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A Call for Theory to Guide Equity-Focused Federal Child Nutrition Program Policy Responses and Recovery Efforts in Times of Public Health Crisis

Juliana F. W. Cohen, ScM, ScD; Kristen Cooksey Stowers, PhD; Angela Odoms-Young, MS, PhD; Rebecca L. Franckle, ScD

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THE CORONAVIRUS DISEASE 2019 (COVID-19) pandemic and its related mitigation efforts have had a dramatic influence on food and nutrition security in the United States. During this period, families with children were particularly vulnerable, demonstrating incredible nutrition need. Before the pandemic, rates of food insecurity among households with children had been generally declining. Specifically, the prevalence of food insecurity among households with children younger than age 18 years was 13.6% in 2019 compared with 20.6% in 2011.^{1,2} However, resulting from COVID-19, these rates rose to 14.8% in 2020.^{1,2} Another measure of food hardship collected during the pandemic has been food insufficiency (ie, sometimes or often not having enough to eat), which increased among households with children from 9.8% in April 2020 to 13.7% in December 2020.³ Food insecurity and insufficiency rates are further pronounced in Black, Indigenous, and People of Color households. For example, in contrast to households overall, food insecurity in Black and Hispanic/Latinx headed households increased in 2020 during the pandemic, resulting in Hispanic children being more than twice as likely, and Black children almost three times more likely, to live in a food-insecure household than White children.² Consequently, not only is there a need for our national food and nutrition assistance system to improve food insecurity and food insufficiency in families with children generally, but also to address racial/ethnic, socioeconomic, and other disparities.

The US Department of Agriculture's (USDA) Child Nutrition Programs—including the National School Lunch Program

(NSLP), School Breakfast Program (SBP), Summer Food Service Program (SFSP), and Child and Adult Care Food Program (CACFP)—have historically played an important role in improving the diets and food security of children, particularly those from historically marginalized populations. Prior research has documented the benefits of participating in these Child Nutrition Programs, including healthier foods for children and reductions in food insecurity among families.⁴⁻⁶ Although there are many strengths to these programs, the pandemic has also highlighted the need to strengthen Child Nutrition Program policies for school-aged children. There are currently promising opportunities given the new directions and leadership of the Biden administration; on President Biden's first day in office, he signed Executive Order 13985 “Advancing Racial Equity and Support for Underserved Communities Through the Federal Government.”⁷ Building on food insecurity, current US Secretary of Agriculture Tom Vilsack has emphasized the USDA's commitment to advancing nutrition security, which acknowledges the coexistence of food insecurity and diet-related health inequities and includes prioritizing equitable systems.⁸ Evidence of this commitment is apparent in recent USDA funding for schools, which included an additional \$1 billion for purchasing domestically grown foods for school meal programs.⁹ Further, the administration has also highlighted that nutrition equity is a priority, including organizing a White House Conference on Hunger, Nutrition, and Health, with a focus on efforts to develop and catalyze a coordinated strategy to address hunger, improve nutrition, and reduce diet-related disparities.¹⁰ In addition, Congress passed the Keep Kids Fed Act during June 2022, which temporarily increased reimbursement rates for school meals and family day-care homes. These are all important steps as the USDA considers further expanding federal nutrition assistance programs as legislative priorities. Innovation, adaptations, and flexibilities to federal Child Nutrition Programs have been critical to supporting health and nutrition during the pandemic, and as public health moves toward pandemic recovery, it is essential that public health theory be used to ensure a focus on nutrition equity (ie, “the absence of avoidable and unfair differences in nutritional intake and in the health outcomes perpetuated by these differences.”¹¹)

It is well recognized that the root causes of food insecurity and insufficiency—as well as obesity—and disparities therein, are complex and result from structural inequities combined

with policies and systems that alter food environments.¹²⁻¹⁴ Therefore, they should also be viewed as a key target for intervention.¹²⁻¹⁴ As the country moves forward with the lifting of pandemic restrictions, this time of transition will facilitate a shift from emergency policy waivers and flexibilities toward more sustainable, permanent policies and programs targeting the root causes of structural inequities. Despite the extremely concerning levels of need, the country is also experiencing a time of great opportunity in child nutrition. There are many opportunities to improve Child Nutrition Programs, and it is critical to identify and focus on those that are most promising to address health and nutrition equity.

THEORY IS A CRITICAL INSTRUMENT FOR FRAMING PUBLIC HEALTH NUTRITION EFFORTS MOVING FORWARD

At a time when public health practitioners, policymakers, and other stakeholders are seeking to shape nutrition policy moving forward, recent calls have been made to leverage implementation science in the COVID-19 public health response.¹⁵ Alongside this shift, theory is a critical instrument that can structure new directions in child nutrition research and policies to address some of the pitfalls revealed by the pandemic, such as the influence on health equity. There are a range of theories that apply to child/family health, nutrition equity, and domestic policy initiatives. Here we utilize the Getting to Equity (GTE) Framework,¹² the Stigma and Food Inequity framework,¹⁶ and the Family Ecological Model (FEM)¹⁷ to demonstrate the utility of theory for guiding domestic public health nutrition policy.

The GTE framework, developed by Shiriki Kumanyika, stipulates that disparities in obesity, food insecurity, and other health issues cannot be addressed without attention to underlying inequities.¹⁰ The GTE framework prioritizes policy, system, and environmental interventions that reduce public health disparities and highlights four key domains: increasing healthy options, reducing deterrents to healthy behaviors, improving social and economic resources, and building community capacity. Antihunger programs, such as those administered through federal Child Nutrition Programs, are considered a key component of this framework as a mechanism to improve social and economic resources; they can provide economic relief (and indirectly increase food purchasing power) among households when children are receiving meals through these USDA programs. The GTE framework also draws attention to equity-oriented strategies that are mindful of and responsive to social disadvantage (ie, unfavorable social, economic, or political conditions that some groups of people systematically experience based on their relative position in social hierarchies) to guide the formulation of policies and programs that address—rather than compound—inequities.¹⁸ Further, the GTE framework encourages the compilation of information to answer key questions with a focus on who is excluded from benefits and why this is occurring. Therefore this framework is ideal to critically evaluate and improve Child Nutrition Programs from a nutrition equity perspective.

Another nutrition equity theory that can be useful to apply to Child Nutrition Programs is the “Stigma and Food Inequity” Framework developed by Earnshaw and Karpyn.¹⁶ This

framework highlights the powerful role that stigma plays in food inequities, particularly the social stigma associated with poverty and participation in federal safety net programs, such as Child Nutrition Programs. This framework also acknowledges the intersectionality of stigma, such as the potential simultaneous stigma associated with poverty, race, ethnicity, or gender. In addition, the Stigma and Food Inequity framework discusses “stigma manifestations,” such as structural manifestations of stigma (eg, food policies that result in limited food resources), and individual manifestations, both as perceivers (eg, stereotypes, prejudice, and discrimination that can result in practices that influence food decisions, such as implementation decisions regarding Child Nutrition Programs) and as individuals who are the targets of stigma. Lastly, this framework notes mediating mechanisms among individuals who are the targets of stigma, including access to resources (eg, availability of high-quality, healthy foods); household food environments, and psychosocial/behavioral processes in response to stigma (eg, coping with stressors through unhealthy eating behaviors); and moderating contextual factors, including history, culture, and human development. This framework provides an additional important lens when examining Child Nutrition Programs from a nutrition equity perspective.

The FEM, a family-centered model for childhood obesity prevention, was developed by Davison, Jurkowski, and Lawson¹⁷ to address the limitations of prior theories, which failed to address the importance of the family unit (eg, the role of parents/guardians) on influencing children’s health-related behaviors, such as diet. This model also highlights the complexity of family life, especially for lower-income households, and the need to consider the broader context, which influences parenting behaviors and therefore child nutrition outcomes. Specifically, FEM focuses on the “family ecology” and “family social and emotional context” as playing key roles in influencing parenting behaviors and practices, which in turn influences both parent health outcomes and child behaviors and health outcomes. First, the family ecology considers factors such as family history/structure (eg, race, ethnicity, family health risks, and generational poverty), child-specific characteristics (eg, age and gender); organizational factors (eg, child vs family-centered services), community factors (eg, availability of healthy foods), and media and policy factors (eg, marketing to children). Second, the family social and emotion context emphasizes family knowledge and social norms (eg, beliefs and self-efficacy regarding healthy behaviors) and social disparities and chronic stress (eg, food insecurity). FEM’s key components—which complement the broader scope of the other equity frameworks—highlight the opportunities for positive and sustainable health-related changes and draws attention to factors that may affect the equitable utilization of Child Nutrition Programs.

USING THEORY TO STRENGTHEN THE NSLP AND SBP

The NSLP is the largest of the Child Nutrition Programs, and before the COVID-19 pandemic in 2019, provided on average 29.6 million children in public and private nonprofit schools with free or low-cost lunches daily throughout the school year.¹⁹ Approximately half of students who participate in the

NSLP also participate in the SBP, which provides free or low-costs breakfasts (14.8 million children in 2019).²⁰ As a result of the pandemic and the rapid shift to remote learning for school-aged children during March 2020, income eligible school-aged students nationwide lost access to school meals traditionally served through the NSLP and SBP.^{15,21} When school meal service resumed remotely for students using various methods, on average 22.6 million children received school lunch and 12.5 million children received school breakfasts, a decrease of approximately 7 million lunches and 2.4 million breakfasts daily compared with the year prior.^{15,21}

Universal Free School Meals

To help address access to school meals, as well as the financial toll experienced by schools with the reductions in school meal participation, a universal free school meal (UFSM) policy was implemented. Whereas this policy increases access to school meals for all children, this policy may have important implications from a nutrition equity lens because it may lead to greater benefits among children at higher risk of poor health (and educational) outcomes, thus reducing disparities (see Figure 1). Specifically, children from lower-income households that were already eligible for free or reduced-priced meals may be more likely to participate in school meals due to reductions in anticipated stigma (eg, students do not want their peers to know they come from lower-income households and are eligible for free/reduced-price meals due to the anticipated stigma associated with poverty [Stigma and Food Inequity Framework]).²²⁻²⁴ In addition, a UFSM policy expands the reach of school meal programs to children from households that were near eligible for free or reduced-priced meals but still facing food insecurity.^{25,26}

As a result, UFSM has the potential to also address multiple domains of the GTE framework, including the ability to improve social and economic resources for lower-income households via UFSM implemented through antihunger programs (NSLP/SBP)²²; increase access to healthy options, especially among children living in both food deserts (ie, low income areas with limited supermarket availability) and food swamps (ie, areas inundated with unhealthy food retailers²⁷⁻³⁰); and reduce deterrents to healthy behaviors as students who consume healthier school foods are less likely to consume unhealthy foods after school, which may be particularly influential for children living in lower-income communities and communities of color that are typically targeted by fast-food restaurants and other less healthy food outlets (also highlighted as a structural manifestation of stigma in the Stigma and Food Equity framework).^{31,32} An additional structural manifestation of stigma/deterrent to healthy behaviors that is addressed though UFSM is around food policies related to the challenges often faced by families to complete school meal application forms for free or reduced-price meals (eg, language barriers or low literacy)²⁴; with a UFSM policy, this is no longer required for a child to receive free or low-cost school meals. From an FEM lens, in addition to addressing the media and policy factors (eg, policies related to competing school meals applications), as well as the community factors (eg, availability of healthy foods) already noted in the GTE framework, a UFSM policy may also play a role in reducing social disparities and chronic

stress for households by alleviating some economic stress and reducing food insecurity.²²

However, unintended consequences if a UFSM policy must also be considered; participating schools cease to collect free and reduced-price meal applications, but these data have historically been used to allocate educational funding to schools in lower-income communities.²⁹ Therefore, a key consideration will be identifying alternative measures and data sources to inform the allocation of school funds in an equitable manner. As highlighted in a previous research brief, *Improving Access to Free School Meals: Addressing Intersections Between Universal Free School Meal Approaches and Educational Funding*, there are multiple strategies that hold promise, including expanding waivers to use income data available as part of Medicaid (currently already being done in 19 states).³³ In addition, because Medicaid eligibility requirements are less restrictive than other programs, such as the Supplemental Nutrition Assistance Program, this strategy can help to ensure immigrant families are considered when allocating education funds.³³ Overall, despite the potential benefits of UFSM, this policy is set to expire at the end of the 2021-22 school year. State UFSM policies, such as those enacted in California,³⁴ Maine,³⁵ and Vermont³⁶ should therefore be strongly considered to promote nutrition equity.

Other School Nutrition Policies and Opportunities

The pandemic has also further highlighted the challenges faced by many schools meal programs that should also be considered from a GTE, FEM, and Stigma and Food Inequity perspective. School nutrition policies and opportunities that can help address some of these challenges include breakfast in the classroom policies, minimum lengths for school lunch periods, and targeted grants for equipment, infrastructure, and trainings for cafeteria employees (Figure 1).³⁷ First, because many schools began short-term policies to eat school meals in the classroom to address crowding concerns in cafeteria, this highlighted the potential feasibility and benefits of breakfast in the classroom policies.³⁷ Breakfast in the classroom can reduce deterrents to healthy behaviors (eg, many students, such as those in rural areas who may have to travel longer distances, often do not arrive in time for traditional breakfast before the bell [GTE]).³⁸ In addition, breakfast in the classroom policies can increase access to healthy options, and may be particularly helpful in addressing inequities by reducing the structural manifestation of stigma associated with school breakfast because it is frequently perceived as a program only utilized by students from lower-income households (GTE/Stigma and Food Inequity).^{24,39} Similar to the mechanism noted for UFSM, breakfast in the classroom also addresses media and policy factors, community factors, and social disparities and chronic stress (FEM).

Second, whereas a benefit of a UFSM policy has been an increase in school meal participation, the pandemic has also highlighted the challenges of sufficient time for students to eat due to the longer lunch lines (a challenge already faced by schools with a greater percentage students eligible for free or reduced-priced meals).³⁷ Minimum lengths for school lunch periods (eg, 25 to 30 minutes) can reduce deterrents to healthy behaviors by ensuring sufficient time for students to eat meals, particularly because students from lower-income households who receive free or reduced-price school meals

NSLP and SBP policies	Theory			Policy/research considerations
	Getting to Equity Framework	Family Ecological Model	Stigma and Food Inequity Framework	
UFSM ^{ab}	<p><u>Social and Economic Resources:</u> UFSM as part of a nutrition assistance program (NSLP/ SBP)</p> <p><u>Increase Access to Healthy Options:</u> UFSM provides healthy meals to children, especially those living in food swamps and food deserts</p> <p><u>Reduce Deterrents:</u> (1) Students who consume healthier meals through UFSM may be less likely to consume unhealthy foods after school, which may especially benefit children in communities often targeted by unhealthy food marketing/ outlets (eg, fast food)</p> <p>(2) UFSM removes policies that create challenges for families to complete school meal applications</p>	<p><u>Media and Policy Factors:</u> UFSM as part of a nutrition assistance program (NSLP/ SBP)</p> <p><u>Community Factors:</u> UFSM increases the availability of healthy foods for students</p> <p><u>Social Disparities and Chronic Stress:</u> UFSM alleviates household economic stress and reduces food insecurity</p>	<p><u>Anticipated Stigma:</u> Providing UFSM no longer identifies students from lower-income households</p> <p><u>Structural Manifestation of Stigma:</u></p> <p>(1) Students who consume healthier meals through UFSM may be less likely to consume unhealthy foods after school, which may especially benefit children in communities often targeted by unhealthy food marketing/outlets (eg, fast food)</p> <p>(2) UFSM removes policies that create challenges for families to complete school meal applications</p>	<p>(1) Research examining the influence of UFSM on students who are near eligible for free or reduced-priced meals</p> <p>(2) Consideration of alternative measures/data sources to allocate educational funding to schools in an equitable manner (an unintended consequence of no longer collecting free/reduced priced meal applications with a UFSM policy), such as income data from Medicaid</p> <p>(3) Greater consideration of opportunities to build community capacity/ engagement, family knowledge, and social norms (eg, innovative involvement of parents while recognizing their limited time and bandwidth)</p> <p>(4) More research examining the equity of impact of breakfast in the classroom policies</p>
BIC ^c	<p><u>Reduce Deterrents:</u> Students will no longer need to arrive early to school to receive a school breakfast (eg, children in rural communities traveling longer distances to school)</p> <p><u>Increase Access to Healthy Options:</u> BIC provides healthy breakfasts to children,</p>	<p><u>Media and Policy Factors:</u> BIC as part of a nutrition assistance program (SBP)</p> <p><u>Community Factors:</u> BIC provides healthy breakfasts to children, especially those living in food swamps and food deserts</p> <p><u>Social Disparities and Chronic Stress:</u> BIC alleviates</p>	<p><u>Structural Manifestation of Stigma:</u> BIC mitigates structural inequities in the way students participate in SBP (eg, needing to arrive early)</p> <p><u>Anticipated Stigma:</u> Providing BIC no longer identifies students from lower-income households (vs school</p>	

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Figure 1. Using theories to inform the National School Lunch Program (NSLP) and School Breakfast Program (SBP).^{21,22}

NSLP and SBP policies	Theory			Policy/research considerations
	Getting to Equity Framework	Family Ecological Model	Stigma and Food Inequity Framework	
	especially those living in food swamps and food deserts	household economic stress and reduces food insecurity	breakfast before the bell consumed primarily among students who are eligible for free/reduced price meals)	<ul style="list-style-type: none"> (5) Consideration of local, state, and federal policies mandating minimum lunch period lengths (eg, 25 to 30 minutes) (5) Consideration of state and federal grants with greater allocations of funds for historically marginalized communities
Minimum lunch period lengths	<u>Reduce Deterrents:</u> Students, especially those in schools with a greater number of students receiving free/reduced price meals, will have sufficient time to consume school meals	<u>Community Factors:</u> Longer lunches increases access via sufficient time to consume healthy foods	<u>Structural Manifestation of Stigma:</u> Longer lunches mitigates structural inequities in student having sufficient time to eat between children who receive school lunches compared with those who bring lunch from home	
Grants for equipment, infrastructure, and training opportunities for cafeteria employees	<u>Social and Economic Resource:</u> Policies that allocate more funds for equipment and infrastructure to schools in historically marginalized communities (eg, lower-income communities and communities of color) can help address inequities in access to healthier school meals	<u>Family History:</u> Improved equipment, infrastructure and trainings can help to provide culturally preferred meals <u>Family Knowledge and Social Norms:</u> Trainings for cafeteria staff can lead to increases in nutrition knowledge and self-efficacy regarding the preparation of healthier foods, which can be	<u>Structural Manifestation of Stigma:</u> <ul style="list-style-type: none"> (1) Greater allocation of funds for equipment and infrastructure to schools in historically marginalized communities can help address structural inequities in existing school kitchen environments 	

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Figure 1. (continued) Using theories to inform the National School Lunch Program (NSLP) and School Breakfast Program (SBP).^{21,22}

NSLP and SBP policies	Theory			Policy/research considerations
	Getting to Equity Framework	Family Ecological Model	Stigma and Food Inequity Framework	
	<p><u>Increase Access to Healthy Options:</u> Improvements in equipment and infrastructure can support schools' ability to serve healthier meals to students</p>	<p>particularly beneficial to cafeteria workers who also are from historically marginalized communities</p>	<p>(2) Training opportunities for cafeteria staff can help to partially overcome the differential ability of schools to have meals reviewed by a nutritionist</p> <p><u>Stigma Among Perceivers:</u> Training opportunities for cafeteria staff can also help to partially overcome decisions on which foods to serve that may perpetuate nutrition inequities</p>	
<p>^aTemporary policy implemented as a result of the coronavirus disease 2019 pandemic.</p> <p>^bUFSM = Universal Free School Meals.</p> <p>^cBIC = Breakfast in the Classroom.</p>				

Figure 1. (continued) Using theories to inform the National School Lunch Program (NSLP) and School Breakfast Program (SBP).^{21,22}

must spend time waiting on the cafeteria line (which is further exacerbated in schools with a greater percentage of students who receive free or reduced-priced meals [GTE]).

Lastly, the pandemic underscored the challenges that schools face in preparing more meals on site (especially those that include fresh fruits and vegetables), highlighting the needs for grants for equipment, infrastructure, and trainings for cafeteria employees, particularly for school districts with a greater percentage of lower-income and/or racial and ethnic minority households.³⁷ These grants could serve as a social and economic resource that could also increase access to healthy options by enhancing schools' abilities to provide healthier, culturally preferred meals in schools (GTE/FEM). Completing complex applications and high matching requirements are often barriers for underresourced schools, and therefore simplified application procedures and eligibility requirements can help support this process.³⁸ In addition, greater allocation of funds for equipment and infrastructure to schools in historically marginalized communities can help address structural manifestations of stigma (eg, structural inequities in existing school kitchen environments). Training opportunities for cafeteria staff to incorporate more culturally appropriate meals that aligns with family history can also help to address structural manifestations of stigma (eg, differential ability of schools to have meals reviewed by a nutritionist) and unintentional stigma among perceivers which can influence which foods are served (FEM/Stigma and Food Equity). There may be secondary benefits for many cafeteria workers (and their families) who both work and are themselves part of historically marginalized communities through an increase in family knowledge and social norms.

Family and Community Engagement

Moving forward, innovative opportunities to build community capacity/family knowledge and social norms, particularly among parents/guardians from underrepresented backgrounds, should be considered. Beyond Parent Teacher Associations (PTAs), Community Advisory Boards, including parents and other local organizations may be a viable structural option to create opportunities for community oversight of relevant policy and processes and inspire intersectoral action to advance child health equity. Additional creative strategies can be used to involve parents/guardians who may already have limited time, such as social media campaigns that encourage parents to share images of family recipes that school cafeterias can then bring to scale. Meaningful community engagement can support greater insights into family social and emotional contexts (including family knowledge and social norms, and aspects of social disparities and chronic stress [eg, the need for more social support and how school food policies may impact household resource shortfalls and parent mental health]) that could allow for the development of more inclusive and equitable programs for families in different contexts (FEM).

Overall, to help monitor the influence of school nutrition policies on child health and nutrition equity, assessments can be integrated into nationally administered, comprehensive studies (eg, School Nutrition and Meal Cost Study) as a feasible strategy for data collection. These assessments can address key gaps in current national data collection efforts,

including family ecology (eg, family history and culture) and family knowledge and social norms to better understand program participation decisions (FEM). UFSM policies (including the state-level legislation that will continue this policy) will be especially important to evaluate from a nutrition equity lens—particularly the influence on racial and ethnic minorities—including stigma, school meal participation and consumption, diet quality, and child and household nutrition security. In addition, to prevent unintended consequences of this policy, research should focus on the effectiveness and equity impact of alternative measures of poverty to allocate education funding. Similar equity-oriented outcomes should be considered for breakfast in the classroom, minimum lunch period lengths, and other school meal policies.

Using Theory to Strengthen the Summer Feeding Programs

The Child Nutrition Summer Feeding Programs provide free meals and snacks to school-aged children and adolescents during the summer months when school is not in session. These programs include the SFSP, which is a state-administered program through community sites such as schools and community centers in income-eligible areas, and the Seamless Summer Option (SSO), which enables the continuation of meal service rules and nutrition standards of NSLP during summer months.^{40,41} However, these programs are historically underutilized; in 2019, the SFSP and SSO collectively served fewer than 2.7 million children on an average weekday, in stark contrast to the nearly 30 million children who received free or reduced-priced meals via the NSLP during this same time frame.^{21,42} This may in part explain the elevated food insecurity rates that are typically observed during summer months among lower-income households with children.^{21,42,43} However, few studies have examined these low child participation rates in Summer Feeding Programs or the benefits of participation, highlighting the need for more work in this area.⁶

During the pandemic-related school closures, summer feeding programs became an instrumental mechanism for serving meals to children and adolescents. The rapid deployment of program waivers allowed for temporary program flexibilities in 2020-2021 that should be examined from a GTE, Stigma and Food Inequity, and FEM framework to consider policies that potentially should be continued to further strengthen summer meals and promote nutrition equity (see Figure 2). First, the USDA allowed summer meals to be served in noncongregate settings (ie, students no longer had to eat the meals at a specific summer meals site in a group setting), including home delivery; delivery along school bus routes; and meal pick-up at schools or other locations, including via drive-thru venues. Second, multiple days' worth of meals could be picked up at one time. Third, "area eligibility" requirements were waived, which allowed districts to provide meals to students from lower-income households living in areas with more wealth. Lastly, Summer Pandemic Electronic Benefit Transfer (P-EBT) was provided as a temporary provision of emergency benefits for eligible families to purchase food (as a continuation of a P-EBT effort that began during the school year). These flexibilities address multiple aspects of the GTE and FEM to promote

Summer Feeding Program policies	Theory			Policy/research considerations
	Getting to Equity Framework	Family Ecological Model	Stigma and Food Inequity Framework	
Noncongregate meal service ^a	<p><u>Increase Access to Healthy Options:</u> Non-congregate meal service enables more delivery methods for healthy meals to children, especially those living in food swamps and food deserts</p> <p><u>Reduce Deterrents:</u> Non-congregate meal service removes policies that create challenges for children to attend summer meal sites</p>	<p><u>Community Factors:</u> Non-congregate meal service increases the availability of summer meals for students</p> <p><u>Social Disparities and Chronic Stress:</u> Non-congregate meal service alleviates household economic stress and reduces food insecurity</p>	<p><u>Anticipated Stigma:</u> Non-congregate meal service reduces the ability to identify students from lower-income households</p> <p><u>Structural Manifestation of Stigma:</u> Non-congregate meal service removes policies that create challenges for children to attend summer meal sites</p>	<ol style="list-style-type: none"> (1) More research examining the best methods to distribute foods (including method of delivery and total number of meals provided at a time) to increase participation and equity of influence (2) Research examining the impact on food security and household outcomes (eg, reducing chronic disruption of family routines and improving household resource shortfalls, and parent sense of control and mental health) (3) Consideration of strategic partnerships with local farmers markets to integrate more fresh produce (4) Policies that ensure communication materials that promote healthy equity in images and framing and are in languages commonly spoken in the local community (5) Development of local summer wellness policies
Multiple meals provided at a time ^a	<p><u>Reduce Deterrents:</u> Students, especially with more limited access to transportation or in rural communities, can go less frequently to sites to obtain meals (compared with traditional meal programs that only provide one meal at a time)</p>	<p><u>Social Disparities and Chronic Stress:</u> Providing multiple meals alleviate disparities in the ability (and stress associated with logistics) to travel to a Summer Feeding Program site for every meal</p>	<p><u>Structural Manifestation of Stigma:</u> Providing multiple meals addresses structural inequities in the way students participate in the summer meal programs (eg, no longer needing to travel to sites for every meal)</p>	
Eliminating area eligibility requirements ^a	<p><u>Increase Access to Healthy Options:</u> Eliminating area eligibility requirements enables access to healthy meals to children from lower-income households who live in areas with more wealth via local sites</p> <p><u>Reduce Deterrents:</u> Eliminating area eligibility requirements removes policies that create challenges for children from</p>	<p><u>Community Factors:</u> Eliminating area eligibility requirements increases the availability of summer meals for students</p>	<p><u>Structural Manifestation of Stigma:</u> Eliminating area eligibility requirements policies removes policies that create challenges for children to attend summer meal sites</p>	

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Figure 2. Using theories to inform Summer Feeding Programs.^{41,42}

Summer Feeding Program policies	Theory			Policy/research considerations
	Getting to Equity Framework	Family Ecological Model	Stigma and Food Inequity Framework	
	lower-income households to receive summer meals			<p>that include diverse stakeholders, including decision makers (eg, those responsible for determining sites, hours of operation, foods offered, and communication materials/ strategies) and community members (eg, parents and youth) to ensure equitable access and influence of Summer Feeding Programs and to meet the needs of different communities</p> <p>(6) Examining the impact of P-EBT on child and household food insecurity and diet during summer months and consideration of policies to issue P-EBT benefits during all out of school time (eg, summer, holidays, and school closures)</p>
P-EBT ^{ab}	<p><u>Increase Access to Healthy Options:</u> P-EBT improves flexibility to purchase healthy, culturally preferred foods</p>	<p><u>Social Disparities and Chronic Stress:</u> P-EBT alleviates household economic stress and reduces food insecurity</p>	<p><u>Anticipated Stigma:</u> P-EBT reduces the ability to identify students from lower-income households</p>	
<p>^aTemporary policy implemented as a result of the coronavirus disease 2019 pandemic.</p> <p>^bP-EBT = Pandemic Electronic Benefit Transfer.</p>				

Figure 2. (continued) Using theories to inform Summer Feeding Programs.^{41,42}

nutrition equity and health outcomes among children at greatest risk for food insecurity: improving social and economic resources via implemented through antihunger programs (Summer Feeding Programs [GTE]); reducing deterrents to healthy behaviors such as by making it easier for children to access summer meals (GTE); increasing access to healthy options (and improving community factors) by providing healthier foods, especially in areas that are food swamps or food deserts [GTE/ FEM]); and addressing social disparities and chronic stress by creating more feasible and lower burden opportunities to access summer meals (FEM). In addition, these flexibilities may have reduced some of the structural manifestations of stigma associated with receiving summer meals in a congregate setting (Stigma and Food Inequity).

Moving forward, summer feeding programs could be further strengthened by building community capacity (GTE), such as strategic partnerships with local farmers markets (including Black, Indigenous, and People of Color farmers and farmers from other historically marginalized backgrounds) to integrate more fresh produce, as well as by leveraging opportunities to consider the family unit, rather than just the individual child, to promote child nutrition and reduce health disparities. Communications in multiple languages that promote health equity through positive images and framing may further reduce deterrents and stigma manifestations to participation as well (GTE/Stigma and Food Inequity). Similar to the NSLP and SBP, FEM components should be integrated, including family history (eg, culturally preferred meals served), organizational factors, and community factors (eg, work demands among parents and access to public transportation, respectively) that may need to be considered when determining when or how meals are accessed/distributed, and family knowledge and social norms (eg, thoughtful approaches to potentially integrate parent nutrition knowledge components).

The waivers for Summer Feeding Programs as a mechanism to provide meals to children during the pandemic represents a research opportunity to better understand the influence of these changes compared with the traditional ways summer meals are served. As highlighted by a recent case study in large urban school districts during COVID-19, research should examine the multiple methods used by Summer Feeding Programs during the pandemic to help identify which flexibilities may have led to the greatest improvements in summer meal program participation.⁴⁴ Specifically, working with school districts and Departments of Education to obtain existing data collected during the pandemic can elucidate the influence of providing multiple meals/days worth of food, noncongregate feeding, flexibility in delivery methods, and summer meal sites in areas that are food swamps and food deserts on outcomes such as the differential influence on children's access to summer meals and diet quality during summer months. Research specifically examining these flexibilities within the family social and emotional context (FEM) could lead to a more nuanced understanding of whether/how these changes might be extended in the future. Unintended consequences should also be considered, such as the influence of providing larger boxes of food may have on families with limited transportation options or continued reluctance among Latinx immigrants who fear accessing government resources to support their families.⁴⁵ In addition, similar to

School Wellness Policies, Summer Wellness Policies can be developed that include diverse stakeholders, including decision makers (eg, those responsible for determining sites, hours of operation, foods offered, and communication materials/strategies) and community members (eg, parents and youth) to ensure equitable access and influence of Summer Feeding Programs and to meet the needs of different communities. More research is also needed to understand the influence of P-EBT on food insecurity and if this initiative should be continued during summer months (whereas P-EBT and other temporary relief efforts blunted COVID-19-related increases in food insecurity, evidence is mixed on whether or not they returned food insecurity rates to pre-pandemic levels).⁴⁶⁻⁴⁸ In addition, there is a need to understand the influence of these policies on households—both short and long-term—including social disparities and chronic stress (including the ability to address chronic disruption of family routines, lack of a sense of control, resource shortfalls, and parent mental health [FEM]). Data are also needed to assess the SFSP nutritional quality (eg, menu analyses) because these meals do not align with the strong school meal/SSO standards.³ These data would support efforts to assess the equity impact of SFSP.

Using Theory to Strengthen the CACFP

CACFP provides reimbursement for meals and snacks served to children and adults who are enrolled at participating child-care centers and adult-care homes.⁴⁹ It is estimated that 4.2 million children receive foods through CACFP every day.⁴⁹ CACFP reimbursable meals and snacks must meet USDA meal pattern requirements for nutrition. However, during the pandemic, younger children lost access to meals and snacks provided at participating day-care centers and child-care homes through the CACFP due to local and statewide lockdown orders.

During the early months of the COVID-19 pandemic, the Families First Coronavirus Response Act authorized waivers for CACFP implementation (eg, grab-and-go meals for families) that were intended to ensure continuity of meal provisions during widespread day-care center closures.⁵⁰ Despite these efforts, there was a sharp decrease (approximately 35% to 41% fewer meals) in CACFP-reimbursed meals served compared with the year preceding the pandemic (March through September 2020 vs 2019).^{46,50,51} There are many potential reasons for this decrease, including a fragmented system of providers and limited program capacity for implementation at large scale.^{46,50,51} In addition to the decreases in participation, many CACFP participants were initially excluded from P-EBT benefits with implementation varying across states, and thus had fewer resources to replace the meals to which they no longer had access (P-EBT was formally expanded to all children October 1, 2020).⁵² Moving forward, there are several policies that could support nutrition equity and child health through a GTE, Stigma and Food Inequity, and FEM lens (see [Figure 3](#)). First, the continuation of the COVID-19 expansion allowing young adults up to age 24 years to be eligible at homeless and youth-serving shelters can have the potential for a profound influence on addressing diet-related disparities among a particularly vulnerable population via improving social and economic resources and increasing healthy options (GTE). Beyond pandemic-related policies,

Child and Adult Care Food Program policy	Theory			Policy/research considerations
	Getting to Equity Framework	Family Ecological Model	Stigma and Food Inequity Framework	
Expanded eligibility ^a	<p><u>Social and Economic Resources:</u> Expanded eligibility as part of a nutrition assistance program (CACFP)</p> <p><u>Increase Access to Healthy Options:</u> Expanded eligibility provides healthy meals to more young adults, especially those living at homeless and youth-serving shelters</p>	<p><u>Community Factors:</u> Expanded eligibility increases access to healthy foods</p> <p><u>Social Disparities and Chronic Stress:</u> Expanded eligibility alleviates household economic stress and reduces food insecurity</p>	<p><u>Structural Manifestation of Stigma:</u> Expanded eligibility provides increased access to healthy foods that may mitigate structural inequities (eg, lack of access to affordable, nutritious food) often faced by impoverished communities</p>	<ol style="list-style-type: none"> (1) Allowing child care centers in low-income areas to automatically receive the highest CACFP reimbursement rates if at least 40% of children qualify for free or reduced-price meals (2) Innovative solutions for collecting data on CACFP participants (eg, partnerships with state programs offices [WIC^b or transitional assistance departments]) and actions at the federal level to upgrade state data systems for participation in federal programs to facilitate the ability to link data (3) Research that examines comprehensive, long-term follow-up on child, parent, and family outcomes
Increased reimbursement ^a	<p><u>Build Community Capacity:</u> Increased reimbursement improves community economic resources by supporting child care centers</p>	<p><u>Community Factors:</u> Increased reimbursement increases access to healthy foods</p>	<p><u>Structural Manifestation of Stigma:</u> Greater allocation of funds can help address inequities in existing childcare food environments</p>	
Providing afternoon snack and/or supper to children in full-day child care	<p><u>Increase Access to Healthy Options:</u> Providing afternoon snacks/supper provides healthy meals to children, especially those living in food swamps and food deserts</p>	<p><u>Community Factors:</u> Providing afternoon snacks/supper increases access to healthy foods</p> <p><u>Social Disparities and Chronic Stress:</u> Providing afternoon snacks/supper alleviates household economic stress and reduces food insecurity</p>	<p><u>Structural Manifestation of Stigma:</u> Providing afternoon snack/dinner may mitigate structural inequities (eg, lack of access to affordable, nutritious food) often faced by impoverished communities</p>	

^aTemporary policy implemented as a result of the coronavirus disease 2019 pandemic that expanded CACFP eligibility to young adults up to age 24 years at homeless and youth-serving shelters.

^bWIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Figure 3. Using theories to inform the Child and Adult Care Food Program (CACFP).⁵⁰

increasing reimbursements for CACFP would build community capacity (GTE) by improving community economic resources via supporting child-care centers. For example, this could be achieved through a policy that allows child-care centers in low-income areas to automatically receive the highest CACFP reimbursement rates if at least 40% of children qualify for free or reduced-price meals. Second, allowing children in full-day child care to receive an afternoon snack or supper could increase healthy options for children (GTE) and reduce social disparities and chronic stress (FEM) for parents, which as noted in the FEM can have positive downstream consequences for children's health outcomes. Similar to school and summer meals, the GTE, FEM, and Stigma and Food Inequity frameworks should all be considered for further opportunities to address nutrition equity and improve child health through culturally preferred options and thoughtful approaches to parent/guardian engagement.

The pandemic has also highlighted that data on CACFP participants are severely lacking or nonexistent; Bauer and colleagues⁵⁰ note that CACFP data collection efforts vary by state, and no known database exists that includes comprehensive data on either participants or providers nationally. As a result, it is currently impossible to assess whether or not vulnerable populations are connected to needed resources, and whether or not participant outcomes (eg, food security and health) are linked to participation.⁵⁰ Creative research strategies and data linkages to collect key information while minimizing the burden of data collection on participants will be essential to developing this understanding. For example, partnerships with state programs offices (eg, Special Supplemental Nutrition Program for Women, Infants, and Children or transitional assistance departments) can provide important information or facilitate participant recruitment for Child Nutrition Programs. Actions at the federal level to upgrade state data systems for participation in federal programs will facilitate the ability to link data.

CONCLUSIONS

In summary, the United States is currently transitioning from acute, emergency response efforts that characterized the early stages of the COVID-19 pandemic, to longer-term recovery initiatives. This time represents a key opportunity to learn from lessons related to the pandemic and to leverage equity-focused frameworks to identify gaps in the response to strengthen the next phase of emergency response and recovery. Overall, the pandemic has highlighted the need for Child Nutrition Programs, but also knowledge gaps that remain regarding their influence. Theory is a critical tool to guide long-term responses, enhance federal nutrition assistance programs, promote child and family health, and address structural inequities and health disparities. Policies that can improve equity of access to all Child Nutrition Programs should be considered, such as consolidating applications/certifications across all Child Nutrition Programs (and Supplemental Nutrition Assistance Program) to ensure children have continuous access to all eligible nutrition assistance programs and to reduce the burden of a separate application process for each program. Frameworks should also guide outcome evaluations of Child Nutrition Programs to ensure equity of impact,

and existing tools such as the Racial Equity Scorecard should be considered.⁵³ In addition, because these policies are implemented and evaluated within differing contexts and populations, these theories can be used to develop appropriate evaluation measures to assess nutrition equity as well as potential unintended consequences. Theory also highlights the complexity of health inequities and food insecurity; moving forward, other theories such as the Nutrition Equity Framework, should also be considered to assess the broader structures and processes that are driving the inequities observed in the United States.¹³

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AUTHOR INFORMATION

J. Cohen is an associate professor, School of Health Sciences, Merrimack College, North Andover, MA, and adjunct associate professor, Department of Nutrition, Harvard T.H. Chan School of Public Health, Harvard University, Boston, MA. K. Stowers is an assistant professor, Department of Allied Health Sciences, Storrs, and resident faculty affiliate, Rudd Center for Food Policy and Obesity, University of Connecticut, Hartford. A. Odoms-Young is an associate professor, Division of Nutritional Sciences, College of Human Ecology, Cornell University, Ithaca, NY. R. Franckle is a researcher, Mathematica, Cambridge, MA.

Address correspondence to: Juliana F. W. Cohen, ScD, Department of Public Health and Nutrition, Merrimack College, 315 Turnpike St, North Andover, MA 01845. E-mail: cohenj@merrimack.edu

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