

# Using panel data to assess change in food insecurity after the end of pandemic-era SNAP benefits in Los Angeles County: Predictors and policy implications

---

**Natasha Wasim, MPH**

**Doctoral Student, USC Population and Public Health Sciences**

# Acknowledgement



Natasha  
Wasim



Kayla  
de la Haye



Wändi  
Bruine de Bruin



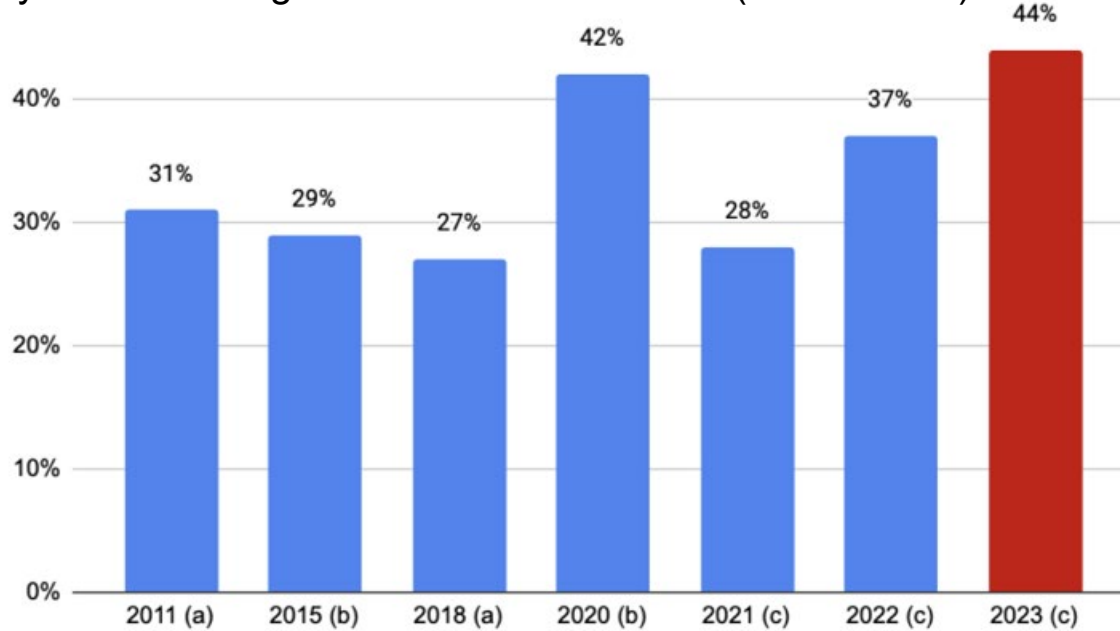
Katherine  
Baker

**Funder: NSF 2125616 (PI: Kayla de la Haye)**



# Among low-income Los Angeles households, food insecurity is the worst in 10 years

Food insecurity trends among low-income households (<300% FPL) in L.A. County



Source of data: a Los Angeles County Health Survey, USDA, Short Form Food Insecurity Module (LAC DPH, 2021); b USC Understanding America Study, Food Insecurity Experience Scale; c USC Understanding America Study, USDA Short Form Food Insecurity Module. FPL = Federal Poverty Level.



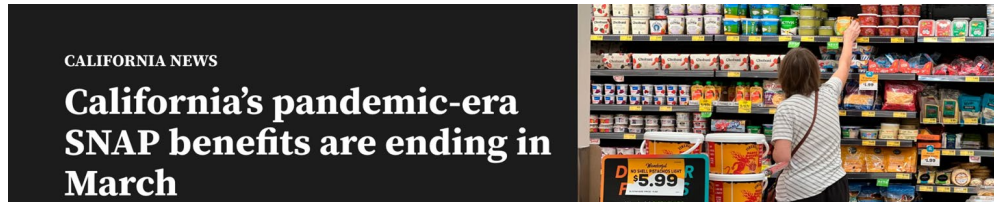
# Food Insecurity and SNAP Connection

- Food insecurity refers to a lack of access to enough food to live an active and healthy life
- USDA SNAP program aims to address it



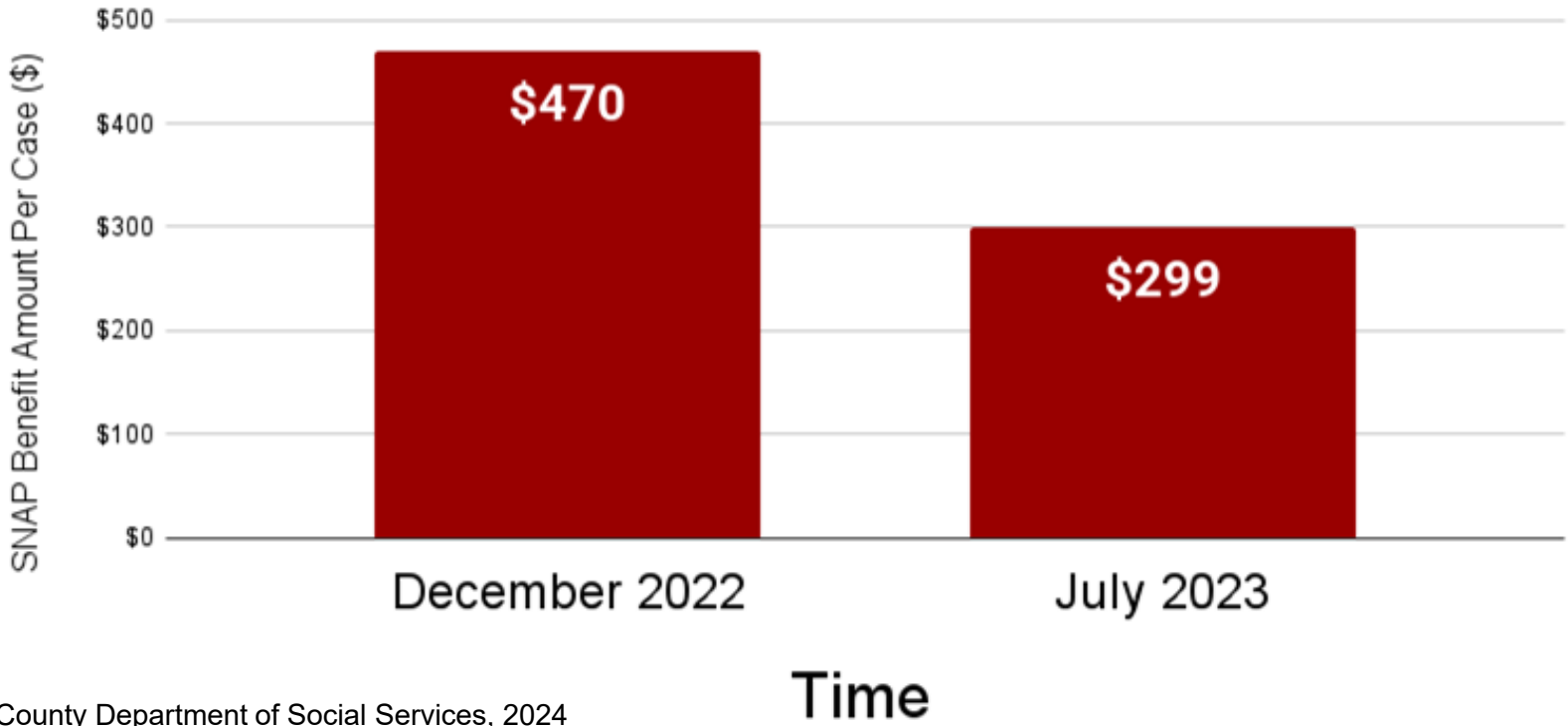
# During the pandemic, SNAP benefits increased

- Emergency Allotments
- Temporary 15% increase of SNAP benefits
- Expanded eligibility and flexibility
- Pandemic Electronic Benefit Transfer



# In March 2023, the pandemic-era SNAP benefits ended

SNAP Average Benefit Amount Per Case (\$) vs. Time in LA County



Source: LA County Department of Social Services, 2024

# Research Questions

1. Did rates of food insecurity increase for SNAP recipients from 2022 and 2023?
2. What sociodemographics predict an increased likelihood of experiencing food insecurity in 2023?
3. Did SNAP recipients who already implemented financial coping strategies in 2022, have higher risk of food insecurity in 2023?

# UAS L.A. County Sample

- 1,071 participated in the December 2022 survey wave
- 1,466 participated in the July 2023 survey wave
- 959 completed both waves, including 161 SNAP recipients





# Survey Measures

- Food insecurity
- Government assistance, including SNAP and WIC
- Financial coping strategies
  - Bought different types of food to save money
  - Bought groceries at a different store
  - Bought cheaper foods
- Sociodemographics

# Research Questions

1. Did rates of food insecurity increase for SNAP recipients from 2022 and 2023?
2. What sociodemographics predict an increased likelihood of experiencing food insecurity in 2023?
3. Did SNAP recipients who already implemented financial coping strategies in 2022, have higher risk of food insecurity in 2023?



# Food insecurity among SNAP recipients increased after pandemic-era benefits ended

	December 2022	July 2023
SNAP recipients	36%	50%

Statistical significance shows that participants who reported food insecurity in December 2022 and July 2023 differ significantly at a 0.05 significance level, as indicated by chi-square tests.



# Food insecurity among SNAP recipients increased after pandemic-era benefits ended

	December 2022	July 2023
SNAP recipients	36%	50%
WIC recipients	52%	57%

# Research Questions

1. Did rates of food insecurity increase for SNAP recipients from 2022 and 2023?
2. What sociodemographics predict an increased likelihood of experiencing food insecurity in 2023?
3. Did SNAP recipients who already implemented financial coping strategies in 2022, have higher risk of food insecurity in 2023?



## SNAP recipients most at risk for FI after the benefits cliff were:

- Those living closest to the poverty line
- Under 65 yrs
- People with some college education

	July 2023 (All SNAP population n=266/1,466) Outcome= Food insecure (n=126) vs. not (n=140)
Characteristic:	Odds Ratio (95% CI)
Income (ref = > 300% of FPL)	
< 100% of Federal Poverty Line	<b>3.2 (1.4, 6.9)*</b>
100-200% of Federal Poverty Line	<b>3.7 (1.6, 8.3)*</b>
201-300% of Federal Poverty Line	1.6 (0.6, 4.1)
Age category (ref = 65+)	
< 30	<b>4.6 (1.6, 12.6)*</b>
31 to 40	<b>5.6 (1.9, 15.6)*</b>
41 to 50	<b>3.4 (1.1, 9.6)*</b>
51 to 64	<b>3.8 (1.4, 9.8)*</b>
Education (ref = College degree)	
High School/ General Education Or less	1.8 (0.8, 3.9)
Some college	<b>2.8 (1.4, 5.5)*</b>

Note: CI=confidence interval; Note: Statistically significant odds ratios are shown in bold and with an asterisk; Statistically significant odds ratios; statistical significance is based on CIs and  $p < 0.05$ .

Table shows only statistically significant results. Additional covariates tested and not listed above: Sex, Race/ethnicity, and Children in household

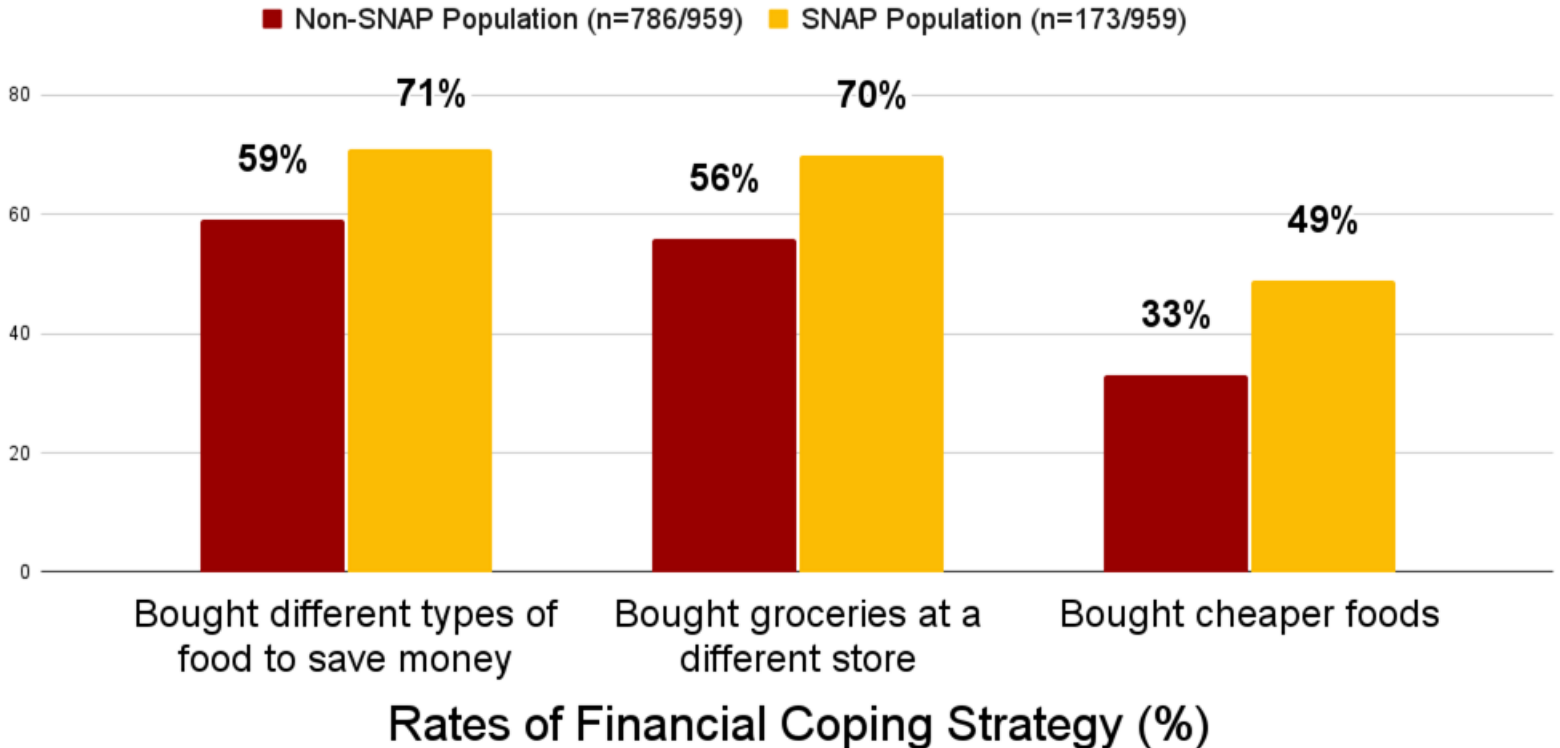
# Research Questions

1. Did rates of food insecurity increase for SNAP recipients from 2022 and 2023?
2. What sociodemographics predict an increased likelihood of experiencing food insecurity in 2023?
3. Did SNAP recipients who already implemented financial coping strategies in 2022, have higher risk of food insecurity in 2023?



# More SNAP recipients used financial coping strategies than the general non-SNAP population

Rates of Financial Coping Strategies Among Non-SNAP/SNAP Recipients: Understanding America Study





# Financial Coping strategy use amongst SNAP recipients predicted a higher risk of food insecurity

Characteristic:	July 2023 (All SNAP population n=266/1,466) Outcome= Food insecure (n=126) vs. not (n=140)
Characteristic:	Odds Ratio (95% CI)
Financial Coping Strategy (ref=no strategy)	
Bought different types of food to save money	<b>5.7 (1.5, 22.1)*</b>
Bought groceries at a different store	2.7 (0.9, 8.8)
Bought cheaper foods	<b>7.0 (2.7, 18.0)*</b>

Note: CI=confidence interval; Note: Statistically significant odds ratios are shown in bold and with an asterisk; Statistically significant odds ratios; statistical significance is based on CIs and  $p < 0.05$ . Adjusted for sociodemographic factors, including income/FPL, age, education, gender, race/ethnicity, & children in household

## Results: Key points

1. Food insecurity **increased** among SNAP recipients after the pandemic benefits era ended
2. Especially among those who are **low-income, less than 65 years of age, and have lower education levels**
3. SNAP recipients who already implemented financial coping strategies in 2022, had a higher risk of food insecurity after the pandemic benefits era ended

# Policy Recommendations

- Gradual benefit reductions instead of abrupt cutoffs
- Strengthen food and grocery subsidy programs
- Seek long-term economic and structural solutions



# Questions?



Natasha  
Wasim

**Wasim@usc.edu**

# Sources

1. United States Department of Agriculture (2021) Dietary guidelines for Americans. <https://www.fns.usda.gov/cnpp/dietary-guidelines-americans> (accessed May 2021).
2. Gundersen, C., & Ziliak, J. P. (2018). Food Insecurity Research in the United States: Where We Have Been and Where We Need to Go. *Applied Economic Perspectives and Policy*, 40(1), 119–135. <https://doi.org/10.1093/aep/ppx058>
3. Drewnowski, A. (2022). Food insecurity has economic root causes. *Nature Food*, 3(8), 555–556. <https://doi.org/10.1038/s43016-022-00577-w>
4. Odoms-Young, A., Brown, A. G. M., Agurs-Collins, T., & Glanz, K. (2024). Food Insecurity, Neighborhood Food Environment, and Health Disparities: State of the Science, Research Gaps and Opportunities. *The American Journal of Clinical Nutrition*, 119(3), 850–861. <https://doi.org/10.1016/j.ajcnut.2023.12.019>
5. Mozaffarian, D., Fleischhacker, S., & Andrés, J. R. (2021). Prioritizing Nutrition Security in the US. *JAMA*, 325(16), 1605–1606. <https://doi.org/10.1001/jama.2021.1915>
6. Gundersen, C., & Ziliak, J. P. (2015). Food Insecurity And Health Outcomes. *Health Affairs*, 34(11), 1830–1839. <https://doi.org/10.1377/hlthaff.2015.0645>
7. Bronchetti, E. T., Christensen, G., & Hoynes, H. W. (2019). Local food prices, SNAP purchasing power, and child health. *Journal of Health Economics*, 68, 102231. <https://doi.org/10.1016/j.jhealeco.2019.102231>
8. Richterman, A., Roberto, C. A., & Thirumurthy, H. (2023). Associations Between Ending Supplemental Nutrition Assistance Program Emergency Allotments and Food Insufficiency. *JAMA Health Forum*, 4(8), e232511. <https://doi.org/10.1001/jamahealthforum.2023.2511>
9. USDA Economic Research Service. (2023, November). SNAP benefits: The COVID-19 pandemic and beyond. U.S. Department of Agriculture. URL (<https://www.fns.usda.gov/snap/benefit-changes-2021>)
10. Leung, C. W., Musicus, A., Willett, W. C., & Rimm, E. B. (2017). Improving the Nutritional Impact of the Supplemental Nutrition Assistance Program. *American Journal of Preventive Medicine*, 52(2 Suppl 2), S193–S198. <https://doi.org/10.1016/j.amepre.2016.07.024>
11. Park, S., Ortega, A. N., Chen, J., Mortensen, K., & Bustamante, A. V. (2024). Association of food insecurity with health, access to care, affordability of care, financial burden of care, and financial hardships among US adults during the COVID-19 pandemic. *Public Health*, 230, 183–189. <https://doi.org/10.1016/j.puhe.2024.02.028>
12. Guan, A., Batra, A., Seligman, H., & Hamad, R. (2023). Understanding the Predictors of Low Take-Up of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC): A Nationwide Longitudinal Study. *Maternal and Child Health Journal*, 27(10), 1795–1810. <https://doi.org/10.1007/s10995-023-03728-y>
13. Gundersen, C., Waxman, E., & Crumbaugh, A. S. (2019). An Examination of the Adequacy of Supplemental Nutrition Assistance Program (SNAP) Benefit Levels: Impacts on Food Insecurity. *Agricultural and Resource Economics Review*, 48(3), 433–447. <https://doi.org/10.1017/age.2019.30>
14. Keith-Jennings, B., Llobrera, J., & Dean, S. (2019). Links of the Supplemental Nutrition Assistance Program With Food Insecurity, Poverty, and Health: Evidence and Potential. *American Journal of Public Health*, 109(12), 1636–1640. <https://doi.org/10.2105/AJPH.2019.305325>
15. L. Alattar, M. Messel, D. Rogofsky, An introduction to the Understanding America Study internet panel [Internet], *Social Sciences Bulletin* (2018). Available
16. Understanding America Study. (2024). Retrieved September 8, 2024, from <https://uasdata.usc.edu/index.php>