

# Impacts of Changing Maximum Incentive Levels on Sales Revenue at Farmers' Markets Participating in the California Nutrition Incentive Program (GusNIP in California)

Research Brief Supplement • May 2023

## **BACKGROUND**

This supplement is intended for use as a companion document to the research brief "Impacts of Changing Maximum Incentive Levels on Sales Revenue at Farmers' Markets Participating in the California Nutrition Incentive Program (GusNIP in California)." This supplement provides more detailed information on the statistical analyses used to derive the key findings presented in that brief along with additional graphical representations of the results of those analytic models.

## **METHODS**

Controlled, interrupted time series models were used to examine the immediate impact (level change) and impact on trend (slope change) of changing the maximum CNIP incentive offered at farmers' markets on CNIP and CalFresh dollars distributed and redeemed. These models took the form:

$$Y = \beta_0 + \beta_1 T + \beta_2 D + \beta_3 P + \beta_4 G + \beta_5 (G^*T) + \beta_6 (G^*D) + \beta_7 (G^*P) + \beta_8 C$$

### where:

Y = the outcome of interest (CNIP or CalFresh dollars distributed or redeemed)

T = the number of months passed from the start of the analysis time period

D = an indicator of whether the observation was collected during the time period after the interruption occurred (incentive changed - increased or decreased)

P = the number of months since the interruption occurred (incentive changed – increased or decreased)

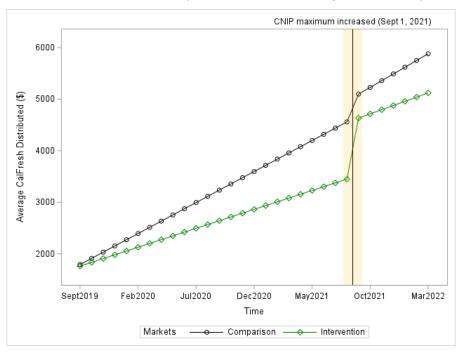
G = an indicator of whether the observation was from an intervention or comparison market

C = the percent of households that used SNAP in the zip code area of the market

# **ADDITIONAL RESULTS**

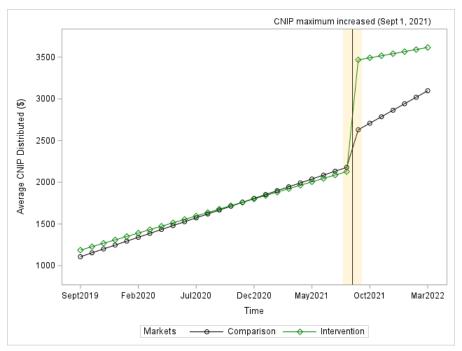
Increasing the maximum CNIP incentive led to a statistically significant greater increase in the dollar amount of CalFresh distributed at markets that increased their CNIP maximum (intervention) compared to comparison markets (by \$693.64).

Figure 1. Adjusted average amount of CalFresh dollars distributed before and after the maximum incentive increase (n=74 intervention, 28 comparison markets).



Increasing the maximum CNIP incentive led to a statistically significant greater increase in the dollar amount of CNIP distributed at markets that increased their CNIP maximum (intervention) compared to comparison markets (by \$941.70).

Figure 2. Adjusted average amount of CNIP dollars distributed before and after maximum incentive increase (n=74 intervention; 30 comparison markets).



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