disease like diabetes (33% of households) or hypertension (58% of households) and are regularly confronted with these challenges to managing their health.<sup>11,12</sup> Results from *Map the Meal Gap* show that **counties with the highest rates of food insecurity also have a higher prevalence of diabetes and disability.** Among counties whose estimated rate of food insecurity falls in the top 10% of all counties, one in seven individuals has a diabetes diagnosis, one in four report poor or fair health and one in five has some form of disability.

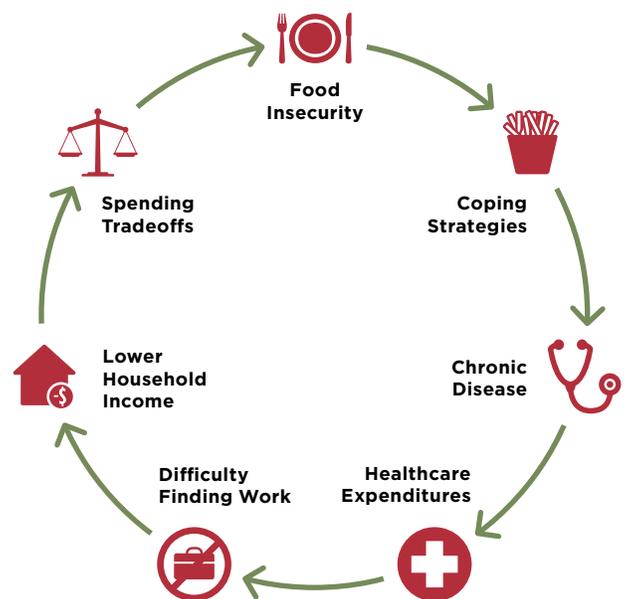
## Health Indicators of Individuals in High Food Insecurity Counties Compared to All Counties



## The Cycle of Food Insecurity and Health

Food insecurity and poor health outcomes can create a vicious cycle.<sup>13</sup> Food-insecure households are often forced to engage in coping strategies such as purchasing cheaper foods that are high in calories but low in nutritional value. Reliance on less healthy foods can lead to poor nutrition and chronic diet-related diseases such as diabetes.<sup>14</sup> In turn, these chronic illnesses can worsen existing disabilities or other illnesses, resulting in higher health care costs<sup>15</sup> and difficulty keeping a job or finding work.<sup>16</sup> These challenges further restrict the household food budget, resulting in fewer resources being allocated to food.

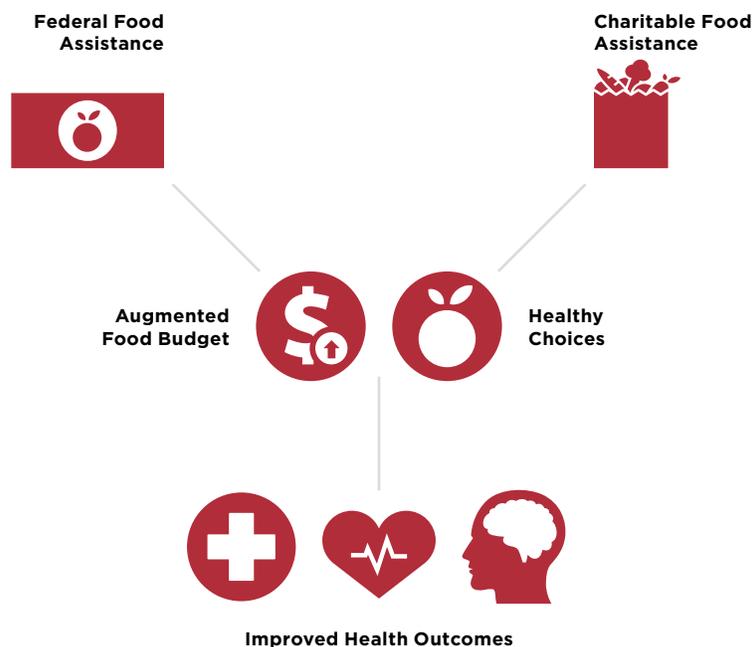
Addressing food insecurity can lead to improved health outcomes for individuals residing in food-insecure households, and consequently lower health care costs throughout the country. **Research using data from *Map the Meal Gap* finds that food insecurity is associated with higher health care costs across the United States and that these costs vary widely by geography.**<sup>17</sup> This suggests that policies and practices at the state and local level that improve food insecurity can also improve health and associated health care costs.



# Public and Charitable Food Assistance

**The Supplemental Nutrition Assistance Program (SNAP), the SNAP-Education (SNAP-Ed) and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) play a critical role in helping low-income families break out of the cycle of food insecurity and diet-related disease.** Both SNAP and WIC augment households' food budgets, allowing them to purchase more healthy foods; and WIC and SNAP-Ed provide nutrition education to participants as well. A 2013 review of SNAP-Ed found that it increased both consumption and willingness to consume fruits and vegetables among child participants.<sup>18</sup> These programs, along with other federal nutrition programs that target specific populations, make up the front line of defense against food insecurity.

**The charitable food system works to improve both food insecurity and health outcomes.** The Feeding America network distributed 1.5 billion pounds of fresh fruits and vegetables in 2019. In addition to distributing nutritious food, food banks and food pantries have emerged as important partners in addressing diabetes outside of the healthcare setting. Building on a successful diabetes prevention pilot, Feeding America conducted a two-year randomized controlled trial to understand how food bank interventions can promote the health of food-insecure individuals living with diabetes. The trial demonstrated several positive results, including increased food security for participants. The intervention included diabetes appropriate food, nutrition education, blood sugar monitoring and referrals to primary care physicians.<sup>19</sup> By joining together to help people struggling with hunger and diet-related disease, food banks and health care partners can have a greater impact on food insecurity and health in the United States.



## Map the Meal Gap Methodology

To accurately estimate the number of people experiencing food insecurity in every U.S. county and congressional district, *Map the Meal Gap* uses publicly available state and local data from the U.S. Census Bureau and Bureau of Labor Statistics on factors that research has shown to contribute to food insecurity. These factors include unemployment and poverty as well as other socioeconomic and demographic characteristics. Beginning in 2020, the estimates also account for disability status, one of the key risk factors for food insecurity. In addition to measuring how pervasive the need is, the study also estimates the cost of a meal and the additional amount of dollars needed among people who are food insecure using local data from Nielsen and national survey data from the Census Bureau. More information on methodology is available online in our [technical brief](#).

*Map the Meal Gap 2020* also features report [briefs](#) on other topics, including an executive summary, an overview of child food insecurity and an overview of food price variations. Additionally, the [interactive map](#) allows for the exploration of food insecurity across geographies throughout the U.S.

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