

Child and Adult Care Food Program

A LITERATURE REVIEW OF PARTICIPATION BENEFITS AND CHALLENGES

February 2025





Public Policy Associates is a public policy research, development, and evaluation firm headquartered in Lansing, Michigan. We serve clients in the public, private, and nonprofit sectors at the national, state, and local levels by conducting research, analysis, and evaluation that supports informed strategic decision-making.

Prepared for

Early Childhood Investment Corporation Lansing, Michigan

Prepared by

Public Policy Associates publicpolicy.com

Author

Dirk F. Zuschlag, Ph.D.

Acknowledgement

This report was supported by the Michigan Health Endowment Fund. The Health Fund works to improve the health and wellness of Michigan residents and reduce the cost of healthcare, with a special focus on children and seniors. You can find more information about the Health Fund at <u>mihealthfund.org</u>.



Table of Contents

INTRODUCTION1
CACFP BENEFITS FOR FAMILIES1
PROVIDER ACCESS, PARTICIPATION, AND RETENTION4
Facilitators and Benefits For Providers4
Barriers and Challenges for Providers6
RESEARCH RECOMMENDATIONS9
CONCLUSION11
REFERENCES



The Child and Adult Care Food Program (CACFP) supports families' food security and nutrition by reimbursing child care providers for preparing and serving healthy food to young children who primarily live in low-income households. Families can only benefit from this key health equity strategy through providers that voluntarily enroll and sustain participation in CACFP. Yet, despite research documenting CACFP's positive impacts, extant literature also shows that providers confront substantial barriers to program access, participation, and retention, which barriers together help explain significant CACFP underutilization.¹

CACFP Benefits for Families

A relatively small but developing body of research suggests that provider participation in CACFP is associated with positive nutritional outcomes and reduced food insecurity for children in early child care. Thus, a comprehensive scoping review of policies affecting child well-being identified one earlier study showing that "CACFP reduced food insecurity" and another finding that the program "improved diet and healthy weight" (Ports et al. 2024, p. 13; references omitted; see also Ralston et al., 2017, discussing the same two studies).

In the first referenced study, Heflin et al. (2015) found that CACFP-participating providers benefited both children themselves and their households through reduced risks of food insecurity. Korenman and colleagues (2013), the reference for the second quote, focused on low-income children, making original use of a national sample. They reported that "CACFP participation is associated with

¹ Underutilization is especially acute and worsening among home-based providers: "Despite the importance of connecting home-based childcare providers to CACFP, the number of children accessing CACFP via home-based providers fell by nearly 50% between 2000 and 2021. This coincided with a drop in home-based provider participation in CACFP and a similar drop in the overall size of the regulated home-based care sector" (Heinz and Yakes Jimenez, 2023, p. S191; endnotes and references omitted).



increased consumption of milk and vegetables, but not with increases (and perhaps decreases) in the chance that a child is overweight."²

More recent research is at least consistent with the earlier work. In their systematic review of studies, which were admittedly inconclusive overall, Kenney et al. (2023) nevertheless found emerging indications of a beneficial link between CACFP participation and a reduced risk of food insecurity and child underweight. Some evidence also suggested that CACFP providers had healthier food environments and food service practices (Kenney et al., 2023; Zaltz et al., 2023; see also Heflin et al., 2015; Korenman et al., 2013). Taking a similar risk-assessment approach, Ettinger de Cuba et al. (2023) compared the health, development, health care utilization, and food security outcomes of children in low-income families based on food source – child care provided versus parent provided.³ They concluded that in the shorter run children with the provider meals had a lower adjusted probability of living in a food-insecure household or having a hospital admission from emergency. In the longer run, these children had lower rates of fair to poor health, developmental risk, and hospitalizations over their lifetime (Ettinger de Cuba et al., 2023).⁴

Another larger set of studies have compared the type, amount, and nutritional practices around the food and beverages furnished by CACFP-participating providers with non-participating providers. For example, Erinosho, Vaughn, Hales, Mazzucca, Gizlice, Treadway, Kelly, and Ward (2018) sought to compare the quality of centers' "nutritional environments" across Georgia, Kentucky, and Mississippi. To do so, the researchers computed overall nutrition scores, where the Head Start centers (highest scores) and the CACFP centers (second highest) both significantly exceeded the non-participating centers' scores (see also Erinosho, Vaughn, Hales, Mazzucca, Gizlice, & Ward, 2018). These results have been complemented by other research, such as the finding of Zaltz et al. (2020)

² The researchers further found that CACFP participation was associated with a decreased prevalence of underweight children and separately with a "moderate reduction in food insecurity among low-income households" (Korenman et al., 2013, p. 334). However, the first association was too small to be meaningful, and the latter was not statistically significant.

³ Although the researchers did not know whether or which providers in their study actually participated in CACFP, their supposition was that a large proportion of them were likely to be eligible at the least, since they served low-income families receiving Child Development and Care (CDC) child care assistance in urban locales.

⁴ The researchers found no differences in growth or development risk.



that CACFP-participating centers faced fewer barriers to providing nutritious foods compared to non-participating centers.

This set also includes research that focused on specific types of foods and beverages as served and consumed in CACFP-participating and nonparticipating providers. Although results varied within and sometimes between studies, they were directionally consistent overall. For example, Gurzo et al. (2020) determined that non-CACFP providers had *lower* odds of providing healthy foods and beverages like vegetables; meats, poultry, or fish; whole grains; and eggs and milk, but a *higher* likelihood of providing candy, salty snacks, and sugary drinks.⁵ The comparison further revealed differences favoring CACFP-participating providers for flavored and sugar-added yogurt, sweetened cereals, frozen treats, and white grains (Gurzo et al., 2020).

The following studies found similarly positive effects from providers' CACFP participation:

- Gordon et al. (2010) significantly greater likelihood of daily milk, fruits, and vegetable consumption
- Brueing et al. (1999) significantly higher intake of protein and essential vitamins and minerals
- Cotwright et al. (2019) less likelihood of providing sugary beverages, greater likelihood of program compliance by serving only whole milk to infants
- Erinosho, Vaughn, Hales, Mazzucca, Gizlice, and Ward (2018) lower-fat milk for older children more often, plus absence of fruit drinks
- Richie et al. (2012) more fruits, vegetables, meat substitutes, and milk served by CACFP providers, and especially Head Start centers, with fewer sweets and less-nutritious snacks

Some research has suggested that CACFP provider participants may contribute to young children's development of healthy eating habits and other incidental family benefits, such as saving parents time and money in food spending and preparation (see, generally, Yoong et al., 2023). One research team found evidence of differences in provider staffs' nutritional knowledge and encouragement. For example, more CACFP-participating providers reported sitting with children at meals and talking with them about the importance of healthy eating, as well as teaching children about and encouraging children to

⁵ While CACFP program participants provided more meals and snacks, most comparisons remained significant even following adjustments for that difference (Gurzo et al., 2020).



eat the healthy foods served to them (Erinosho, Vaughn, Hales, Mazzucca, Gizlice, & Ward, 2018; see also Andreyeva et al., 2018; Liu et al., 2016).⁶

The literature, in sum, indicates that, working through providers, CACFP can and has contributed to young children's consumption of more nutritious food while in child care, which in the process suggests improved health and food security outcomes.

Provider Access, Participation, and Retention

Providers play a pivotal role in the implementation of the CACFP. Because provider underutilization of the CACFP regardless of its beneficial effects is significant and widespread, a separate body of research continues to develop that examines the benefits of the CACFP to providers and the barriers and challenges to provider participation in the CACFP.

FACILITATORS AND BENEFITS FOR PROVIDERS

CACFP by design includes several features intended to incentivize sustained provider participation. Perceived benefits of the CACFP to providers may encourage their participation in the program. The primary, most salient benefit for providers is reimbursement for qualified meals and snacks served to children in their care (see, e.g., Andreyeva, McCann et al., 2024; Speirs et al., 2020).⁷ Particularly for some home-based and unlicensed providers who themselves may be low-income, payments at the program's higher rates may constitute a significant source of needed income (Spiers et al., 2020; see Adams et al., 2023; Andreyeva et al., 2022). Moreover, provider underutilization of CACFP funding foregoes substantial federal spending in most states; by one estimate centers in

⁶ Dev and colleagues (2014) reported data showing how provider training and behavior modeling could influence children's healthy eating and found that Head Start providers were more likely to engage in these practices, perhaps due to program requirements.

⁷ According to Andreyeva and colleagues (2022), providers also reported more altruistic motives for CACFP participation, including the ability to provide nutritious foods to the children in their care, including those who may lack adequate food or who may not get certain foods at home.



Connecticut lost out on between nearly \$31 million and over \$35 million during FY 2019-2020 (see Andreyeva et al., 2022).

The program has also been shown to benefit providers through the training and education, technical assistance, and resource sharing that the state agencies and sponsoring organizations administering CACFP provide (e.g., Andreyeva et al., 2022; Erinosho et al., 2022).⁸ States vary, but nonetheless this facilitator is especially important to home-based providers, as well as some centers, that as a legal or practical matter depend on sponsors' resources and assistance (see Andreyeva, Moore et al., 2024; Adams et al., 2023 [license exempt focused report]; Adams & Hernandez, 2021 [home-based focused report]).⁹

Sponsor roles and provider relationships can entail an array of ongoing supports, ranging from alleviating or mitigating administrative burden – i.e., the learning, compliance, and psychological costs of provider participation – to assisting with system technology and documentation management, to providing technical assistance, education, and resources around nutrition standards, required meal patterns, qualifying menus, and securing qualifying food (Andreyeva, McCann et al. 2024; Andreyeva, Moore et al., 2024; Asada et al., 2024; see also; Jana et al., 2023; Heinz et al., 2022; Lee et al., 2022; Temitope et al., 2022).¹⁰

Researchers have also investigated many states' engagement in a wide range of activities to promote CACFP access. Andreyeva, McCann et al. (2024) have reported successful efforts involving *both* active outreach (e.g., producing multilingual program materials and contacting new and prospective licensees and distributing materials at provider-attended events; dedicating staff to the purpose; collaborating with other agencies, nonprofit groups and provider networks; and linking CACFP participation to other programs' requirements or benefits) *and* facilitated enrollment (e.g., streamlining applications, flexibly

⁸ Pursuant to CACFP, states contract with independent sponsoring agencies or organizations ("sponsors") to supervise and assist participating providers. CACFP requires all licensed home-based providers to have a sponsor; a rule that applies to eligible unlicensed or license-exempt "family, friend, and neighbor" (FFN) providers that the state has approved. CACFP also allows centers to have sponsors, and states may have direct relationships with "independent" centers as well.

⁹ Unlicensed but state-approved or "registered" FFN providers in New Mexico may operate within the same reality because in this one state, at least, CACFP participation is required in most circumstances (Heinz et al., 2023). New Mexico reports high CACFP participation rates, as do other states such as Louisiana that encourage license-exempt providers to participate (Heinz and Yakes Jimenez, 2023).

¹⁰ Andreyeva, Moore et al. (2024) recently reported a positive association between the number of sponsors serving centers and CACFP participation in a state.



applying certain rules, and direct process navigation assistance) (see also Erinosho et al., 2022 for a home-based provider focus). Researchers have likewise reported that the technical assistance some CACFP state agencies and sponsors have provided extended to the program onboarding process (Asada et al., 2024).

The literature has identified several potential benefits to providers that may encourage their participation in the CACFP and other program facilitators that can vary widely by provider, sponsor, and state:

- Participation can help providers meet Quality Rating and Improvement System (QRIS) indicators (Andreyeva, McCann et al., 2024)
- The availability of free nutritious food may attract families to CACFPparticipating providers (Andreyeva et al., 2022)
- Sponsors may have multi-lingual staff and materials to assist providers (Heinz et al., 2022)
- Sponsors may use non-CACFP funded staff time and resources to assist providers with the participation process and expenses (Heinz et al., 2022; see also Adams et al., 2023 as to sponsors helping license-exempt providers cover food costs and improve health care and safety)

BARRIERS AND CHALLENGES FOR PROVIDERS

Researchers have identified many and varied barriers to CACFP access, participation, and retention (see, generally, Franckle & Boyle, 2023; Erinosho & Story, 2023). While these barriers adversely affect program uptake and sustainability by all provider types (e.g., Asada et al., 2024), licensed home-based providers confront distinct challenges (e.g., Speirs et al., 2020).¹¹ These can result in inequities due to the characteristics of families these providers tend to serve (see Asada et al., 2023).

Barriers to access arise even before a provider considers CACFP participation. Research demonstrates that many providers are unaware of CACFP altogether, and that even non-program providers with awareness consistently report that they do not know or understand enough about the program to pursue access (see Andreyeva et al., 2022; Andreyeva, Moore et al., 2024; Asada et al., 2024). Homebased and FFN providers may be especially susceptible to this initial barrier (see Adams & Hernandez, 2021; Heinz et al., 2023). In one study's striking finding,

¹¹ Although federal CACFP rules permit license-exempt and other unlicensed "family, friend, and neighbor" (FFN) providers to participate, it appears that few states, including Michigan, provide for participation (Adams & Hernandez, 2021; Heinz & Yakes Jimenez, 2023). There is thus little research in the area, but where allowed at all, such providers presumably face similar, if not higher, barriers than home-based providers (see Adams et al., 2023; Heinz et al., 2023).



over half of non-participating centers in Connecticut did not know about CACFP despite the likely eligibility of many and a licensing requirement that all follow CACFP nutrition standards (Andreyeva, et al. 2022; see also Andreyeva & Henderson, 2018).

Providers face further challenges during program enrollment and onboarding. Researchers have found, for example, that providers were deterred from enrollment by the amount and complexity of paperwork, real or perceived (Asada et al., 2024), as well as by concerns over their ability to meet eligibility requirements (Heinz et al., 2023; Jana et al., 2023). Home-based and small center providers may be unable to meet or maintain program "viable, capable, accountable" (VCA) requirements — i.e., demonstrated financial viability, adequate administrative capacity, and internal accountability controls (Andreyeva, McCann et al., 2024). Finally, enrollment has often involved application and other start-up costs (Adams & Hernandez, 2021; Heinz et al., 2022).

According to the literature, once enrolled, providers confronted a constellation of challenges around reimbursement rates, together with related program requirements, that impose a heavy administrative burden. A large body of research has substantiated that reimbursement levels per se are inadequate. For many providers, CACFP payments did not cover the actual food costs, let alone the costs, monetary and otherwise, of obtaining and preparing qualifying foods and completing documentation (Andreyeva et al., 2022; Heinz et al., 2022; Heinz et al., 2022).

Already highly sensitive to costs, many home-based providers must either operate at lower Tier 2 rates, or depending on the happenstance of location, undertake the burdensome task of verifying individual family low-income status to obtain higher Tier 1 payments (Speirs et al., 2020; see Heinz & Yakes Jimenez, 2023). Indeed, all types of providers have reported excessive paperwork, including that involving income eligibility, as a major barrier (Andreyeva, McCann et al., 2024; Heinz & Yakes Jimenez, 2023; Lee et al., 2022).¹²

Related rules have been found to introduce multiple barriers — and to have added administrative burden — to providers' ongoing participation; these have included:

¹² CACFP participation by for-profit centers requires a 25% minimum enrollment of income-eligible children (Andreyeva, McCann et al., 2024).



- CACFP limited the daily number of reimbursable meals and snacks even for non-traditional or extended hours providers, many of whom tended to be home-based or FFN (Heinz et al., 2023)
- CACFP participants were required to "front" food and preparation costs, only receiving payment later (Adams & Hernandez, 2021)
- Providers had to learn and comply with program menu, meal pattern, and similar requirements to ensure meals and snacks qualify for reimbursement (Adams & Hernandez, 2021; Heinz et al., 2022; Jana et al., 2023)
- Many providers were constrained in their staff capacity, facilities, or food service vendor availability for procuring and preparing qualifying meals (Andreyeva, McCann et al., 2024; Jana et al., 2023).
- Meal and snack requirements have been perceived as rigid, stringent, and strictly applied regardless of any limited availability of or accessibility to qualifying food and beverages (Asada et al., 2024)

Many regions and locales within a state have lacked sufficient sponsors overall or sponsor presence and availability in particular locales such as rural areas (Andreyeva, McCann et al., 2024; Lee et al., 2022; Temitope et al., 2022; see Andreyeva, Moore et al., 2024). Even where sponsors existed and operated, research has revealed wide variation in the extent and effectiveness of sponsor capacity, activity, and support (Adams & Hernandez, 2021; Andreyeva, McCann et al., 2024; Asada et al., 2024; Speirs et al., 2020).

Researchers have studied other sponsor-related barriers within state CACFP systems, that tended to adversely affect home-based providers, including:

- Multiple sponsor roles, some at once supportive and regulative with the potential for unproductive relationship, conflict, and limited capacity for effective support (Adams & Hernandez, 2021; Speirs et al., 2020; see Jana et al., 2023)
- Providers discomforted by unannounced monitoring visits and with heavyhanded or rigid rule enforcement – for example, penalties for relatively minor paperwork or meal-pattern errors; such concerns could be worsened by language barriers and immigration status (Heinz & Yakes Jimenez, 2023; Heinz et al., 2022; Temitope et al., 2022)
- Limited, low-quality training and outdated, cumbersome, inadequate technology (Jana et al., 2023; Lee et al., 2022; Temitope et al., 2022)

Having studied the many barriers to provider uptake, researchers have assembled a wide range of recommendations; these are presented next in a summary table.

Research Recommendations

Area of Barrier	Area for Action	Recommended Policy Action/Improvement Strategy	Principal References
	Awareness/ Understanding	 Systematize statewide outreach, increasing focus on most underutilizing provider types (e.g., home-based, FFN) Provide clear multilingual information and staff assistance concerning requirements and processes Implement state-level use of active recruiting strategies 	Adams & Hernandez (2021); Andreyeva et al. (2022); Andreyeva, McCann, et al. (2024); Asada et al. (2024); Heinz et al. (2023)
and Access	Enrollment/ Onboarding	 Foster, strengthen sponsor-provider relationships, such as by: Forming early in process to initiate ongoing support Expanding sponsor roles and capacity, separating the TA and monitoring/supervision responsibilities Increasing sponsor presence in underserved areas Establish abbreviated approval process for FFN providers Help fund application and start-up costs 	Andreyeva et al. (2022); Asada et al. (2024); Heinz, et al. (2022); Heinz & Yakes Jimenez et al. (2023); Speirs et al. (2020); Temitope et al. (2022)
		 Increasing sponsor presence in underserved areas 	Jimenez et al. Speirs et al. (2

•••

Area of Barrier	Area for Action	Recommended Policy Action/Improvement Strategy	Principal References
Participation and Retention	Education and Training	 Increase training flexibility, availability (e.g., minimize travel, language barriers, inconvenient times) Tailor training for underutilizing provider types Provide educational resources directed to parents 	Andreyeva et al. (2022); Heinz et al. (2022); Heinz, et al. (2023)
	Federal Regulatory Revisions	 Improve U.S. Department of Agriculture/Food and Nutrition Service program guidance Eliminate the for-profit center low-income requirement Revise, simplify VCA requirement Give CACFP same regulatory flexibility as school meal programs, including a Community Eligibility Provision (CEP) 	Andreyeva et al. (2022); Andreyeva, McCann, et al. (2024); Andreyeva, Moore, et al. (2024)
	Reimbursement Rates and Coverage	 Increase reimbursement rates overall; also ensure rates: Take inflation and labor costs into account Align with school meal programs Flexibly allow for varying food availability and cost Reimburse for third meal, additional snack (extended time) Ensure all home-based providers receive higher Tier 1 or comparable reimbursement rate Include funding for ongoing, non-food costs 	Andreyeva, McCann, et al. (2024); Asada et al. (2024); Heinz, et al. (2022); Heinz et al. (2023); Heinz & Yakes Jimenez, et al. (2023); Temitope et al. (2022)
	Admin Burden	 Improve TA responsiveness, optimize training relevance Simplify, streamline paperwork Provide free, improved software for meal planning Identify, support efforts to reduce food-procurement, meal-preparation burdens Respond to noncompliance with flexibility, leniency Assist locating and purchasing meal vendor services, approved food/beverages 	Andreyeva et al. (2022); Asada et al. (2024); Jana et al. (2023)
	State Licensing and Related Requirements	 Revise and fund requirements such as fingerprinting, background checks, CPR and related training Count CACFP education for license-required training Make CACFP participation a QRIS indicator Require that all licensees meet CACFP meal patterns 	Andreyeva, McCann, et al. (2024); Asada et al. 2024; Heinz et al. (2022)



Conclusion

The literature confirms what Dev and colleagues recently concluded: "CACFP is vital for safeguarding the health of our nation's most vulnerable young children from low-income families who are at a higher risk of health disparities" (Dev et al., 2024, p. 454; see also Nestle, 2023). At the same time, research showed that while CACFP included benefits for participating providers together with other facilitators, significant barriers at best discouraged and at worse precluded access, participation, and retention for many providers. These barriers, and resulting effects, were particularly evident in the experience of and the program underutilization by home-based and license exempt providers (where the latter were even eligible to participate).



References

Adams, G., Kuhns, C., & Hernandez-Lepe, F. (2023). Untapped potential: licenseexempt home-based child care providers and the Child and Adult Care Food Program [Research Report]. Urban Institute. <u>https://www.urban.org/research/publication/untapped-potentiallicense-exempt-home-based-child-care-providers</u>

- Andreyeva, T. & Henderson, K. E. (2018). Center-reported adherence to nutrition standards of the Child and Adult Care Food Program. *Childhood Obesity*, 14(6), 421-427. <u>https://doi.org/10.1089/chi.2018.0076</u>
- Andreyeva, T., Kenney, E. L., O'Connell, M., Sun, X., & Henderson, K. E. (2018). Predictors of nutrition quality in early child education settings in Connecticut. *Journal of Nutrition Education and Behavior*, 50(5), 458–467. <u>https://doi.org/10.1016/j.jneb.2017.12.016</u>
- Andreyeva, T., McCann, M., Prager, J., & Kenney, E. (2024). State agency perspectives on successes and challenges of administering the Child and Adult Care Food Program. *Journal of Nutrition Education and Behavior*, 56(1), 66-73. <u>http://doi.org/10.1016/j.jneb.2023.10.015</u>
- Andreyeva, T., Moore, T. E., Godoy, L. C., & Kenney, E. (2024). Federal nutrition assistance for young children: Underutilized and unequally accessed. *American Journal of Preventative Medicine*, 66(1), 18-26. <u>http://doi.org/10.1016/j.amepre.2023.09.008</u>
- Andreyeva, T., Sun, X., Cannon, M., & Kenney, E. (2022). The Child and Adult Care Food Program: Barriers to participation and financial implications of underuse. *Journal of Nutrition Education and Behavior*, 54(4), 327-334. <u>http://doi.org/10.1016/j.jneb.2021.10.001</u>
- Asada, Y., Bleiweiss-Sande, R., Barnes, C., Lane, H., & Chriqui, J. F. (2023). In pursuit of equitable access in federal food and nutrition assistance programs. *American Journal of Public Health*, 113(S3), S175-S178. <u>https://doi.org/10.2105/AJPH.2023.307496</u>

Adams, G., & Hernandez, F. (2021). The Child and Adult Care Food Program and home-based child care providers: Expanding participation [Research Brief]. Urban Institute. <u>https://www.urban.org/research/publication/child-and-adult-carefood-program-and-home-based-child-care-providers</u>



- Asada, Y., Schermbeck, R., Thiede, K., & Chriqui, J. F. (2024). Opportunities to improve access to and retention in the Child and Adult Care Food Program: Key recommendations from early childcare providers in Illinois, December 2020–July 2021. *American Journal of Public Health*, 113(S3), S231–S239. https://doi.org/10.2105/ajph.2023.307433
- Bruening, K. S., Gilbride, J. A., Passannante, M. R., & McClowry, S. (1999).
 Dietary intake and health outcomes among young children attending 2 urban day-care centers. *Journal of the Academy of Nutrition and Dietetics*, 99(12), 1529–1535. <u>https://doi.org/10.1016/S0002-8223(99)00375-2</u>
- Cotwright, C. J., Bradley, H., Celestin, N., Drake, S., Love, K., & Birch, L. (2019). Beverage Policy implementation by Child and Adult Care Food Program participation and program type: A statewide examination in Georgia. *Childhood Obesity*, 15(3), 185-193. <u>http://doi.org/10.1089/chi.2018.0101</u>
- Dev, D., Hillburn, C., Luxa, J., Bauer, K. W., Lessard, L., Cotwright, C., & Tovar, A. (2024). Illuminating Child and Adult Care Food Program partnerships that improved food access and waiver utilization for feeding young children in early care and education programs during COVID-19: A qualitative study. *Journal of the Academy of Nutrition and Dietetics*, 124(4), 453-464. <u>https://doi.org/10.1016/j.jand.2023.10.006</u>
- Dev, D. A., McBride, B. A., Speirs, K. E., Donovan, S. M., & Cho, H. K. (2014). Predictors of Head Start and child-care providers' healthful and controlling feeding practices with children aged 2 to 5 years. *Journal of the Academy of Nutrition and Dietetics*, 114(9), 1396–1403. <u>https://doi.org/10.1016/j.jand.2014.01.006</u>
- Erinosho, T., Jana, B., Loefstedt, K., Vu, M., & Ward, D. (2022). Facilitators and barriers to family child care home participation in the U.S. Child and Adult Care Food Program (CACFP). *Preventive Medicine Reports*, 102022. https://doi.org/10.1016/j.pmedr.2022.102022
- Erinosho, T. & Story, M. (2023). The Child and Adult Care Food Program (CACFP): Nutritional benefits and barriers hindering participation by home-based childcare providers. *American Journal of Public Health*, 113, (S3), S183-S185. <u>https://doi.org/10.2105/AJPH.2023.307497</u>
- Erinosho, T., Vaughn, A., Hales, D., Mazzucca, S., Gizlice, Z., Treadway, C., Kelly, A., & Ward, D. (2018). The quality of nutrition and physical activity environments of child-care centers across three states in the southern U.S.



Preventive Medicine, 113, 95-101. https://doi.org/10.1016/j.ypmed.2018.04.029

- Erinosho T., Vaughn, A., Hales, D., Mazzucca, S., Gizlice, Z., & Ward, D. (2018). Participation in the Child and Adult Care Food Program is associated with healthier nutrition environments at family child care homes in Mississippi. *Journal of Nutrition Education and Behavior*, 50(5), 441-450. <u>https://doi.org/10.1016/j.jneb.2017.11.004</u>
- Ettinger de Cuba, S., Bovell-Ammon, A., Ahmad, N., Bruce, C., Poblacion, A., Rateau, L. J., Coleman, S. M., Black, M. M., Frank, D. A., Lê-Scherban, F., Henchy, G., Ochoa, E., Jr, Sandel, M., & Cutts, D. B. (2023). Child care feeding programs associated with food security and health for young children from families with low incomes. *Journal of the Academy of Nutrition and Dietetics*, 123(10), 1429–1439. https://doi.org/10.1016/j.jand.2023.06.003
- Franckle, R. & Boyle, M. (2023). Barriers to participation in the Child and Adult Care Food Program for early childhood care providers. *American Journal* of Public Health, 113(S3), S180-S193. <u>https://doi.org/10.2105/AJPH.2023.307473</u>
- Gordon, R., Kaestner, R., Korenman, S., & Abner, K. (2010). The Child and Adult Care Food Program: Who is Served and what are their nutritional outcomes?
 [NBER Working Paper 16148]. National Bureau of Economic Research. https://www.nber.org/papers/w16148
- Gurzo, K., Louhrine Lee, D., Ritchie, K., Yoshida, S., Homel Vitale, E., Hecht, K., & Ritchie, L. D. (2020). Child care sites participating in the federal Child and Adult Care Food Program provide more nutritious foods and beverages. *Journal of Nutrition Education and Behavior*, 52(7), 697–704. <u>https://doi.org/10.1016/j.jneb.2020.02.009</u>
- Heflin, C., Arteaga, I., & Gable, S. (2015). The Child and Adult Care Food Program and food insecurity. *Social Service Review*, 89(1), 77-98. <u>https://foodsecurity.missouri.edu/wp-content/uploads/2015/04/cacfp-heflin-arteaga-gable-2015.pdf</u>.
- Heinz, H., Bell, D., Martinez, J., Cunningham, M., Maunders, B., & Yakes Jimenez, E. (2022). New Mexico sponsors identify time and money as factors affecting home-based provider Child and Adult Care Food Program engagement. *Journal of Nutrition Education and Behavior*, 54(10), 947-956. <u>https://doi.org/10.1016/j.jneb.2022.05.007</u>



- Heinz, H., Pimentel, M. F. A., Castillo, D., Cordova, Y., Fowler, R., Bell, D., & Yakes Jimenez, E. (2023). Perspectives of home-based child care providers in New Mexico on barriers and facilitators to participating in the Child and Adult Care Food Program, 2021-2022. *American Journal of Public Health* 113(S3), S215-S219. <u>https://doi.org/10.2105/AJPH.2023.307402</u>
- Heinz, H. & Yakes Jimenez, E. (2023). State regulations set the stage for Child and Adult Care Food Program (CACFP) participation in home-based childcare. *American Journal of Public Health*, 113(S3), S191-S193. <u>https://doi.org/10.2105/AJPH.2023.307487</u>
- Jana, B., Loefstedt, K., Vu, M., Ward, D., & Erinosho, T. (2023). "It has a lot to do with the cumbersome paperwork": Barriers and facilitators of centerbased early care and education program participation in the Child and Adult Care Food Program. *Journal of the Academy of Nutrition and Dietetics*, 123(8), 1173-1186. <u>https://doi.org/10.1016/j.jand.2023.03.014</u>
- Kenney, E. L., Tucker, K., Plummer, R. S., Mita, C., & Andreyeva, T. (2023). The Child and Adult Care Food Program and Young children's health: A systematic review. *Nutrition Reviews*, 81(11): 1402–13. <u>https://doi.org/10.1093/nutrit/nuad016</u>.
- Korenman, S., Abner, K. S., Kaestner, R., & Gordon, R. A. (2012). The Child and Adult Care Food Program and the nutrition of preschoolers. *Early Childhood Research Quarterly* 28(2): 325–36. <u>https://doi.org/10.1016/j.ecresq.2012.07.007</u>
- Lee, D. L., Homel Vitale, E., Marshall, S. K. D., Hecht, C., Beck, L. T., & Ritchie, L. D. (2022). Child and Adult Care Food Program Participation benefits, barriers and facilitators for independent child care centers in California. *Nutrients*, 14, 4449. <u>https://doi.org/10.3390/nu14214449</u>
- Liu, S. T., Graffagino, C. L., Leser, K. A., Trombetta, A. L., & Pirie, P. L. (2016). Obesity Prevention Practices and Policies in Child Care Settings Enrolled and Not Enrolled in the Child and Adult Care Food Program. *Maternal and Child Health Journal*, 20(9), 1933–1939. https://doi.org/10.1007/s10995-016-2007-z
- Nestle, M. (2023). Equitable access to USDA's food assistance programs: Policies needed to reduce barriers and increase accessibility [Introduction to special supplement]. American Journal of Public Health, 113(S3), S167-S170. <u>https://doi.org/10.2105/AJPH.2023.307480</u>



- Ports, K. A., Rostad, W. L., Coyne, P., Dunning, J., Gonzalez, A. E., & Troy, A. (2024). A Scoping Review to Identify Community- and Societal-Level Strategies Evaluated from 2013 to 2023 for Their Potential Impact on Child Well-Being in the United States. *Children*, 11(9), 1070. <u>https://doi.org/10.3390/children11091070</u>
- Ralston, K., Treen, K., Coleman-Jensen, A., & Guthrie, J. (2017). Children's food security and USDA child nutrition programs. Economic Information Bulletin. *Report 174*, United States Department of Agriculture, Economic Research Service.
 <u>https://ers.usda.gov/sites/default/files/_laserfiche/publications/84003</u>/EIB-174.pdf?v=50442
- Ritchie, L. D., Boyle, M., Chandran, K., Spector, P., Whaley, S. E., James, P., Samuels, S., Hecht, K., & Crawford, P. (2012). Participation in the Child And Adult Care Food Program is associated with more nutritious foods and beverages in child care. *Childhood Obesity*, *8*(3), 224–229. <u>https://doi.org/10.1089/chi.2011.0061</u>
- Speirs, K. E., Gordon, R. A., Powers, E. T., Koester, B. D., & Fiese, B. H. (2020). Licensed family child care providers' participation in the Child and Adult Care Food Program (CACFP): Greater benefits and fewer burdens in highly urban areas? *Early Education and Development*, *31*(2), 153–176. <u>https://doi.org/10.1080/10409289.2019.1648087</u>
- Yoong, S. L., Lum, M., Wolfenden, L., Jackson, J., Barnes, C., Hall, A. E., Mccrabb, S., Pearson, N., Lane, C., Jones, J. Z., Nolan, E., Dinour, L., McDonnell, T., Booth, D., & Grady, A. (2023). Healthy eating interventions delivered in early childhood education and care settings for improving the diet of children aged six months to six years. *Cochrane Database of Systematic Reviews*, 8(8), CD013862. http://doi.org/10.1002/14651858.CD013862.pub3
- Zaltz, D. A., Hecht, A. A., Pate, R. R., Neelon, B., O'Neill, J. R., & Benjamin-Neelon, S. E. (2020). Participation in the Child and Adult Care Food Program is associated with fewer barriers to serving healthier foods in early care and education. *BMC Public Health*, 20(1), 856. <u>https://doi.org/10.1186/s12889-020-08712-7</u>
- Zaltz, D. A., Pate, R. R., Liu, T., McIver, K. L., Neelon, B., & Benjamin-Neelon, S. E. (2023). Young children's dietary quality in family child care and in their



own home. *Journal of the Academy of Nutrition and Dietetics*, 123(8), 1197–1206. <u>https://doi.org/10.1016/j.jand.2022.10.014</u>