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**UNDERGRADUATE RESEARCH
OPPORTUNITY PROGRAM**

CENTER FOR UNDERGRADUATE RESEARCH & ACADEMIC ENGAGEMENT

Anum Akbar, Mirza Baig, Victoria Camacho, Raiyan Quadri & Dr. Katherine Yewell

Introduction

- Approximately 48 million people live in food-insecure households in the U.S., a problem the 2010 Healthy, Hunger-Free Kids Act addressed through the Community Eligibility Provision (CEP).
- While existing research has established the CEP's role in reducing nationwide food insecurity, there is a distinct lack of data regarding its direct influence on student health outcomes
- This study investigates whether CEP participation has positive effects on the physical, mental, and behavioral health conditions of participating students.
- By connecting nutrition policy with medical classifications, the project aims to determine the program's effectiveness in reducing health complications.
- **Hypothesis:** Participation in the CEP correlates with a notable decrease in pediatric medical issues.
- This research seeks to redefine the CEP as a vital public health strategy rather than an economic or educational program.

Methodology

The study focused on K-12 students in schools across states that implemented the CEP program.

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- 1 Participation status data from districts in Kentucky, Florida, Illinois, Ohio, and New York was cross-referenced with regional medical records.
 - 2 A literature review of scholarly sources was conducted to determine the known health outcomes of the CEP, and how the program functions upon implementation.
 - 3 Emergency room (ER) visit frequencies were tracked on Excel using ICD-10 medical codes. This was to identify visits for nutrition-related illnesses like type 2 diabetes, hypertension, and anemia.
 - 4 Excel spreadsheets were utilized to link conditions caused by food insecurity to their relevant codes and regional health records.
 - 5 School records and state eligibility data were matched with health records to determine if ER visits for hunger-related illnesses dropped after the free meal policy began.

Percentage of Eligible Schools Adopting Community Eligibility

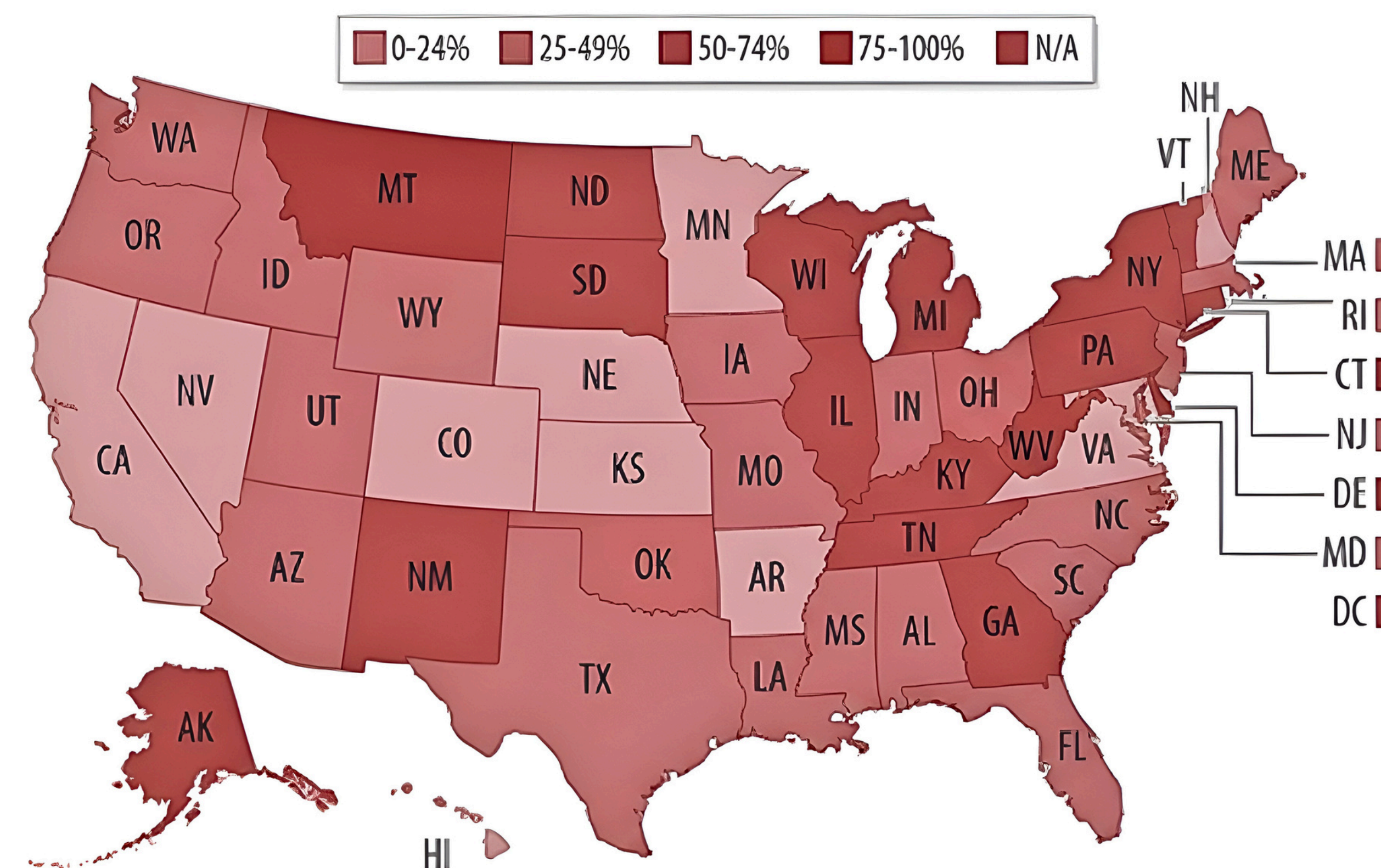


Figure 1: CBPP analysis of data on eligible schools published by state child nutrition agencies in May 2014 and data on schools adopting community eligibility collected directly from state child nutrition agencies September 2014-January 2015.



Figure 2: Word cloud visualizing the link between food insecurity, chronic disease, and the need for CEP intervention as validated through quantitative data analysis.

Results

- Preliminary findings suggest that participation in CEP-implemented programs directly influence selected health outcomes.
- Post-implementation data shows a decrease in emergency room visitations for type 2 diabetes, hypertension, and anemia, particularly in high-participation regions.
- The data supports the original hypothesis by demonstrating the positive effects of CEP participation rates on pediatric health issues.
- The significant results establish the CEP as a proactive health intervention rather than just a hunger-relief program. By linking universal meals to specific health outcomes, the CEP can be used as a potential strategy to remove health barriers and encourage student success.
- This is critical for assessing CEP efficiency as a policy addressing the 48 million food-insecure households in the United States, and as a program addressing public health.

Conclusion

- Although results are preliminary, analysis of K-12 students enrolled in CEP found significant reductions in ER visitations for hypertension, Type-2 diabetes, and anemia, among others.
- These findings suggest that CEP has direct positive effects on the physical, mental, and behavioral health conditions of participating students
- **Limitations:** External factors such as individual access to healthcare and household nutritional composition are still unaccounted for.
- Further research is required to isolate these variables and comprehensively evaluate the long-term impacts of the CEP; however, our current research suggests that CEP should be encouraged both as an economic and educational program for food security, and as a public health strategy.
- Future research should involve state and federal health experts to track if these health benefits persist as students transition to different stages in their life. This will help determine the effectiveness of the CEP as a long-term investment in national well-being.

Key Sources & Acknowledgements

