

**FIGHTING FOOD INSECURITY: RECOMMENDATIONS FROM  
CHILD NUTRITION PROGRAM DIRECTORS IN ALABAMA'S BLACK BELT**

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**Abstract**

Public school students in the Black Belt of Alabama suffer from food insecurity disproportionately compared with national peers. Results of a recent mixed methods study indicated food insecurity levels that were three times the national average, with very low food security an alarming 11 times the national average. In the fight against hunger in our public schools, no professionals are more valuable than the Child Nutrition Programs (CNP) staff, headed by the local CNP director. The qualitative portion of the mixed methods study solicited input from CNP directors in 14 Black Belt counties in Alabama. The recommendations from structured interviews suggest an intentional, coordinated, and multifaceted approach to fight against food insecurity in our rural public schools.

*Keywords:* food insecurity, rural, Black Belt

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## Introduction

According to the most recent statistics published by the United States Department of Agriculture, over 38 million Americans, including over 6 million children, live in food insecure households (USDA, 2021). These households lack consistent access to “adequate food for active, healthy living for all household members” (USDA, 2020, p. 5). Food insecurity is pervasive in the United States, with every county reporting its presence among a percentage of its population (Everett, 2019).

Food insecurity among young adults is particularly detrimental. Adolescents suffering from food insecurity are more likely to experience negative academic outcomes (Shanafelt et al., 2016), along with behavioral (Jackson & Vaughn, 2016), physical (Eicher-Miller et al., 2009), and mental health problems (Burke et al., 2016). They are at higher risk of substance use (Baer et al., 2015), in greater danger of sexual exploitation (Dush, 2020), at greater risk of depression and suicidal ideation (McIntyre et al., 2013), and experience an overall higher rate of hospitalization compared to those from food secure homes (Banach, 2016). It comes as little surprise, then, that the presence of food insecurity among youth has been categorized as “a marker of vulnerability” (Kirkpatrick et al., 2010).

## Review of Literature

Rural communities are more vulnerable to food insecurity than their urban and suburban counterparts (Haynes-Maslow et al., 2020). This is especially true in the rural South, where African American children are twice as likely to suffer from food insecurity as their Caucasian peers (Zekeri, 2010). The racial disparity in food insecurity is also seen among all households on a national level, with 21.7 percent of African American households experiencing food insecurity during 2020, compared to the national average of 10.5 percent (USDA, 2021). (See Table 1.)

**Table 1**

*Food Insecurity Comparison: National vs. African American Averages, 2020*

	National Average	African American Average
Food insecure	10.5	21.7
Low food security	6.6	13.7
Very low food security	3.9	8.0

Since 1995, food insecurity in the United States has been measured each December using the Household Food Security Survey Module (HFSSM). This survey is designed to be completed by adults, even in households where children are present. This frequently leads to underreporting of food insecurity among children and adolescents, missing as many as 50% of children who report being hungry (Fram et al., 2015).

To better assess food insecurity among the adolescent population, in the early 2000s, the Children’s Food Security Scale (CFSS) was designed and published (Connell et al., 2004). This nine-question survey is designed to be taken by adolescents as young as 12 without an adult proxy,

allowing for a more accurate picture of food insecurity among youth. Despite its utility, the CFSS has been underutilized in research, leading to calls for its wider implementation in food security studies (Nalty et al., 2013).

Given the scarcity of self-reported food insecurity data among adolescents, particularly rural minorities, it was decided to administer the CFSS to public high school students in the Black Belt region of Alabama. Originally named for its dark, rich soils, the term “Black Belt” has come to denote, in more modern times, “a region or place with a majority Black population” (Tullos, 2004, p. 1); according to Winemiller (2009), the African American population must be “at or above 50 percent” (p. 5). Depending upon the lexicographer one consults, the Black Belt region in Alabama may be delineated as consisting of 12 to 21 counties. In whatever fashion the geographical boundaries are parsed, the overarching theme uniting the region is poverty. Zekeri et al. (2016) described Alabama’s Black Belt as “one of the poorest regions in the nation,” with “a majority of the residents” being “welfare-dependent” (p. 2). As Winemiller (2009) observed, the defining characteristics of the modern Black Belt “include low taxes on property, high rates of poverty and unemployment, low-achieving schools, and high rates of out-migration” (p. 4).

In households with children, the national average for food insecurity (FI) is 7.6 percent, which may be further divided into two categories: low food security (LFS; 6.8 percent) and very low food security (VLFS; 0.8 percent) (USDA, 2021). From October-December 2021, the CFSS was administered to 742 students in 16 public schools in nine Black Belt counties. Results from each participating school may be seen in Table 2.

**Table 2**

*Food Security/Insecurity Percentages in Participating Alabama Black Belt High Schools*

High School	N	FS	FI	LFS	VLFS
A	13	62	38	15	23
B	57	81	19	15.8	3.5
C	54	83	17	7.4	9.3
D	10	60	40	40	0
E	71	77	23	10	13
F	44	70	30	18.2	11.4
G	36	92	8	8	0
H	85	66	34	19	15
I	75	80	20	16	4
J	28	86	14	7	7
K	24	88	12	8	4
L	19	63	37	26	11
M	51	73	27	16	11
N	98	79	21	13	8
O	57	75	25	12.3	12.3
P	20	60	40	35	5

*Note* N = 742. Food Secure (FS), Food Insecure (FI), Low Food Security (LFS), Very Low Food Security (VLFS).

In each Black Belt school surveyed, food insecurity levels exceeded national averages; in some cases, exponentially so. Overall food insecurity among Black Belt students was measured at 24%, over three times the national average of 7.6%. Low food security (LFS) was measured at over twice the national average (15%, compared to 6.8%). Most alarmingly, very low food security (VLFS) was measured at 11.25 times the national rate (9% in the Black Belt, vs. 0.8% nationally). (See Table 3.)

**Table 3**

*Food Insecurity Comparison: National vs. Black Belt for Households with Children, 2020*

	National	Black Belt
Food secure	85.2	76.3
Food insecure	7.6	23.7
Low food security	6.8	14.7
Very low food security	0.8	9.0

## Methods

To better understand the difficulties posed by food insecurity to public school students in the Black Belt and develop a framework for change, input was solicited from Child Nutrition Programs (CNP) directors. These directors exercised oversight in the same Black Belt districts where the quantitative study was conducted, allowing for more direct analysis and interpretation of the data. A total of 14 CNP directors participated in structured interviews in November 2021. Analysis of these interviews revealed an interconnected tier of recommendations for combating food insecurity in rural public schools.

## Results

### Promote School Breakfast, But Shift Its Location

Studies have long demonstrated the benefits of eating breakfast, especially in terms of improving academic performance, student health, and reducing aberrant behavior (FRAC, 2020; Poppendieck, 2010). The question has been how to best increase participation, specifically in locations wherein a stigma is attached to the meal itself. As Poppendieck (2010) related:

A product of the War on Poverty, the School Breakfast Program has always been viewed as primarily a program for poor children, despite valiant efforts by many of its supporters to point out that affluent children also suffered if they skipped breakfast. Only recently, with the spread of “universal breakfast in the classroom” ... has it begun to lose its poverty-program profile. (p. 175)

Many believe the best method for increasing breakfast participation is to remove it from the cafeteria setting and place it squarely within the confines of the classroom. The Food Research & Action Center (2020) noted, “Implementing a breakfast after the bell model that moves breakfast out of the cafeteria and makes it more accessible and a part of the regular school day has proven to be the most successful strategy for increasing student participation” (p. 9). Among the various possibilities, the CNP directors recommended Breakfast in the Classroom (BIC) as the one most likely to produce positive results, reducing stigma and increasing participation (and thereby

reducing food insecurity). As Everett (2019) noted, "...when breakfast was offered to all children in their classrooms, after the day began, doing so doubled participation and reduced the stigma of being a poor kid eating in the cafeteria before school" (p. 59). Not only was the stigma removed; participation rates also soared. According to Everett (2019), "When schools simply change the location of breakfast, participation rates often increase from 30 percent to 90 percent" (p. 60).

Of the 14 CNP directors surveyed, seven (50%) said schools in their district participated in some form of Breakfast After the Bell program (e.g., Breakfast in the Classroom, Grab and Go, Second Chance Breakfast, etc.). Of the seven CNP directors whose districts implement some form of Breakfast After the Bell, six (86%) utilize the Breakfast in the Classroom model. Black Belt schools implementing BIC have seen a marked increase in breakfast participation. According to CNPD 8, whose district now sees 83% of students participate in breakfast, "This [breakfast participation] is much higher than before COVID. We started Breakfast in the Classroom because of COVID, and our numbers increased." The district overseen by CNPD 12 enjoyed a similar increase because of BIC. CNPD 12 observed, "Before the pandemic, about 60% of our elementary schools ate breakfast, but with breakfast in the classroom, we are doing about 85%. The high school and middle schools were doing about 45% before the pandemic, and now they are doing about 80%."

Not only are there health, behavioral, and academic advantages to be gained from implementing BIC, there are financial incentives, as well. CNPD 14 alluded to the fiscal benefits of BIC in observing, "...less hungry students perform better in the classroom; same costs as regular breakfast, but revenue is greater." According to Poppendieck (2010), states lose millions of federal dollars each year "compared with the amount they would receive if the state met a target of 60 percent of the low-income students who participate in lunch also eating breakfast" (p. 178).

Given the obvious benefits of BIC, why do more districts not participate? On the one hand, some CNP directors are unaware of its existence. One CNP director confessed during the qualitative study, "I didn't know about that program." On the other hand, other CNP directors have asked for BIC to be implemented, only to be denied. As one CNPD related, "I have asked the administrator many times to implement the program." Why might these denials be issued? According to one CNPD, "[School redacted] does breakfast in the classroom for 7<sup>th</sup> and 8<sup>th</sup> grade only to keep the crowds down in the cafeteria. The other schools declined that option because teachers do not want the food in their classrooms." This seems a common refrain, combined with a fear of potential loss of instructional time. However, as Poppendieck (2010) countered, BIC "...has been successful in increasing concentration and alertness during the morning hours and reducing tardiness, morning visits to the nurse's office, and morning disciplinary actions" (pp. 35-36). Given its immense potential for good, any possible drawbacks to participating in BIC would surely be offset.

### **Offer Healthier Food Options**

According to Eicher-Miller and Zhao (2018), "...adolescence [is] the pediatric age stage where food insecurity has the most potential for negative impact on child dietary intake" (p. 98). When it is considered that over twice as many children in the United States participate in school lunch than in school breakfast—29.7 million vs. 14.6 million during the 2018-2019 school year (FRAC, 2019)—it makes sense that the greatest gains to be made in the fight against adolescent malnutrition are made in the school lunchroom. Stated more simply, a meal that students eat impacts their nutritional health more than one they are prone to skip.

However, with the onset of COVID-19, many school cafeterias face financial deficits that frequently lead to students receiving less-than-optimal dining choices. In the place of fresh fruits and vegetables are sugary drinks and snacks. As one CNP director related, “I have noticed that fewer students are eating the traditional school meal... more unhealthy food items, including spicy chips and sodas, are being brought in daily.” Some school systems even provide these unhealthier options to students daily in outside-the-cafeteria snack stores (or sometimes even within the cafeteria) to raise additional money to fund cash-strapped programs. It is a vicious cycle, and, as in many instances in the adult world, children are the unwitting victims.

Ironically, the sugar-laden treats peddled by many school systems often lead to increased hunger among adolescents rather than promote food security. As Bruening et al. (2012) observed, “Food insecurity was significantly associated with...less healthy foods served at meals, and higher rates of binge eating. Food-insecure parents were 2 to 4 times more likely to report barriers to accessing fruits and vegetables” (p. 520).

In contrast to the heavily-processed food approach, many systems are finding success in the fight against food insecurity by offering more healthy choices, not less. As CNPD 5 observed:

Our District participates in the Fresh Fruit and Vegetable Program. The Fresh Fruit and Vegetable Program (FFVP) is an important tool in our efforts to combat childhood obesity. The program has been successful in introducing elementary school children to a variety of produce that they otherwise might not have the opportunity to sample.

To accomplish this, some Black Belt schools are turning to community gardens, or other farm-to-table initiatives, to fight hunger. CNPD 14 observed, “Supporting community gardens is a step in addressing lack of variety in fresh fruit and vegetables in the surrounding food deserts.” These approaches are to be applauded, and it is recommended that local professionals and business leaders research grant and initiative opportunities, such as those provided by the United States Department of Agriculture,<sup>1</sup> to implement these efforts on a broader scale. As Bruening et al. (2012) observed, “Environmental interventions are needed to protect vulnerable families against food insecurity and to improve access to affordable, healthy foods” (p. 520).

### **Develop and Implement School Food Pantries**

The final recommendation to emerge from the qualitative study concerns the establishment of on-site pantries in local schools to help reduce food insecurity among students. Food pantries offer the potential for students to collect healthy food items at no cost, providing much-needed nutritional support. Such pantries are especially beneficial in helping students combat the “weekend food gap” that many face.

Literature regarding food pantries in academic research, however, is scant. As Hossfeld et al. (2018) observed, “Food pantries are invisible in policy and academic research. While well known to the local social service providers in communities, there is little academic research on the local-level nonprofit food assistance network...” (p. 24). Unfortunately, food pantries seem scarcely more visible on rural school campuses. In fact, in no Black Belt district surveyed was a dedicated on-campus food pantry in operation—a need keenly felt by the CNP directors.

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<sup>1</sup> See, for example, the Healthy Food Financing Initiative, [Healthy Food Financing Initiative | Rural Development \(usda.gov\)](https://www.usda.gov/healthy-food-financing-initiative).

To implement a campus food pantry in Alabama, it is recommended to partner with one of the eight regional food banks comprising the Alabama Food Bank Association (ALFBA).<sup>2</sup> Although these food banks have varying food allocation and distribution procedures, each is a potential goldmine for school leaders seeking to offset food insecurity. As of this writing, a budding partnership is underway between the Food Bank of North Alabama and a high school in DeKalb County, Alabama. This pilot program would see an on-campus pantry stocked by the food bank, with food distributed to affected students by local school leaders. Hopefully, this effort will serve as a model to other school districts in search of practical solutions to the growing problem of food insecurity.

### **Conclusion**

There are no easy solutions to a problem as nuanced and deep-rooted as food insecurity. However, as an old maxim admonishes, it is better to light a candle than to curse the darkness. Perhaps more than any initiative a researcher might recommend, what is truly needful are school leaders with hearts that bleed for their impoverished children. Untold gains could be made in our schools—socially, emotionally, and academically—if leaders will only see the many possibilities available to improve their student’s lives, and, perhaps most importantly, if they will cultivate the determination to bring these novel ideas to life.

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<sup>2</sup> See [Alabama Food Bank Network | Alabama Food Bank Association \(feedingalabama.org\)](http://AlabamaFoodBankNetwork.org). Note that “network” is misspelled in the web address as “netwrok.”

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