Food Insecurity on College Campuses

A Review of Literature and Perspectives from the Field

Introduction

Food insecurity among students on college campuses is not a new concern, but it saw a surge in interest in 2017 through the #RealCollege movement (S. Goldrick-Rab, personal communication, November 12, 2019) and recently received additional scrutiny, following a report released by the U.S. Government Accountability Office in late 2018. The U.S. Department of Agriculture (2017, p. 10) defines food insecurity as a condition whereby people do not have "access…at all times to enough food for an active, healthy life." The single greatest cause of food insecurity in the United States is inadequate financial resources to obtain the food (U.S. Department of Agriculture, 2017). Educators, policy leaders, and researchers agree that food insecurity is a widespread and serious concern. An understanding about the nature of the broader issue, including root causes, as well as strategies to address it are emerging in a more concentrated way (Broton & Goldrick-Rab, 2018; Bruening, Argo, Payne-Sturges, & Laska, 2017; Dubick, Mathews, & Cady, 2016; Forman, Mangini, Dong, Hernandez, & Fingerman, 2018; Meza, Altman, Martinez, & Leung, 2018). To date, very little research has been completed to assess outcomes or effectiveness of interventions and strategies that address food insecurity.

Wilder Research reviewed current literature related to food insecurity on college campuses and also completed telephone interviews with experts involved in this work. This report summarizes key points in the literature and from the interviews that describe the nature of food insecurity, risk factors associated with food insecurity, negative impacts on students' academic performance and well-being, and strategies being implemented to address the issue.

Rates of food insecurity

Researchers have sought to develop estimates of the prevalence of food insecurity on college campuses. Most study results are limited to the students at the institutions being considered (i.e., one institution, several campuses, small sample sizes, or low survey response rates) and the results are not generalizable to all students on college campuses in the United States. Several national studies, using extant data and more intensive research methods, have estimated the prevalence of food insecurity among undergraduate students to range from 14% to 59% (Blagg, Whitmore-Schanzenbach, Gundersen, & Ziliak, 2017; Broton & Goldrick-Rab, 2018; Bruening, Brennhofer, van Woerden, Todd, & Laska, 2016; Forman et al., 2018; Hagedorn et al., 2019; Henry, 2017; Hollis, 2017; King, 2017; Knol, Robb, McKinley, & Wood, 2018).

A 2018 study completed by Nazmi et al. compiled data from multiple studies and determined that the current rate of food insecurity is about 44%. Another completed by Goldrick-Rab, Baker-Smith, Coca, Looker, and Williams (2019) determined that the current rate of food insecurity is 48% for students at community colleges and 41% for students at 4-year institutions. Regardless of the actual proportion of students, data and anecdotal reports indicate that college students do experience food insecurity; almost all estimates indicate that rates on some campuses are higher than the national average (Bruening, van Woerden, Todd, & Laska, 2018; Hagedorn et al., 2019; Henry, 2017; Maroto, 2013; Nazmi et al., 2018).

Factors contributing to food insecurity

The convergence of a variety of circumstances and students' characteristics contribute to food insecurity among college students. A low-income status is considered the key risk factor (U.S. Government Accountability Office, 2018). According to the U.S. GAO report, the National Postsecondary Student Aid Study data indicate that college enrollment figures have seen an increase in students who are considered low income. Federal grants can help students afford higher education, but costs associated with college have also increased (U.S. Government Accountability Office, 2018). Additionally, many grants and other sources of financial aid do not cover all the costs of college attendance (Broton & Goldrick-Rab, 2018; Camelo, 2017; Goldrick-Rab et al, 2019). Costs of food on campuses may also be high relative to students' resources (Calvez, Miller, Thomas, Vazquez, & Walenta, 2016). With limited income and insufficient funds, students may have difficulties in meeting their basic needs (Gaines, Robb, Knol, & Sickler, 2014; Goldrick-Rab, Richardson, & Hernandez, 2017) and even find that they must choose between things like buying books or food (Dubick et al., 2016). Without adequate financial resources for food, many students go hungry (Broton & Goldrick-Rab, 2016).

Expert Perspective: The "New Economics of College"

- The rising cost of college is a factor, but not the only factor to increased food insecurity. The bigger issue is that the stated price of college is inaccurate and underestimates actual living expenses (Goldrick-Rab, 2016).
- There is a stagnation or decline in family income and wealth, so the ability to pay has not kept up with cost increases.
- The guidelines on the Free Application for Federal Student Aid (FAFSA) used to calculate financial assistance do not accurately capture the full costs of college attendance and family income stagnation, so fewer students who could use assistance get assistance.
- Supports like SNAP and TANF have significant restrictions for students, making most students ineligible. Students must then rely more heavily on other forms of income and assistance.
- Changes in the labor market strain student resources, and the opportunity cost of fixed academic schedules leaves students struggling to access labor markets that require time flexibility (which are also the markets most likely to be accessed by working students, such as service jobs).
- Per-student funding allocations on campuses have declined, so institutions are less equipped to respond to increasing need.
- The new realities of college attendance may be poorly understood by policymakers who attended college in a different era (of low costs and generous financial support).

The characteristics of college students today have also changed compared to what has historically been considered the "typical" college student. In addition to an increase in students with a low income status, students now are more likely to be older (average age of 26 years), have dependent children, be financially independent from their parents, and be working at least half time (U.S. Government Accountability Office, 2018).

Based on a review of 31 studies, the U.S. Government Accountability Office report (2018, pp. 14-15) identified seven main risk factors associated with food insecurity among college students, characteristics that were also identified by other researchers (Broton, Weaver, & Mai, 2018; Camelo, 2017; Davidson & Morrell, 2018; Forcone, 2018; Goldrick-Rab, Richardson, Schneider, Hernandez & Cady, 2018; Maroto, 2013; Martinez, Maynard, & Ritchie, 2016; Spaid & Gillett-Karam, 2018).

These characteristics include:

- Low income
- First-generation college student
- Receiving Supplemental Nutrition Assistance Program (SNAP) benefits
- Single parent
- A disability
- Homeless or at risk of homelessness
- Former foster youth

A number of studies also identified race as a risk factor. Researchers determined that students of color were more likely than their white counterparts to experience food insecurity (Broton, Weaver, et al., 2018; Forcone, 2018; Forman et al., 2018; Goldrick-Rab et al., 2019; Hagedorn et al., 2019; Maroto, 2013; Maroto, Snelling, & Linck, 2015; Martinez, Webb, et al., 2018; Morris, Smith, Davis, & Null, 2016; Payne-Sturges, Tjaden, Caldeira, Vincent, & Arria, 2018; Spaid & Gillett-Karam, 2018; Thompson, 2018; Willis, 2019; Wood & Harris, 2018).

Another risk factor identified by researchers is students' living arrangements. Students who are financially independent from their families, do not live with their families, and/or live off campus have a greater risk for food insecurity (Broton, Weaver, et al., 2018; Camelo, 2017; Gorman, 2014; Goldrick-Rab et al., 2019; Knol, Robb, McKinley, & Wood, 2017; Maroto, 2013; Maroto et al., 2015; Morris et al., 2016). Students who live off campus may be more likely to be the older and independent, non-traditional students identified in the U.S. Government Accountability Office (2018) report.

Additional barriers to accessing supports, highlighted in the literature include:

- Restrictive eligibility requirements for SNAP
- A lack of readily available information about SNAP and other campus-based supports
- Stigma associated with food insecurity and the use of public benefits to supplement resources available for food

(Broton, Weaver, et al., 2018; El Zein, Mathews, House, & Shelnutt, 2018; Henry, 2017; King, 2015; King, 2017; Tigerino, 2018)

Impact of food insecurity

The impact of food insecurity on students is also well documented. In general, educators, human service providers, and researchers agree about the following:

Food insecurity is likely to negatively affect:

- Academic achievement (e.g., difficulty concentrating, time spent managing non-academic situations)
- Physical health and well-being (e.g., hunger, poor health outcomes)
- Mental health and well-being (e.g., stigma, shame, stress)
- Time available for campus engagement
- Retention and graduation rates

(Agramont-Justiniano, 2018; Aleong, 2018; Allen & Alleman, 2019; Bianco, Bedore, Jiang, & Stamper, 2016; Broton & Goldrick-Rab, 2016; Bruening et al., 2016; Bruening et al., 2018; Butler, 2018; Cady, 2014; Camelo, 2017; Dubick et al., 2016; El Zein et al., 2017; Henry, 2017; Ilieva, Ahmed, & Yan, 2018; King, 2017; Knol et al., 2018; Maroto, 2013; Maroto et al., 2015; Martinez, Frongillo, Leung, & Ritchie, 2018; Martinez, Webb, et al., 2018; Mercado, 2017; Meza et al., 2018; Payne-Sturges et al., 2018; Raskind, Haardörfer, & Berg, 2019; Shipley & Christopher, 2018; Silva et al., 2017; van Woerden, Hruschka, & Bruening, 2018)

Addressing food insecurity

Colleges and states have found some success using a number of strategies to address food insecurity.

Efforts on campus

Efforts implemented on college campuses include:

- Education for faculty and staff about food insecurity, recognizing students who may require assistance, and services and supports available for students
- Education and outreach to students about available services and supports, nutrition, and financial management, including targeting freshmen who may be more vulnerable
- Providing free food (e.g., food pantries, free meals) and emergency assistance
- Centralizing, coordinating, and customizing student services, including online access (e.g., social workers, academic supports, assistance with applying for benefits, housing)
- Partnering with non-academic agencies to expand available resources

(Aleong, 2018; Bianco et al., 2016; Broton & Goldrick-Rab, 2016; Bruening et al., 2017; Buch, Langley, Johnson, & Coleman, 2016; Butler, 2018; Cady, 2014; Cady & White, 2018; Chaparro, Zaghloul, Holck, & Dobbs, 2009; El Zein et al., 2018; Fincher et al., 2018; Forcone, 2018; Forman et al., 2018; Galarneau, Canedo, Heng, Rosenberg, & Sheean-Remotto, n.d; Goldrick-Rab, 2018; Gupton, Trost, & Collins, 2018; Henry, 2017; Kim, 2018; King, 2017; Knol et al., 2017; Martinez et al., 2016; Martinez, Webb, et al., 2018; McArthur, Fasczewski, Wartinger, & Miller, 2018; McArthur, Ball, Danek, & Holbert, 2018; Nazmi et al., 2018;

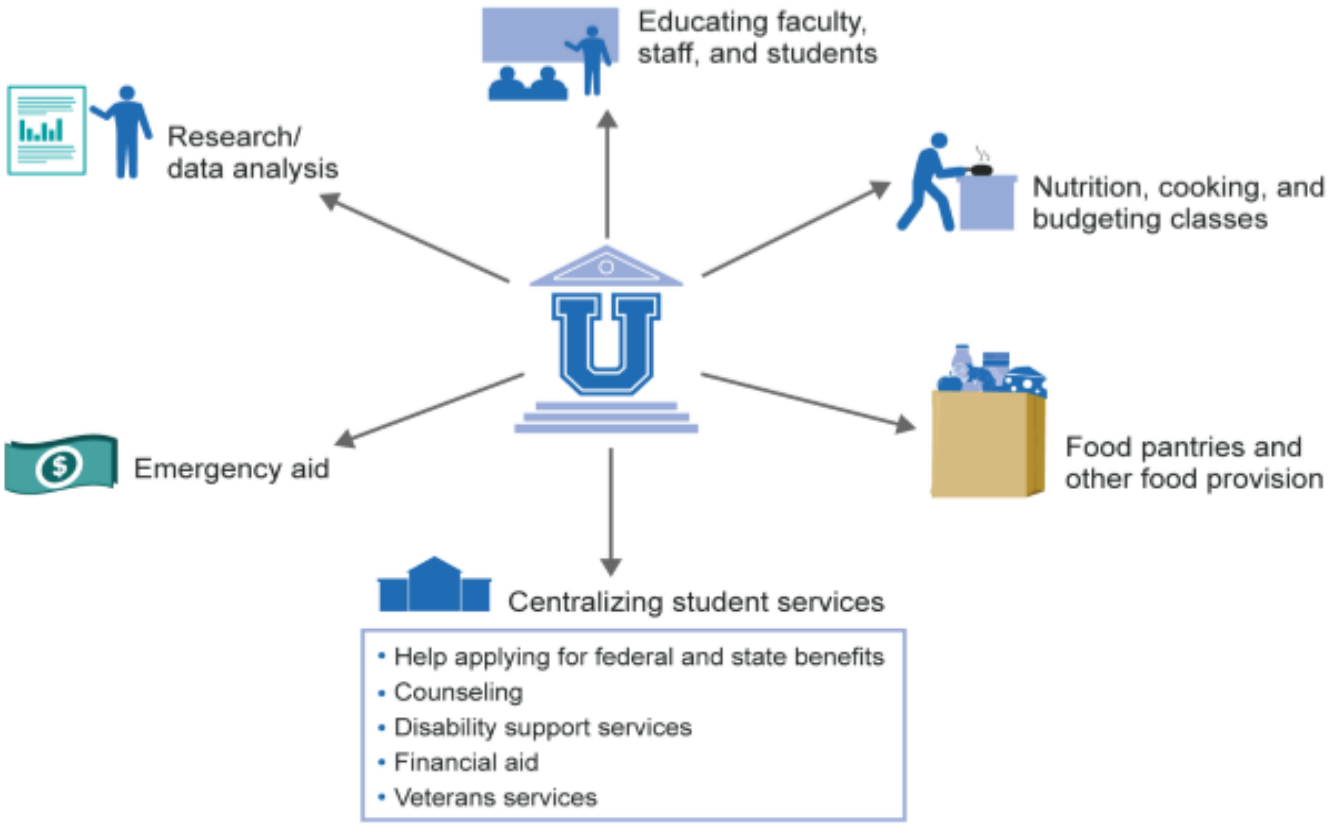
Expert perspective: Provide a continuum of strategies and support to combat campus hunger

- Food pantries and other provision of food resources represent the most basic and direct intervention; it is an effective intervention for getting resources to students, and a leading indicator for other successful interventions (it gets the campus talking about the issues and connects the campus to others working on the same issue), but it is not in itself a measure of success
- Campus information and engagement to inform students about resources including campus messaging, information sessions, and communication during orientation; this can inform students in need as well as frame this issue for other stakeholders
- Integrated support through existing campus structures (including place-based support) like the registrar's office and academic advising; this can increase access and reduce stigma related to receiving services
- Integrating food and budgeting education into mandatory coursework; this can help students work with food they might get at a pantry and build valuable life skills for all students
- Expand support efforts to work on potential co-occurring issues (e.g., housing and transportation) that are also risk factors for food insecurity; housing assistance appears to show the most promise
- Qualitative evidence from students indicate that providing these services increases their connection to their school, which is an indicator of school success and completion.

Novak & Johnson, 2017; O'Neill, 2019; Patton-Lopez, Lopez-Cevallos, Cancel-Tirado, & Vazquez, 2014; Phillips, McDaniel, & Croft, 2018; Price, Sampson, Reppond, Thomas-Brown, & Camp, 2019; Raskind et al., 2019; Shipley & Christopher, 2018; Twill, Bergdahl, & Fensler, 2016; University of California Global Food Initiative, 2017; van Woerden et al., 2018; Watson, Malan, Glik, & Martinez, 2017)

The U.S. Government Accountability Office report (2018) included the following graph to illustrate the range of strategies used to address food insecurity on college campuses (Figure 1).

1. GAO illustration of initiatives used by selected colleges to address student food insecurity (2018)



From *Food insecurity: Better information could help eligible college students access federal food assistance benefits* (p. 21), by U.S. Government Accountability Office, 2018 (https://www.gao.gov/assets/700/696254.pdf). Reprinted with permission. Source: Information from 14 selected colleges GAO contacted.

Examples of campus initiatives

The following examples illustrate a range of strategies used by colleges and universities to address food insecurity**.**

Expert perspective: How philanthropy can support the efforts

- Campus organizing and engagement efforts: Investments of $10-20K investment can do a lot to help students on a campus organize around the issue of hunger
- Emergency aid: Investing in direct support for students in crisis is always needed
- Comprehensive interventions: Working with on-the-ground programs to fund comprehensive strategies that include integrated on-campus service and auxiliary supports like housing assistance
- Communications and convening: Supporting inter-campus networks and national conferences can be an effective way to distribute effective practices
- Research and evaluation: Resources are always needed to continue to develop the research base related to what interventions are most effective

Global Food Initiative

Administrators at the University of California determined that addressing basic needs security, including food and housing, of its students was imperative and that there was a critical need for "establishing a holistic crisis resolution approach that will go beyond food pantries and look at the root of chronically food insecure students" (University of California Global Food Initiative, 2017, p.7). As part of the Global Food Initiative, the University of California system has produced materials that capture many of the components mentioned by other researchers. Their basic needs plan covered an array of initiatives and activities, including:

- Campus basic needs centers
- Producing informational materials that highlight basic needs information
- Outreach to students who may be most vulnerable for food insecurity
- Assistance with applying for benefits
- Trainings and workshops on topics such as budgeting and financial literacy, and purchasing and preparing healthy foods (University of California Global Food Initiative, 2017, pp. 6-7)

The Global Food Initiative also produced a toolkit that outlines a three-pronged approach to addressing food insecurity among students: 1) campus education and community engagement programs, 2) campus food access models, and 3) policy and institutional processes. The comprehensive toolkit provides examples of activities and programs in each category, including current program descriptions, insights, and information about implementation challenges. The authors encourage other educators to use this guide to tailor programs on their own campuses (Galarneau, Canedo, Heng, Rosenberg, & Sheean-Remotto, n.d.).

The College and University Food Bank Alliance

In 2012, the Michigan State Student Food Bank and the Oregon State University Food Pantry collaborated to develop The College and University Food Bank Alliance (CUFBA). The CUFBA website (http://cufba.org/) serves as a clearinghouse for current information on food insecurity on college campuses, and includes a nationwide network of more than 700 institutions. The primary function of CUFBA is to provide resources and support for colleges and universities who operate food banks for their students.

Food shelves or food banks, with a wide variety of methods for distributing donated or recovered food (unused from dining halls or other locations), are a popular strategy on many college campuses. Models range from smaller pantries to mobile units, and larger warehouses, and they are widely recognized as beneficial to students (Buch et al., 2016; Gupton et al., 2018; Kim, 2018; Reppond, Thomas-Brown, Sampson, & Price, 2018; Spaid & Gillett-Karam, 2018). Current literature is replete with examples, recommendations, and tips for establishing and increasing participation in food shelves on campuses (Cady & White, 2018; Chaparro et al., 2009; El Zein et al., 2018; King, 2017; LeGrand, 2018; Price et al., 2019; Twill et al., 2016).

Particularly noteworthy are two resources shared on the CUFBA website. Visitors to the website may download a comprehensive toolkit for starting a food pantry and a detailed guide for running a campus food pantry, both of which are considered evidence-based, best practices manuals. In addition, a 2018 report, *Campus Food Pantries: Insights from a National Survey* (Goldrick-Rab, Cady & Coca) provides results from a survey of campus food pantries.

Faculty input

The website of The Hope Center for College, Community, and Justice serves as a repository for current research and practical guides on the multiple challenges many college students face in completing their degrees. The FAST (Faculty and Students Together) Fund is highlighted as an initiative that involves faculty in providing comprehensive emergency aid for students, which may include food. Due to their daily contact with students, faculty members can serve as key sentinels for students who may be struggling, and provide front line assistance in connecting them with services and supports (Cady, Conroy, Goldrick-Rab, & Rosen, 2019).

Other researchers suggest that by normalizing the conversation and raising awareness, faculty can also help reduce the stigma associated with food insecurity and facilitate the use of supports (El Zein et al., 2018; Hagedorn & Olfert, 2018; Henry, 2017; King, 2017). Goldrick-Rab (2019) provides guidelines for crafting a basic needs security statement that can be included in all course syllabi. The author believes that this is an efficient and consistent method for reaching students through their existing connections with faculty.

Meal card swipes

At Colorado State University, researchers examined the Students Against Hunger meal card swipes program, which is based on the Swipe Out Hunger initiative, whereby students donate unused meal swipes (that would expire at the end of the term) from their campus meal programs. The meal credits (i.e., free meal swipes) are then distributed to students experiencing food insecurity. The authors determined that students who had access to the meal vouchers were more likely to stay in school and improve their grade point averages (Novak & Johnson, 2017).

Centralized basic needs centers

The Single Stop program (https://singlestopusa.org/) partners with community colleges in Florida, Louisiana, Massachusetts, Mississippi, North Caroline, New York, Oregon, and Pennsylvania to provide access to a network of nonacademic services and supports for low-income students. At sites located on campuses, students meet with staff, complete benefits screening, connect to a wide range of community services, and receive case management services. Researchers determined that students who used Single Stop services were more likely to stay enrolled or graduate than student who did not (Zhu, Harnett & Scuello, 2018). Students who used Single Stop also had higher grade point averages than those who did not use this service (Zhu et al, 2018).

Another program, through United Way in King County (Seattle), has implemented Benefits Hubs on campuses where students meet with staff and are offered emergency financial, housing and food assistance, legal services, transportation, and childcare, as well as assistance applying for public benefits. The goal is to reduce barriers experienced by low-income students that make it difficult to complete their education (United Way of King County, n.d.).

Efforts by states

Efforts by states include revising rules and regulations that:

- Improve access and support eligibility for SNAP benefits
- Expand and revise eligibility requirements to include more Employment & Training courses and programs

(Bianco et al., 2016; Broton & Goldrick-Rab, 2016; Broton, Weaver, et al., 2018; Butler, 2018; King, 2015; Tigerino, 2018)

Many people erroneously believe that college students are not eligible for SNAP benefits. In fact, students who meet income and asset criteria and at least one exception are eligible to receive SNAP (The Hope Center, 2019).

The authors of *Beyond the Food Pantry: Supporting Students with Access to SNAP* describe the need for expanded collaboration between state agencies and educators, improved communication and outreach to students about benefits, and increased advocacy at the state and federal levels for changes to policies. They suggest that providing access to this benefit can directly boost students' access to adequate food, which can ultimately contribute to their well-being and success (The Hope Center, 2019).

Evaluating outcomes and effectiveness of strategies

Key experts interviewed for this report confirmed that very little currently completed research exists on effectiveness and outcomes related to strategies that address food insecurity, and that efforts vary by individual campus locations and states. They also agree that research on outcomes must be prioritized and believe that momentum is growing to address this gap in research on a broader scale. However, one respondent explained that multiple randomized controlled trial studies are currently in the field. Research using this methodology is considered rigorous and could yield important information about the effectiveness of the various strategies being implemented. The Hope Center is also currently leading a national evaluation of Swipe Out Hunger. Results for all the studies will become available over the next several years.

While robust data sets that could establish evidence of the impact of strategies are available or under development and the motivation to complete the research is substantial, a lack of funding challenges these efforts. Partnerships with philanthropic organizations have provided past research support and continue to provide an important platform for engagement and dissemination of results. In particular, the experts interviewed for this report, as well as the authors of articles included in this literature review, make the case for the critical importance of solid evidence to build and advance policy measures that will make a lasting impact on food insecurity.

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