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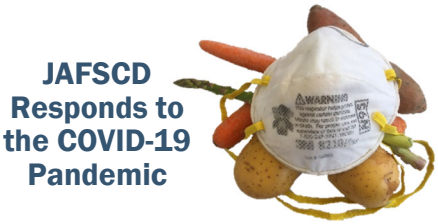
COMMENTARY ON COVID-19 AND THE FOOD SYSTEM

The impact of the COVID-19 pandemic on food insecurity



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Abstract

This research commentary reviews the current impact of the COVID-19 pandemic on food insecurity. We explore the impact of the pandemic on existing programs and evaluate how these programs adapted under these unprecedented circumstances. Moreover, we explore currently undertaken, favorable strategies for successfully addressing food insecurity during the pandemic. These initiatives include a nonprofit-retail industry partnership and programmatic strategies implemented by the U.S. Department of Agriculture (USDA). In an effort to bring awareness to addressing this important public health issue, we note the need to document these strategies and determine the most effective solutions to combat food insecurity in a vulnerable population.

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Conflict of Interest Statement

Dr. Sharma is on the board of directors of the nonprofit Brighter Bites, which works to improve access to fresh fruits and vegetables and nutrition education among underserved communities. This is an unpaid, advisory board position. The other authors have no conflicts of interest relevant to this article to disclose.

Keywords
Review, Food Insecurity, Food System, Nonprofit, COVID-19, Pandemic, Public Health

Introduction

Food insecurity is defined as "the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways" (USDA ERS, 2020, September). Food insecurity is a growing concern during the 2020 pandemic, caused by limited food resources that may lead to poor nutritional intake and diet-related chronic disease (Aiyer et al., 2019). Those who are food insecure often experience inadequate food supplies due to budget shortages, resulting in the consumption of unhealthy foods, including increased consumption of energy-dense foods with added sugars and saturated and/or trans fats that have low nutritional quality (Seligman, Laraia, & Kushel, 2010). These dietary patterns resulting from food insecurity can lead to poor nutritional status and poor health outcomes such as diabetes, hyperlipidemia, hypertension, and other chronic disease (Laraia, 2013; Seligman, Smith, Rosenmoss, Marshall, & Waxman, 2018).

As food insecurity rates increase in the United States, there is simultaneously a vast amount of consumable food wasted. In 2010, the U.S. wasted 30–40% of the edible food supply in retail, an estimated monetary loss of US$161 billion (U.S. Department of Agriculture, n.d.). As a resolution, the U.S. Department of Agriculture (USDA) joined with the U.S. Environmental Protection Agency (EPA) to cut the nation's food waste by 50% in 2030 (USDA, n.d.).

Furthermore, the COVID-19 pandemic has threatened the health of individuals and disrupted social welfare and the economy throughout the world. In September 2020, the number of infections in the U.S. passed 6 million cases and nearly 200,000 deaths (CDC, 2020). In 2019, prior to COVID-19, 10.5% or 13.7 million U.S. households were food insecure at one point (USDA Economic Research Service, 2020a, 2020b). As a result of the pandemic, the number of food-insecure individuals increased to approximately 54 million people (Feeding America, 2020). The pandemic continues to impact many, with reports indicating that food insecurity rates tripled among families with children in April 2020 (Schanzenbach & Pitts, 2020). Given the health impacts of food insecurity, it is urgent that sustained and scalable solutions be developed to mitigate food waste and address food insecurity among the most vulnerable.

Call to Action: Partnership Strategies to Mitigate Food Insecurity during COVID-19

Several innovative and promising solutions are currently being implemented to mitigate food insecurity among the most vulnerable. One method is avoiding food loss by donating excess food supplies to hunger-relief organizations targeting food-insecure individuals (USDA, n.d.). More recently, at the national level, the USDA followed its model by connecting suppliers directly to vulnerable consumers by distributing more than 90 million food boxes through the Farmers to Families Food Box Program to support American farmers and families affected by the COVID-19 pandemic (USDA, 2020). This is one example of a strategy that links food systems by allowing for the procurement of more produce from farmers and providing it to families most in need.

From a policy perspective, Supplemental Nutrition Assistance Program (SNAP) and Medicaid set in new actions to implement federal flexibilities in response to the pandemic, such as allowing participants to purchase food online from Amazon and Walmart with a delivery option and allowing recipients to obtain the maximum amount for their household size (Texas Health and Human Services, n.d.-a.). During the 2019-2020 school year, the USDA approved Texas for Pandemic Electronic Benefit Transfer (P-EBT) with more than US$1 billion to provide one-time payment benefits for families who lost access to free or reduced-price meals (Texas Health and Human Services, n.d.-b.). In fact, several food policies are being tested at the local level to specifically address low-income, vulnerable communities during the

COVID-19 period that could be sustained and scaled. For example, El Paso County opened an application process for US$1 million in healthy food financing initiative funds to develop the infrastructure to increase access to healthy and affordable food by offering grants and low-interest loans in high-need areas (Paso Del Norte Health Foundation, 2020). These strategies allow more food-insecure families to enroll in SNAP and access services and government assistance to meet their needs.

At the programmatic level, several community-based organizations are implementing innovative solutions that could be rapidly scaled. For example, due to COVID-19 related school closures, a nonprofit/retail industry partnership was forged through a program called Brighter Bites (Sharma, Markham, Chow, Ranjit, Pomeroy, & Raber, 2016; Sharma et al., 2019). This nonprofit pivoted to partner with the for-profit grocery retail stores to distribute biweekly produce vouchers to their participating families with children, combining this with its comprehensive health literacy framework to continue to provide fruits and vegetables and nutrition education on their website (Brighter Bites, 2020). Other programmatic strategies include SNAP Double Up programs where every SNAP dollar spent would be matched in free double up food bucks to spend on local produce at participating farmers markets (USDA SNAP-Ed Connection, 2009). Another successful farmers market incentive program is the Utah Double Up Food Bucks (DUFB) program, established to allow locally grown fruits and vegetables to be more affordable and accessible for low-income people (Durward et al., 2019). These partnerships between for-profit, nonprofit, and government agencies can create healthy, food-secure ecosystems by connecting systems to build new networks.

Conclusion

Faced with the current challenges of COVID-19 and overstraining health systems, it is crucial to understand and document initiatives creating structural improvement among these food-insecure, vulnerable populations by achieving long-term nutritional impact and behavioral changes. We call for scaling and sustaining these policy, partnership, and programmatic strategies among new and existing programs to help mitigate food insecurity during COVID-19. Furthermore, a systematic evaluation of existing programs is needed to analyze the current efforts undertaken to produce scientifically sound, evidence-based organizational and community approaches necessary to achieve structural changes for an equitable, sustainable food system.

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