

WIC Participant Perceptions of the Cash-Value Benefit Increase:

Perspectives from 4 States

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Overview

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Background

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Findings from DE

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Findings from NC

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Findings from CA

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Findings from MA

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Synthesis and Implications

McKenna: As White, middle-class women who obtained our degrees from predominately White academic institutions, we acknowledge that we will never fully understand the experiences of historically marginalized racial and ethnic groups or families experiencing poverty. However, we are committed to continuously challenging our biases, engaging deeply with these populations, forming reciprocal research partnerships, and ensuring that our findings will directly inform more equitable policies and practices.

Emily: As it relates to this project, I am a non-Hispanic white woman that has never experienced food insecurity or participated in a federal nutrition assistance program. I am also not a mother or a caregiver, but I am a native North Carolinian. My positionality presents many limitations related to this project; however, I have tried to build out a diverse team and stakeholder advisory board to, at least in part, address some of these limitations.

Positionality Statements

Marisa: In relation to this project, I am a childless Asian American daughter of immigrants who qualified but did not participate in federal nutrition assistance programs. I acknowledge that my background presents limitations, and I have learned from and appreciated the diverse team of researchers involved in this project.

Cristina: As a childless Hispanic white cisgender woman who has never experienced food insecurity or participated in a federal nutrition assistance program, I acknowledge that I will never fully understand the experience of the WIC caregivers we surveyed. To address this limitation, we have intentionally built a diverse team of collaborators, who have helped actively shape every stage of the research project.



Adequate Fruit
and Vegetable
Consumption is
Critical for Disease
Prevention



USDA Increased
WIC Funding for
Fruits and
Vegetables
During COVID-19

COVID-19 Related CVB Increase

WIC Fruit and Vegetable Benefit Increase Timeline

Pre-Pandemic and Beginning of Pandemic	March 2021	June 2021	September 2021	December 2021	March 2022	September 2022
Original benefit amount: <ul style="list-style-type: none">▶ \$9/month for children▶ \$11/month for pregnant, postpartum, and breastfeeding individuals	The American Rescue Plan is enacted, including a provision that expands access to fruits and vegetables for mothers and children participating in WIC by increasing benefit amount to \$35/month per person for up to four months.	WIC agencies begin implementing the \$35 per month, per participant, fruit and vegetable benefit through September 2021.	Via a continuing resolution, fruit and vegetable benefit increase extended through December 2021 at these levels: <ul style="list-style-type: none">▶ \$24/month for children▶ \$43–47/month for pregnant, postpartum, and breastfeeding individuals	Via a continuing resolution, enhanced benefit extended through March 2022	Via 2022 Appropriations Act, enhanced benefit extended through September 2022	Enhanced benefit extended through December 2022



In NC, benefit dipped back to
~\$10/month/person in
October 2021

Image: (Food Research and Action Center, 2022)

WIC participants' perceptions of the Cash-Value Benefit increase during the COVID-19 pandemic

McKenna Halverson

Research Questions

1. How did increases to the CVB allotment during the COVID-19 pandemic impact WIC participants' perceptions of the benefit?
2. How did increases to the CVB allotment during the COVID-19 pandemic impact WIC participants' grocery purchases, food preparation, and fruit and vegetable consumption patterns?

Semi-Structured Phone Interviews

Data Collection

- 51 WIC participants in Wilmington, DE
- March – June 2022
- 30-minute phone interviews
- \$20 incentive

Recruitment

- ShopRite (supermarket chain)
- Child care centers
- Churches
- Community Partners



Measures

- Demographics
- Food Security Screener: Hunger Vital Sign
- Impact and Perceptions of the CVP Increase:

Representative Interview Questions

1. Can you describe how the shifts in your Cash-Value Benefit amount impacted your family?
2. What do you usually buy with your Cash-Value Benefit?
3. How do you use the items that you purchase with the Cash-Value Benefit?
4. When you have more money to spend as part of your Cash-Value Benefit, how do your purchases change if at all?
5. How does having more money in the Cash-Value Benefit change the way your family eats? For example, do meals or snacks look different?
6. How much money makes a difference? Does a difference between \$11 and \$47 change the kinds of foods you would buy? If so, how?
7. What would your ideal Cash-Value Benefit amount be?

Sample

Sample Characteristics (N = 51)	M(SD)
Average Age	30.88 (7.01)
Average Number of Children (WIC)	2.3 (0.89)
Race	%
Black/African American	70.6
White	11.8
Other	2.0
Ethnicity	
Hispanic/Latinx	21.7
Income	
Under \$30,000	68.6
\$30,000 – \$60,000	21.6
Over \$60,000	9.8
Education	
HS/GED or Less	58.8
Some College	31.4
4-year College or More	9.8
Food Insecure	76.5
Pregnant	19.6
Currently Enrolled in SNAP	56.9
Participants Who Would Like Higher CVB Than Current Amount	70.5

Results

Increased
Purchasing of Fruits
and Vegetables and
More Frequent
Shopping Occasions

Increased
Consumption of
Fruits and
Vegetables

Enhanced Dietary
Variety

High Participant
Valuation of the
Increased CVB
Allotment

Increased Purchasing of Fruits and Vegetables and More Frequent Shopping Occasions


Results

“Before the pandemic, the fruit and vegetables, it wasn't as significant, [...] it wasn't as much money. So, I could probably get maybe a few bananas [...], but now I can get like a lot of fruit and a lot of vegetables, and it's like really significant. \$50 goes a long way for fresh fruit.” – Respondent 40

“Oh, he loves fruit. It allows me to get fruit twice throughout the month, rather than just the one time. It is a big help with dinner and getting and having broccoli and cabbage.”- Respondent 53

Increased Consumption of Fruits and Vegetables

Results



"We were able to have more. I basically make sure that we have a full vegetable at every meal, and I know that's like a really big deal and it kind of makes me weary that we weren't having a full fruit and vegetable at every meal." –
Respondent 11

Results

Enhanced Dietary Variety

“Yeah, just give(s),
[...] different variety.
And like I said, I tried
different fruit, you
know, different things.
So, it did help a lot with
[...] the little bit extra.” –
Respondent 23

“It was great. Cause my
five-year-old, she loved
bananas, my son and my
oldest, they loved apples
and then the little halo. So,
it was good. I was like, go
ahead and pick out what
you want.” – Respondent
28

High Participant Valuation of the Increased CVB Allotment

Results

"I usually pretty much use my produce benefits to the full extent of their abilities, because that's my favorite part of WIC." – Respondent 25

"Yeah, I think it really did help me to kind of start educating myself on what types of fruits and vegetables we could eat. How it helps our health." - Respondent 11

Collaborators and Funders

Funder

- Healthy Eating Research

Academic Advisor & Coauthor

- Dr. Allison Karpyn

Research and Community Partners

- Conscious Connections, Inc.
- Village Tree, Inc.
- Delaware WIC team
- WIC Learning Collaborative
- Dr. Christina Chauvenet

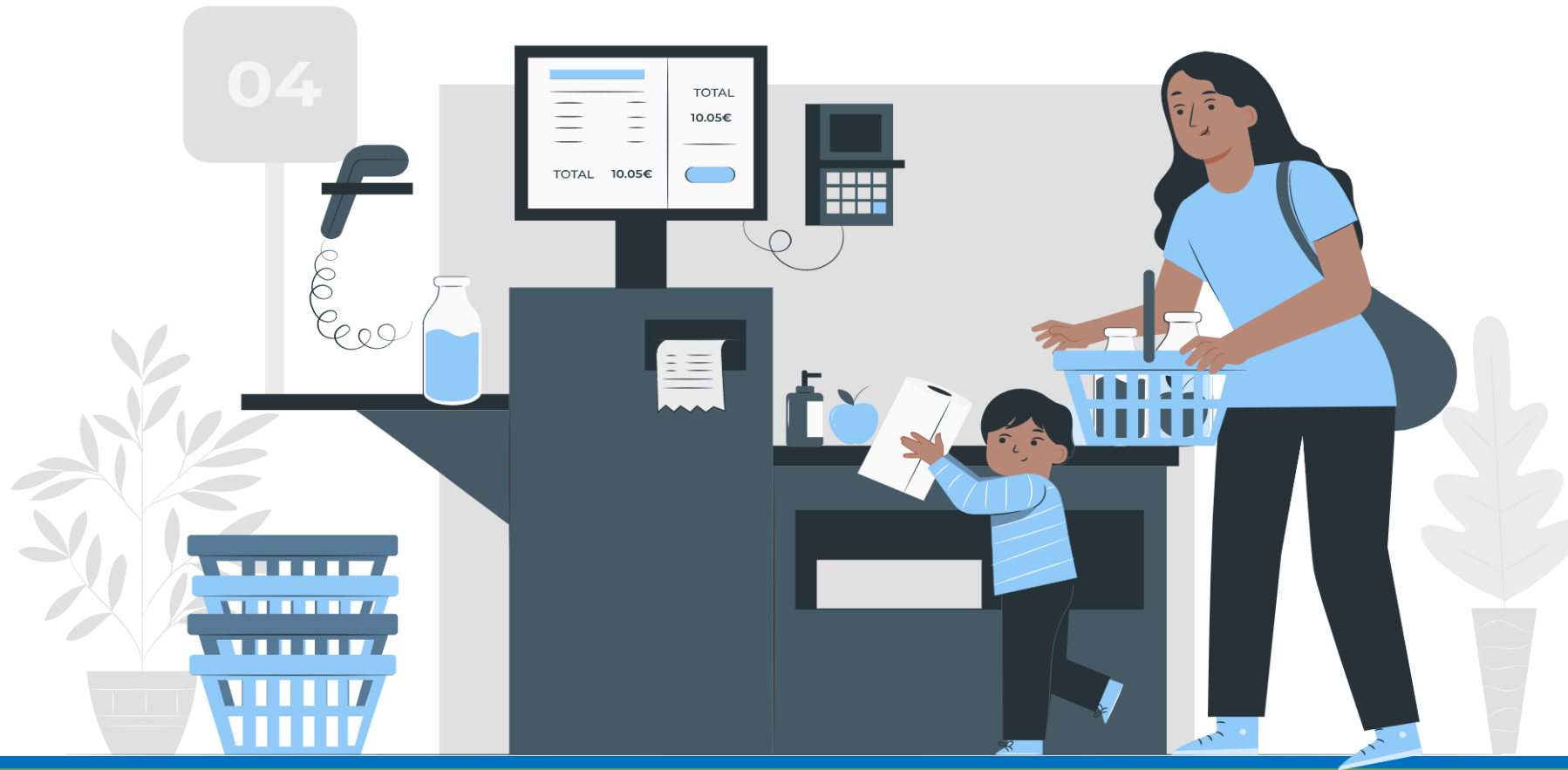


The Village Tree, Inc.



“I think that’s the most beneficial change that WIC has made in a really long time”

Perceptions and Awareness of an Increase in the WIC Cash Value Benefit



Collaborators and Funders

Co-Authors

Daniele Vest
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Molly De Marco
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Stakeholder Advisory Board

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Funders

Carlina Population Center
NC TRaCS
RWJF Healthy Eating Research

Objectives

1

Qualitatively examine 1) **perceptions and awareness** of the CVB increase 2) **barriers and facilitators** to using the increased CVB and 3) **perceived effects** of the CVB increase on household **fruit and vegetable consumption**

2

Understand whether experiences and perceptions of the CVB increase differed by **rurality**

Virtual Focus Groups

Recruitment

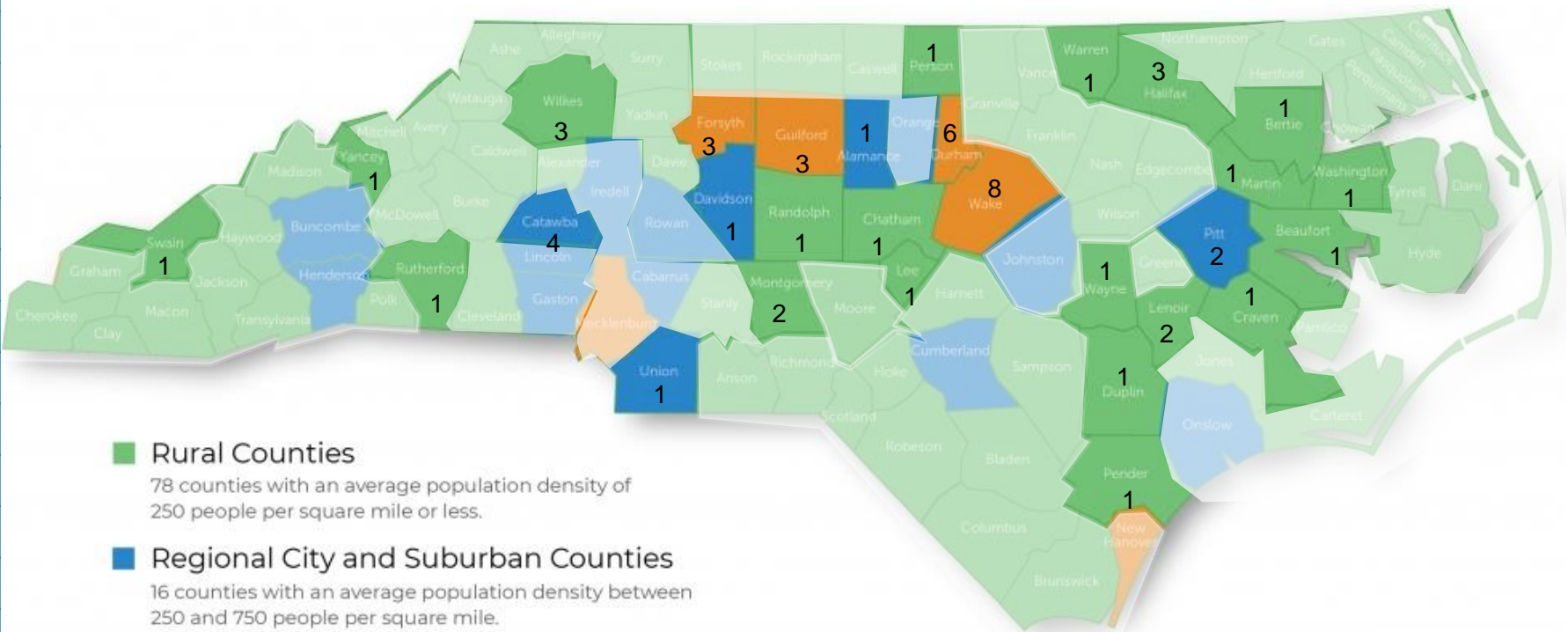
- Local WIC agencies***
- SNAP Ed Implementing Agencies and FNS agents
- Stakeholder advisory board

Data Collection

- March 2022
- 5 rural and 5 urban/suburban focus groups (n=55)
- 4-8 participants per group
- 1 hour Zoom group discussion
- \$40 incentive
- Used a semi-structured focus group guide

Sample

Characteristic	Rural (n=26)	Urban (n=29)
Average Age	29.2	31.6
Race		
Black/African American	7 (27%)	16 (55%)
White	12 (46%)	5 (17%)
Mixed Race	2 (8%)	2 (7%)
Middle Eastern/North African	0 (0%)	1 (3%)
Asian	0 (0%)	1 (3%)
Hispanic/Latinx	7 (27%)	6 (21%)
Participates in SNAP	12 (46%)	16 (55%)
Income		
\$0-24,999	13 (50%)	10(34%)
\$25-49,999	12(46%)	16(55%)
\$50,000+	1(4%)	3(10%)
Education		
HS/GED or Less	8 (30%)	4 (14%)
Some College	16 (62%)	13 (45%)
4-year College or More	2 (8%)	12 (41%)



Focus Group Guide

 WIC enrollment

 Shopping experiences and COVID-19

 Food package

 CVB awareness and perceptions

 Barriers and facilitators to CVB use

 Household dietary behaviors

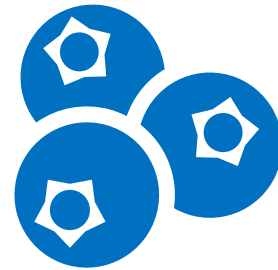
Similar Themes



Positive
perceptions



Perceived
increase in
consumption



Enhanced fruit
and vegetable
variety



Highly valued
food package
component

Awareness of Changes & Implementation Challenges

- Many not notified by WIC
- October decrease created challenges and uncertainty
- Some frustration with the decrease for some families in November

*...when we got the first increase, I wasn't told about it. So I called WIC to make sure that it was accurate because **I didn't want to spend it and then have to be responsible for repaying it...***

Barriers to CVB Use More Pronounced in Rural Settings

Facilitators

- Variety of eligible foods
- Household preferences for fruits and vegetables

Barriers

- Insufficient supply
- Inaccurate or unclear shelf/product labeling
- Issues with BNFT app
- **General WIC use barriers**
- More pronounced in rural groups

Desired Changes to CVB

- Higher amounts to meet needs and keep pace with inflation
- Exchange CVB for baby food for 6-12-month-old children
- Substitute unused components of the food package for more CVB
- Roll over benefits

*...if I could say, you know, **you can keep this bread and give it to someone who would actually use this bread** and someone who will actually use this cereal, **go ahead and just give me \$5 more for fruits and vegetables**, and that would be fine. Like, I just think if it's like tailored to the child like that*

Full Paper: go.unc.edu/cvbstudy

Research Brief: go.unc.edu/cvbbrief

Increased WIC Cash Value Benefit for fruits and vegetables is associated with higher redemption, satisfaction, and household food security across race/ethnicity groups

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University of California, Nutrition Policy Institute
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a program of
Heluna Health



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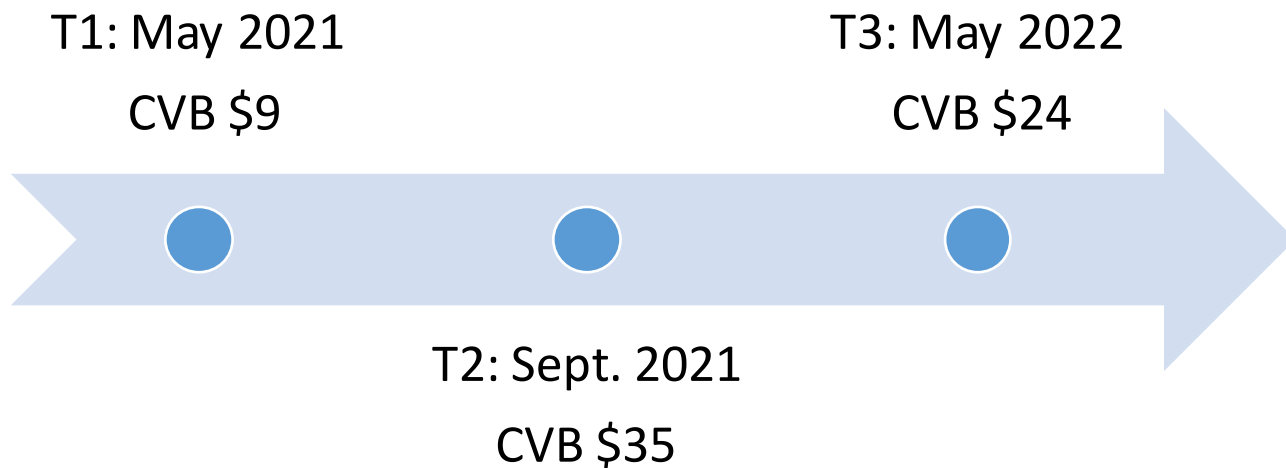
Background and research question

- The 2017 NASEM committee issued recommendations on WIC food packages
 - Increase the cash value benefit (CVB) for fruits and vegetables from \$9 to \$23 for children ages 1-4 years to provide half of recommended intake
- 2021 American Rescue Plan Act allowed USDA to temporarily augment the CVB
 - Augmentation started June 2021, and is extended to December 2022 at \$24-25/month
- *Primary research question:* How are different levels of the CVB associated with changes in redemption, satisfaction, household food security, and child fruit and vegetable intake?
- *Secondary research question:* Are results universal, or do they differ by race, ethnicity, and language?



Study design

- Longitudinal
- 3 surveys of caregivers of WIC-participating children in Southern California



Baseline participant characteristics (n=1770) ^a	% or mean
3+ people in the household under 18 years old	35%
Number of children in household currently receiving WIC	1.3 children
Child female	47%
Child age	2.8 years
Race and ethnicity	n (%)
Asian	65 (4)
Non-Hispanic Black	222 (13)
Hispanic English-speaking	798 (45)
Hispanic Spanish-speaking	532 (30)
Other	114 (6)
Non-Hispanic White	39 (2)

Measurement of study outcomes

Redemption

- Administrative records

Satisfaction with CVB amount: perceived as sufficient

- Would you say [the \$ amount of CVB] is... Too much? Not enough? Just right? Don't know?
- Dichotomized: satisfied (too much, just right) and not satisfied (not enough).

Household food security: 6 item USDA household food security screener

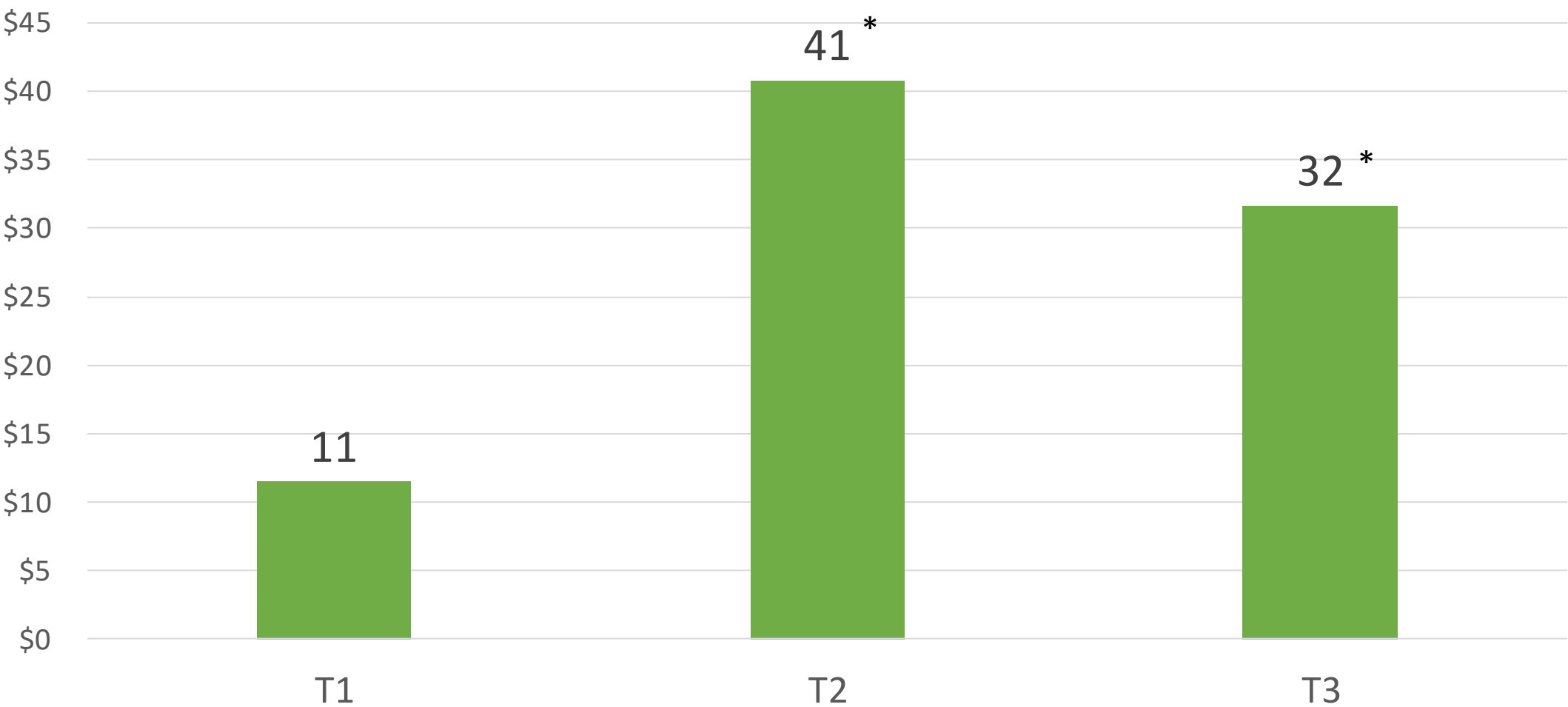
Child fruit and vegetable intake: NHANES Dietary Screener Questionnaire

Likelihood of remaining on WIC if CVB amount went back to \$9

- If the amount [of CVB reverted] to \$9 ... how likely are you to keep coming to WIC for your children between age 1-4? Very likely, somewhat likely, somewhat unlikely, not very likely?
- Dichotomized: likely (very or somewhat likely) and unlikely (somewhat unlikely, not very likely).



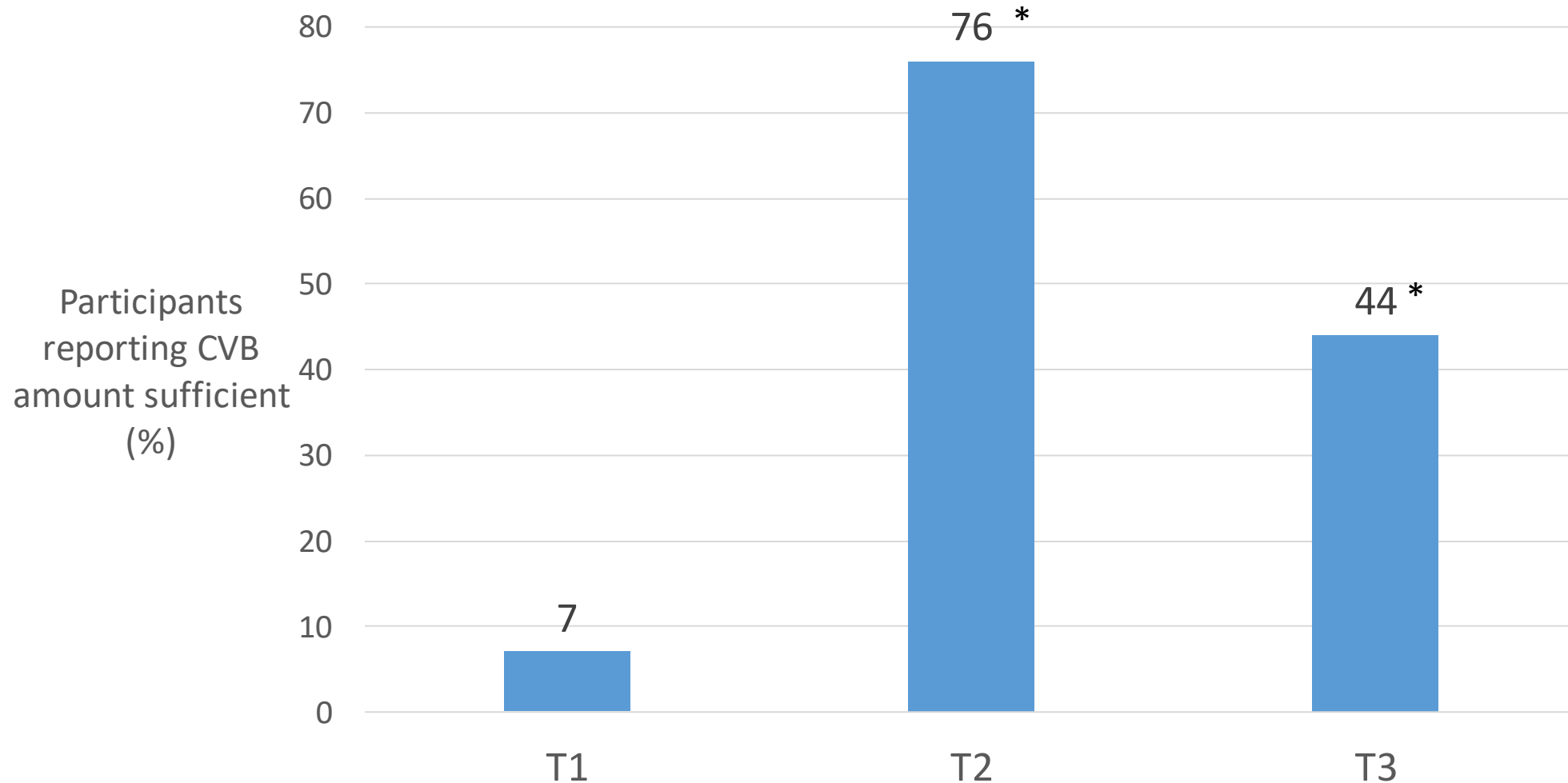
Average household CVB redemption per month (\$) increased compared to baseline



*p<0.05, compared to baseline



Satisfaction with CVB amount (%) varied with CVB value



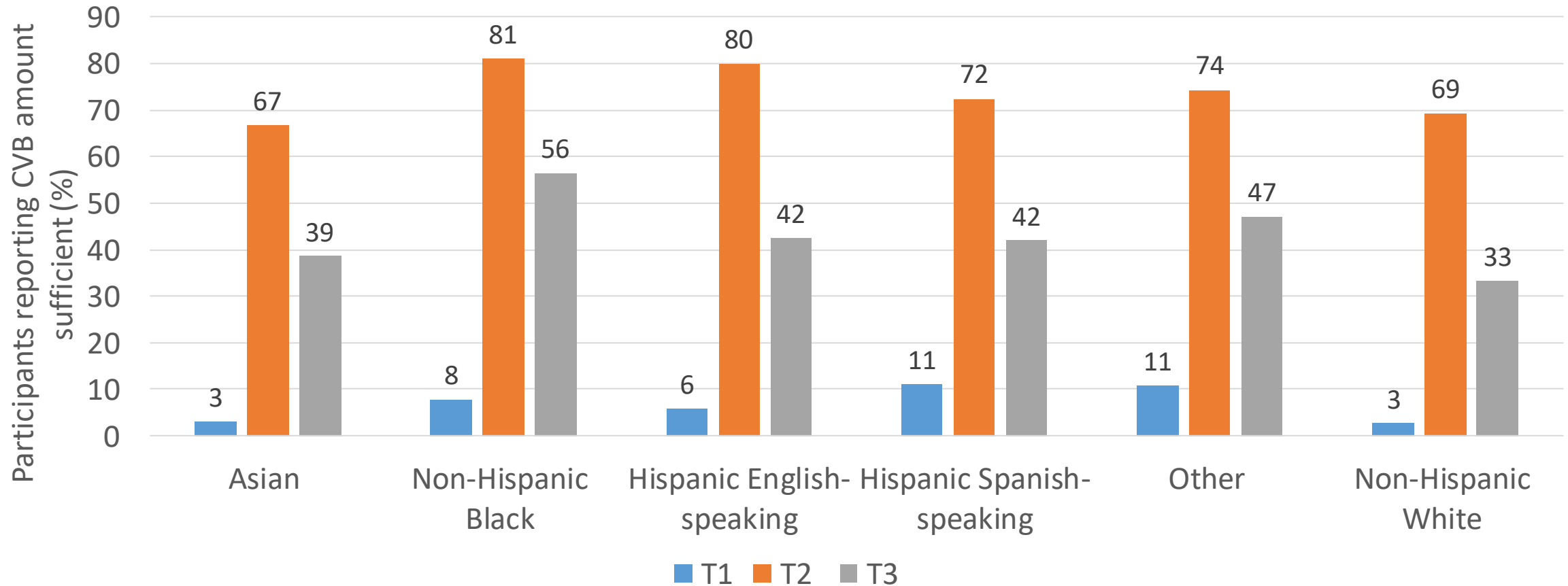
*p<0.05, compared to baseline



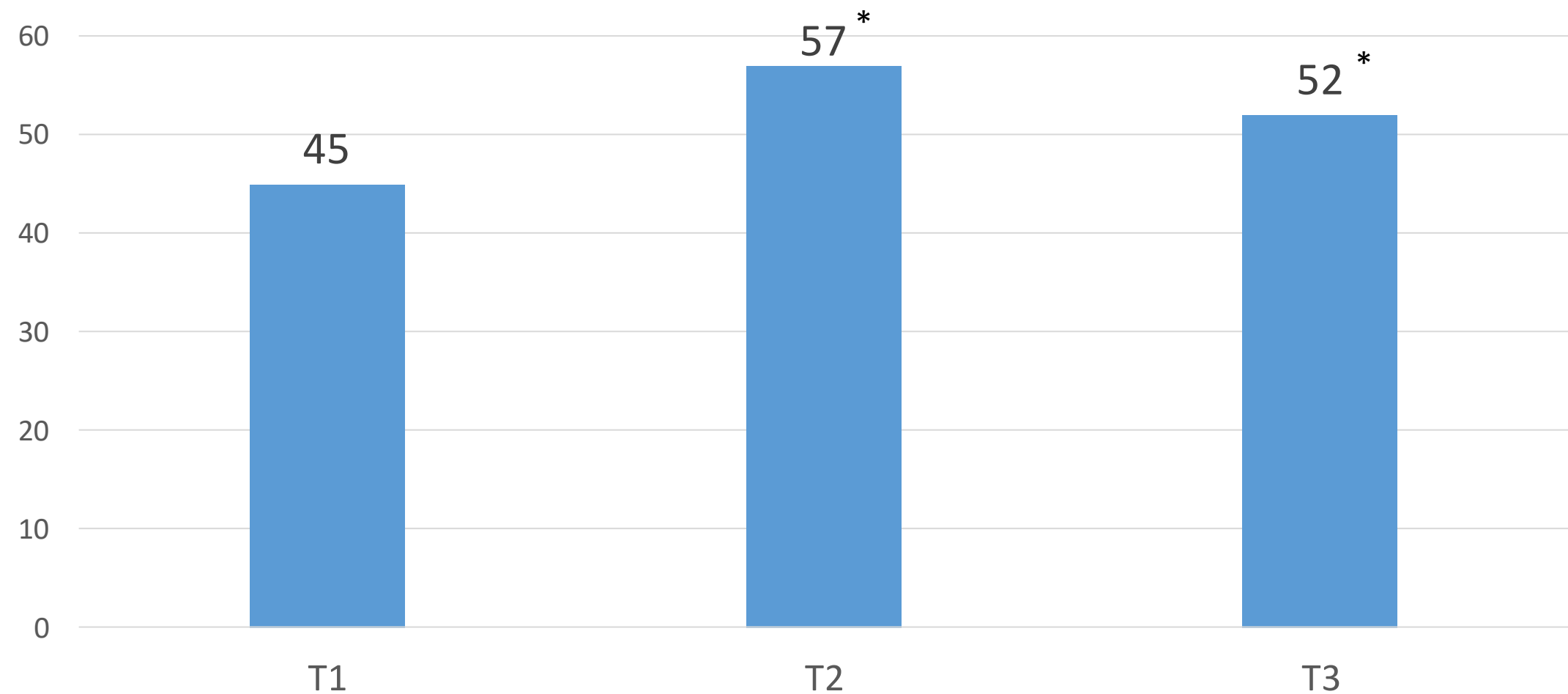
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Satisfaction with CVB amount by race, ethnicity, and language (%)



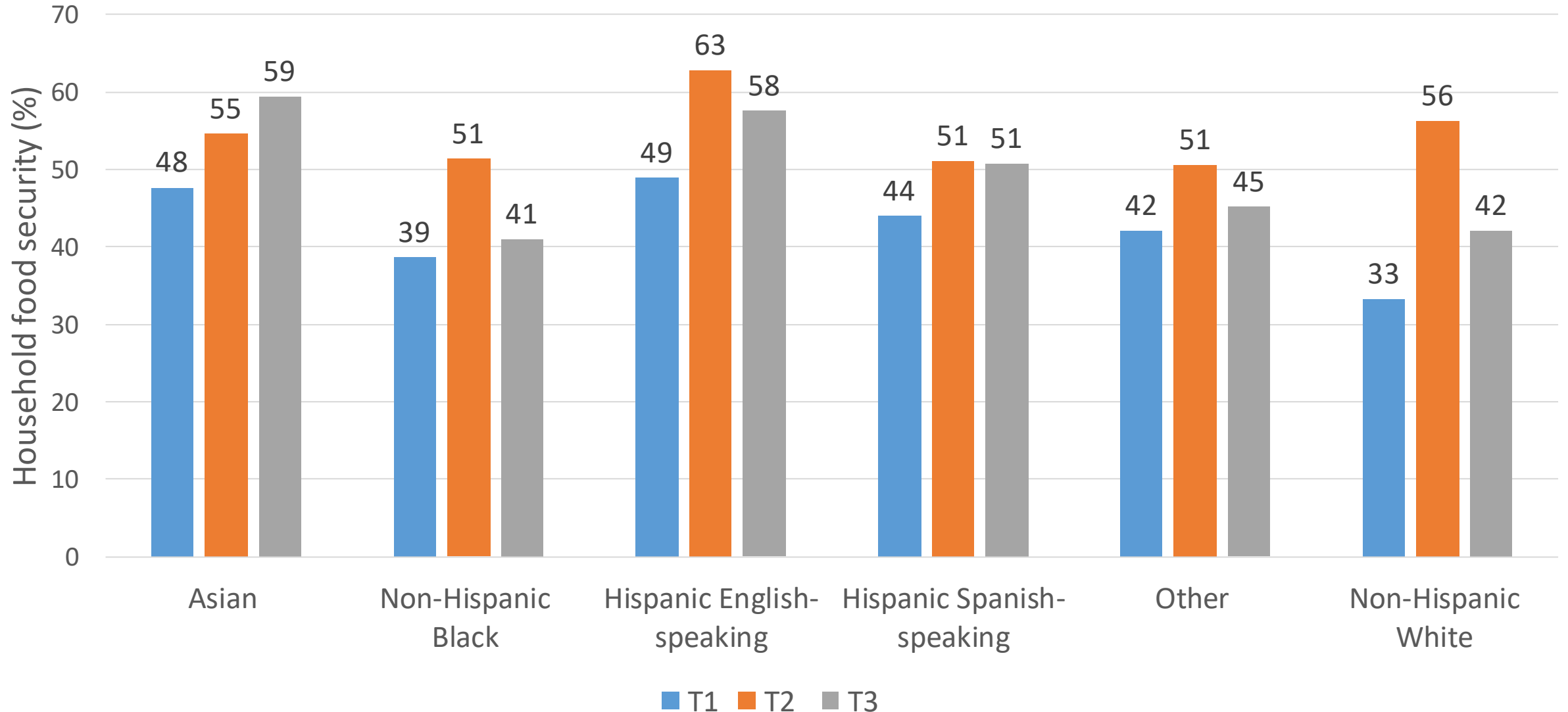
Household food security (%) increased, compared to baseline



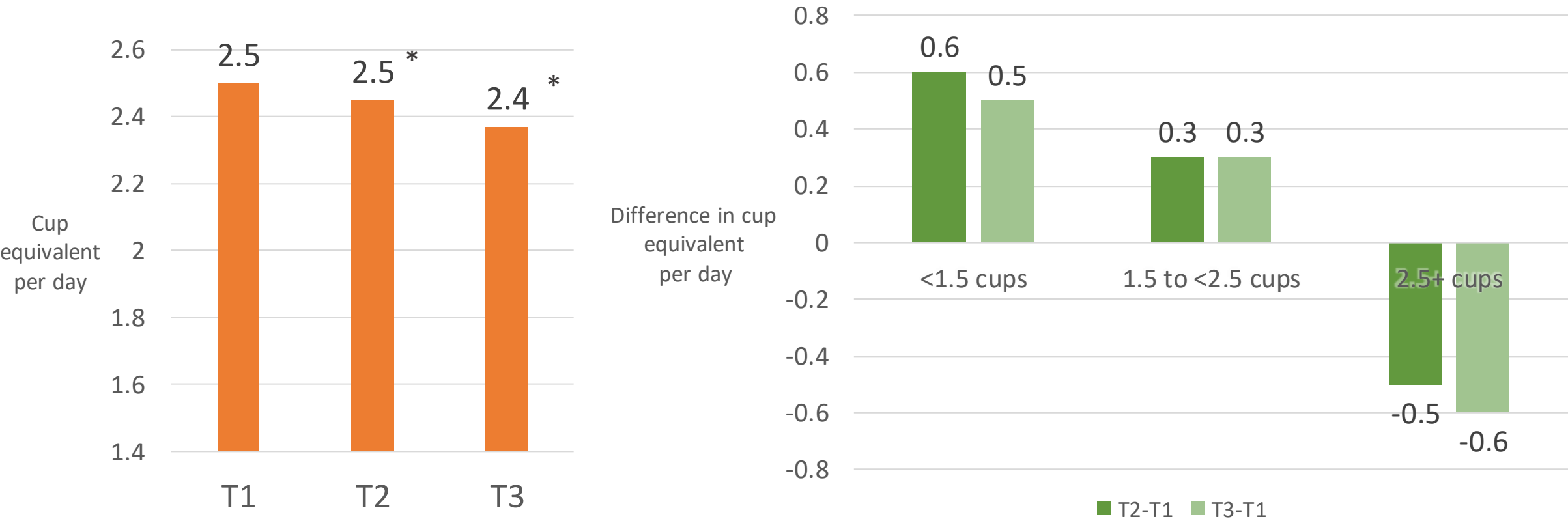
*p<0.05, compared to baseline



Household food security by race, ethnicity, and language changed at each timepoint

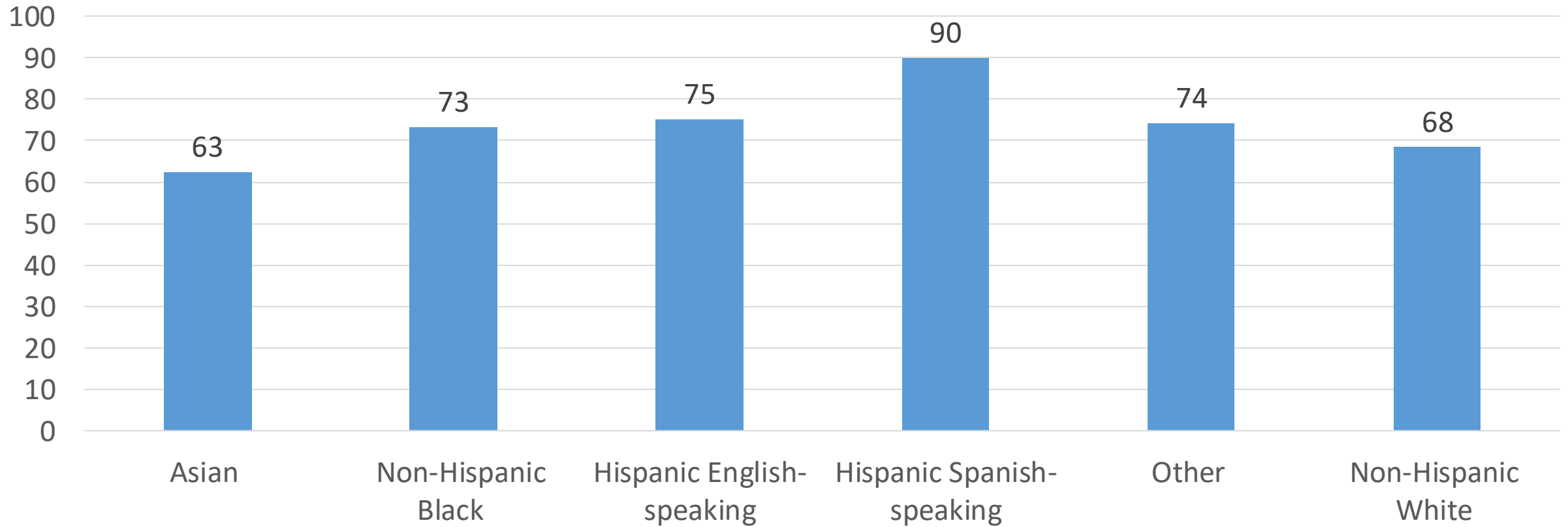


Fruit and vegetable intake increased among children whose intake was lowest at baseline



*p<0.05, compared to baseline

Likelihood of participation if CVB went back to \$9 varied by race and ethnicity (%)



Conclusion

- The augmented CVB increased fruit and vegetable access substantially, evident in higher CVB redemption and higher household food security
 - Improved fruit and vegetable access was experienced by all racial/ethnic groups
- Participants satisfaction with CVB increased with higher CVB amount.
 - Increases in satisfaction were larger among racial/ethnic groups that reported lower baseline satisfaction.
- Fruit and vegetable intake decreased in full sample, but intakes increased among children with the lowest baseline FV intake.



Thank you! Questions?

Email: mmtsai@ucanr.edu

Study team

University of California, Nutrition Policy Institute:

- Lorrene D. Ritchie, PhD, RD (Co-PI)

University of California, Davis

- Lauren E. Au, PhD, RD

PHFE WIC:

- Shannon E. Whaley, PhD (Co-PI)
- Christopher E. Anderson, PhD, MSPH
- Catherine E. Martinez, MPH
- Martha Meza



Robert Wood Johnson
Foundation



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Future research questions

- How did participants spend their CVB (e.g., mostly fruits, mostly vegetables)?
- Does variety of child FV intake change after enhanced CVB?
- How does the increased CVB affect retention?
- Was improved household food security maintained?



IMPACT OF TEMPORARY CVV/B INCREASE ON FV PURCHASE, CONSUMPTION, AND ACCESS IN MA



HARVARD T.H. CHAN
SCHOOL OF PUBLIC HEALTH



RESEARCH TEAM & SUPPORT



Harvard TH Chan School

- Erica Kenney, PhD & Eric Rimm, PhD



MA Department of Public Health

- Rachel Colchamiro, MPH, RD, LDN & Kelley May, MPH, RD



Funding

- NOPREN Early Career Scholar Award

AIM

Examine WIC caregiver perceptions of the impact the CVV/B increase posed on ...

- (1) FV access & consumption,
- (2) Out-of-pocket grocery costs & burden, and
- (3) General satisfaction with WIC.



METHODS

SAMPLE

- 321 MA WIC caregivers
 - Child 1y+
 - Enrolled 1y+
 - Remember increase

RECRUIT

- Invite via text from MA State Office
- Anonymous survey link

DATA

- 10-minute Qualtrics survey
 - English, Spanish, Portuguese
- \$10 incentive
- \$75 lottery

SURVEY

GENERAL QUESTIONS

- E.g., Who is currently enrolled & is receiving benefits?

MARKET ACCESS & FOOD NEEDS

- E.g., How long does it usually take you to get to the store?

CVV/B IMPACT

- E.g., How did the CVV/B increase affect the amount you spend on FV with your own money?

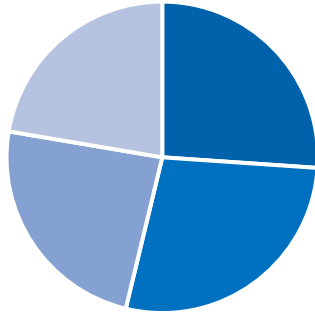
DEMOGRAPHIC & SOCIOECONOMIC FACTORS

- E.g., gender, race/ethnicity, marital status, education, employment

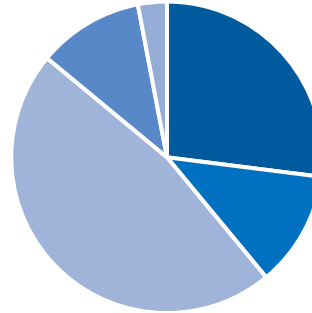


STUDY SAMPLE (N=319)

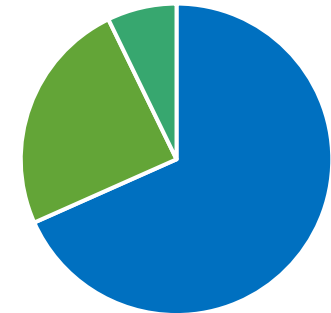
Age



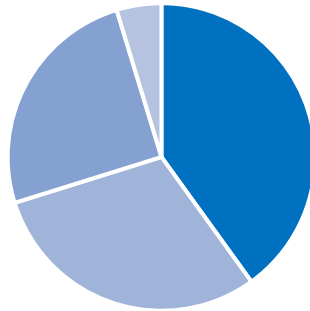
Race & Ethnicity



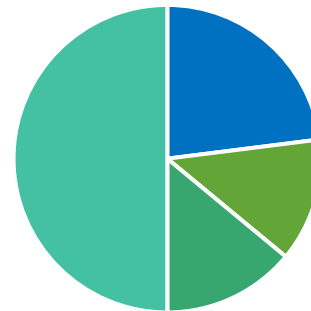
Language



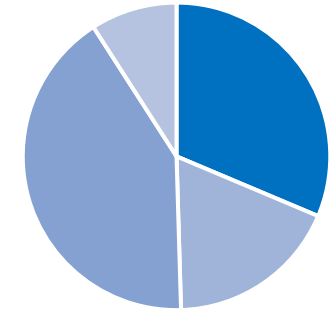
Education



SNAP

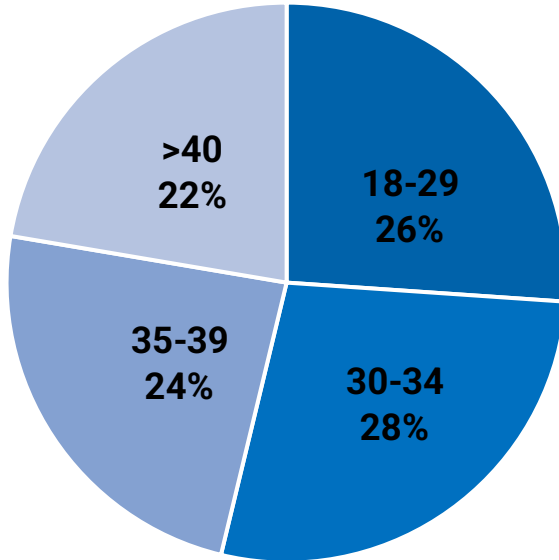


Employment

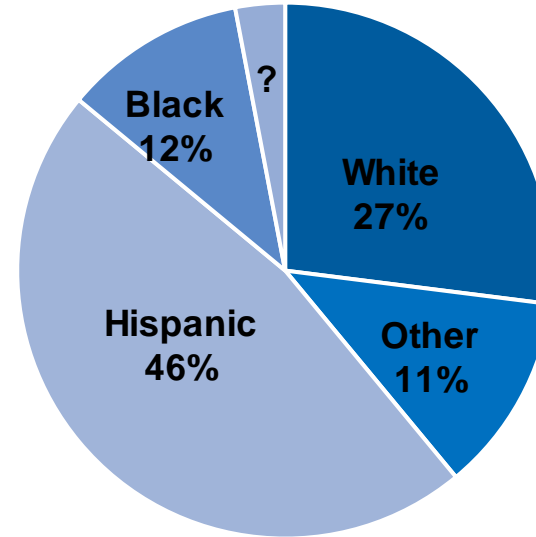


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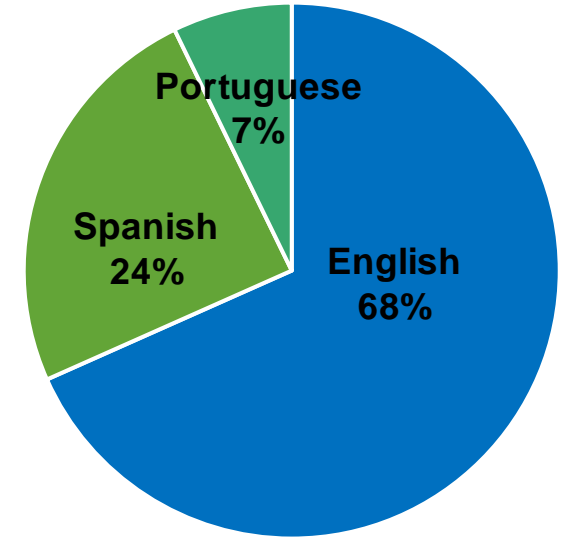
Age



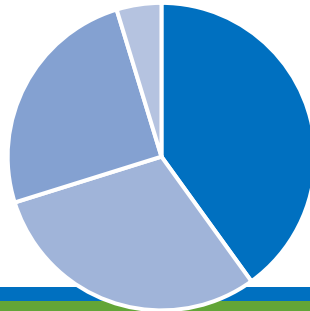
Race/Ethnicity



Language



Education



SNAP

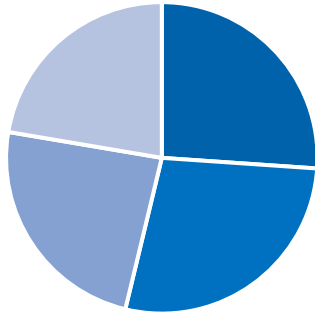


Employment

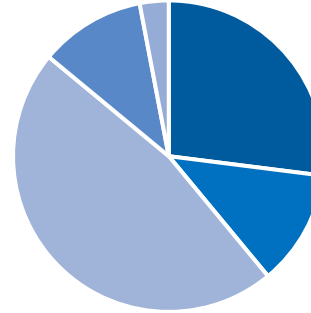


STUDY SAMPLE (N=319)

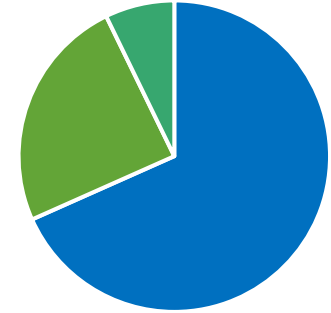
Age



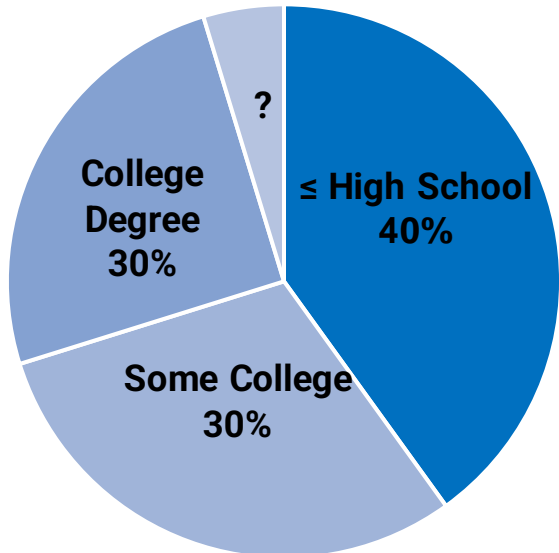
Race & Ethnicity



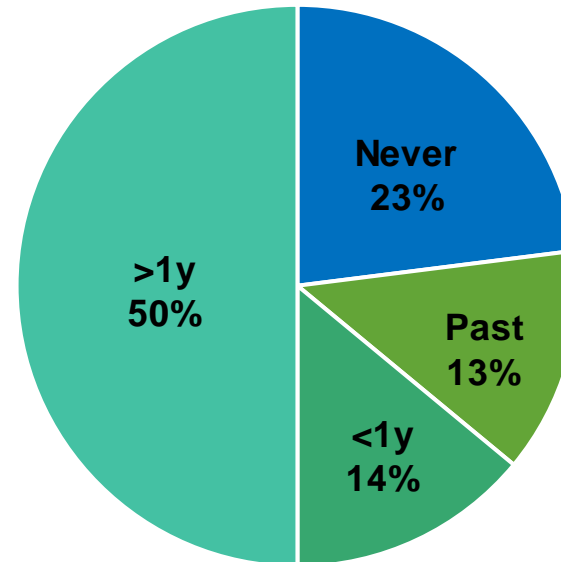
Language



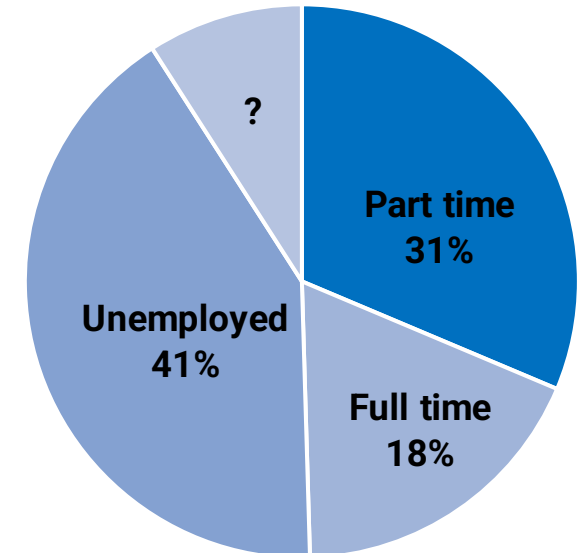
Education



SNAP

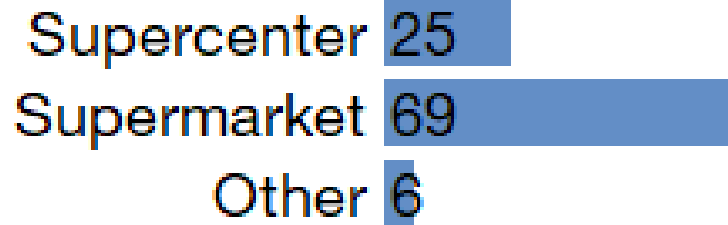


Employment

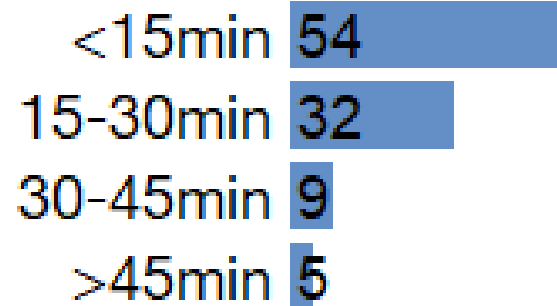


SHOPPING EXPERIENCES

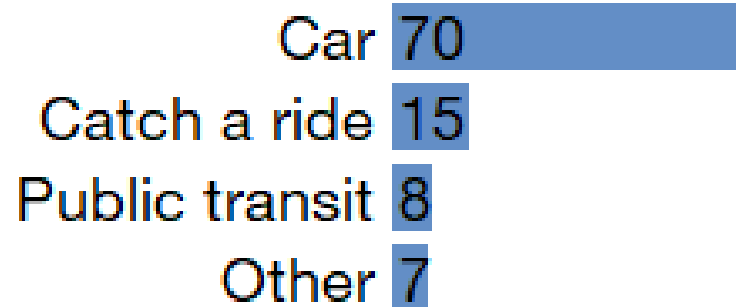
Where do you shop most?



How long does it take to get there?



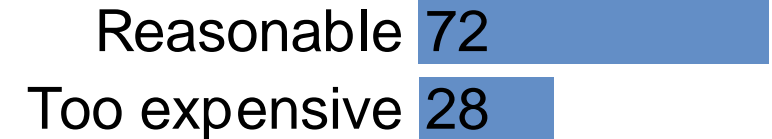
How do you get there?



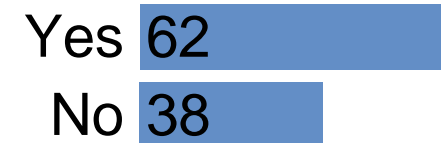
Do they sell FV your family likes?



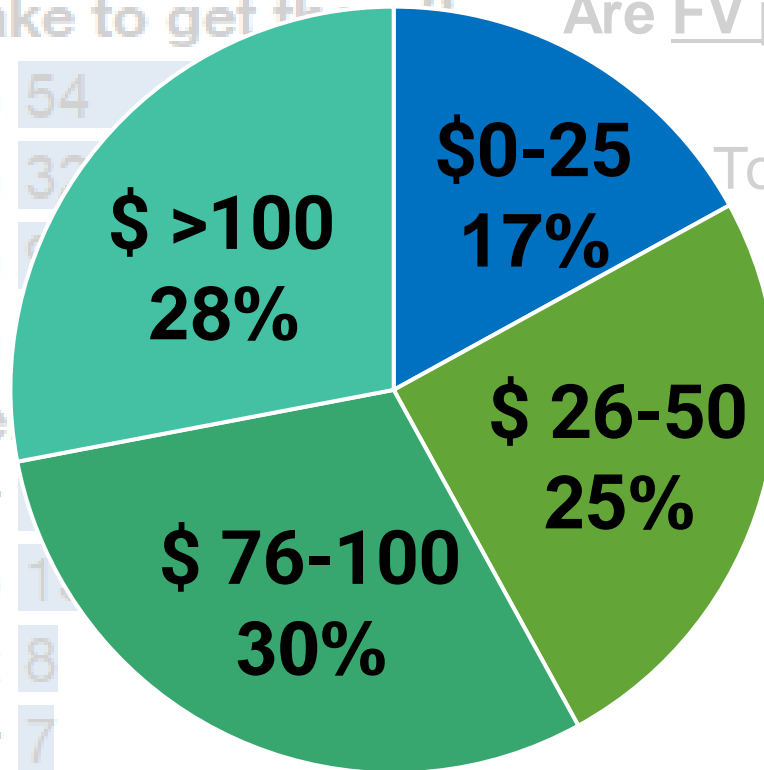
Are FV prices reasonable?



Able to get enough FV last month?



Out-of-Pocket FV Costs/Month



Where do you shop most?

Supercenter 25
Supermarket 29
Other 6

Do they sell FV your family likes?

Yes 97
No 3

How long does it take to get the FV?

<15min 54
15-30min 32
30-45min 9
>45min 5

Are FV prices reasonable?

Reasonable 72
Too expensive 28

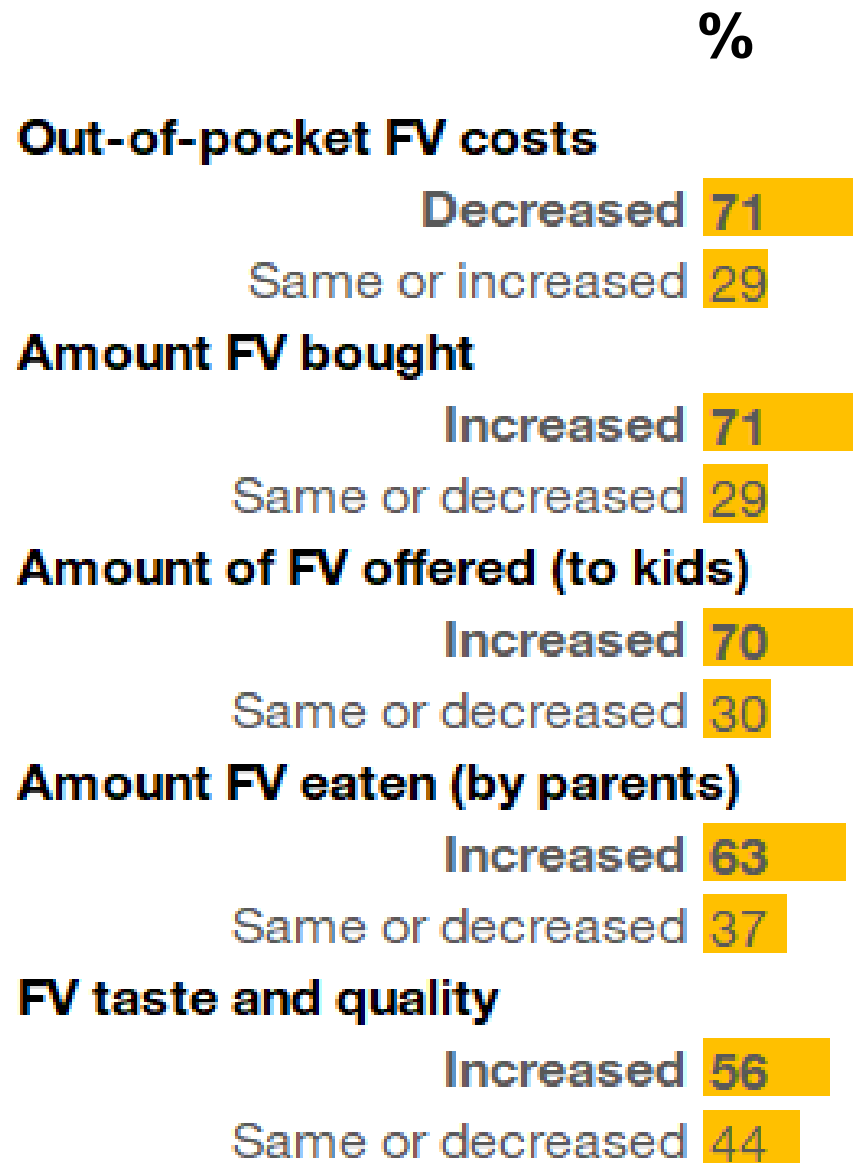
How do you get the FV?

Car 10
Catch a ride 1
Public transit 8
Other 7

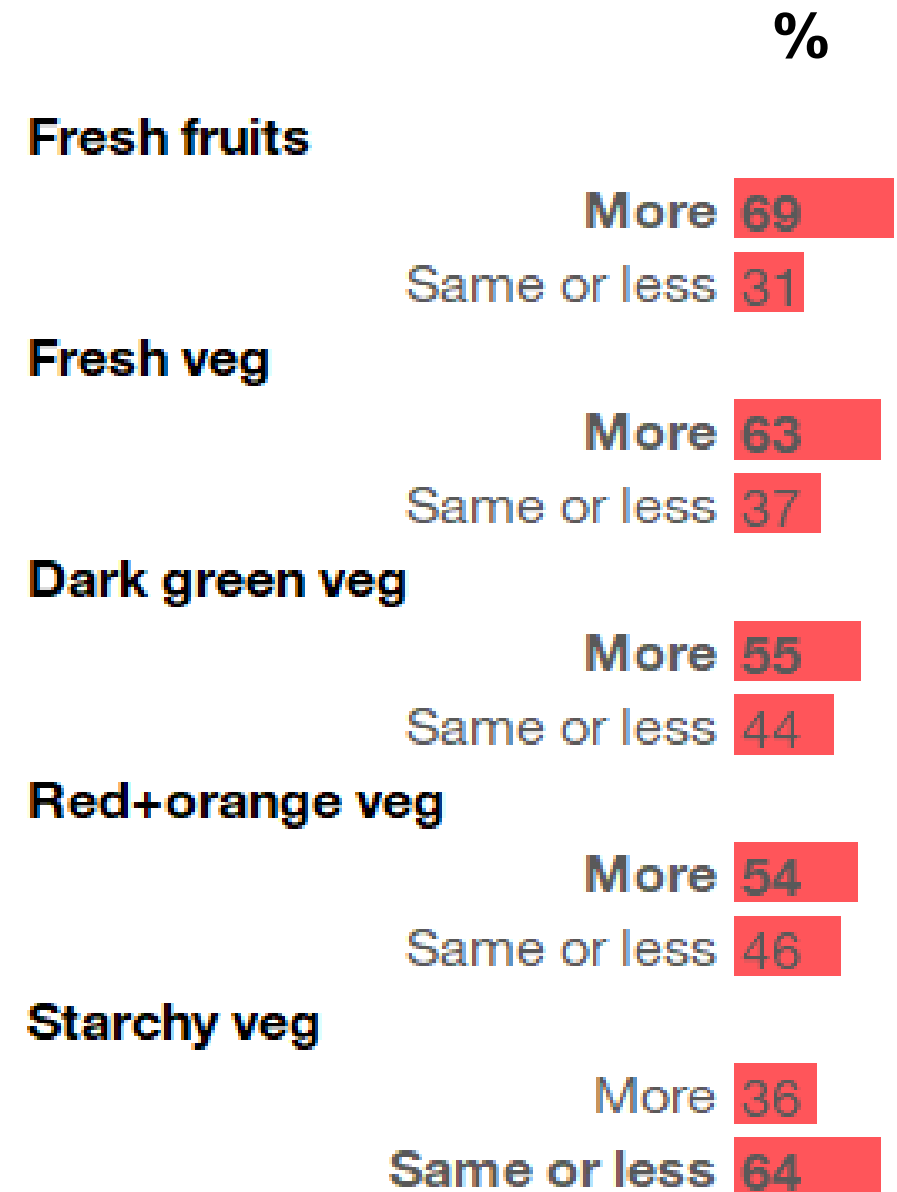
Did you get enough FV last month?

Yes 62
No 38

PERCEIVED IMPACT

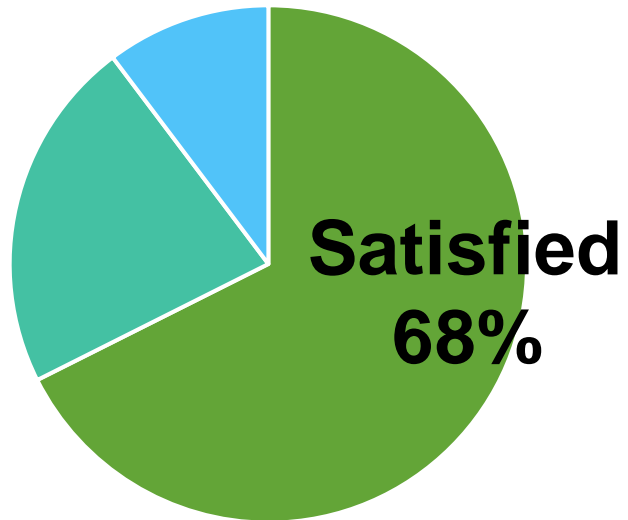


CHANGES IN VARIETY

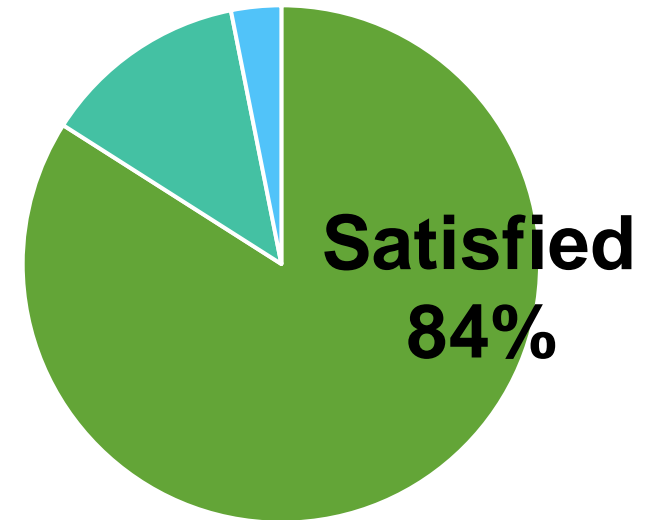


SATISFACTION WITH WIC FOOD PACKAGE

PRE-INCREASE



POST-INCREASE



CONCLUSION

Caregivers perceived...

- Reduced out-of-pocket cost
- Increased amount FV bought, consumed, & offered
- Improved satisfaction with WIC

Key takeaways



1. WIC participants report **strong support** for the CVB allotment increase and stated **pre-COVID amount was insufficient**



2. Higher CVB allotments **decreased** participants' perceived out-of-pocket cost.



3. Higher CVB allotments **increased** participants' perceived **purchasing and consumption** of fruit and vegetables, perceived **dietary variety**, and perceived **satisfaction** with the WIC food package.



4. Many participants believe the **CVB should be increased further** to meet their needs



5. **Implementation challenges** should be considered in future emergency food response policy

Implications

LOCAL AGENCIES

- Reminders via text or recert appointments regarding CVV/B status/changes
- Individualized reminders on CVV/B remaining balance via ShopperApp (where available)

STATEWIDE INITIATIVES

- Collaborate with academic researchers to increase evaluation capacity
- Evaluate CVB increases using grocery store transaction data
- Continue cross-state collaboration

FEDERAL POLICY

- Use research to inform NWA's ongoing policy and advocacy efforts on CVB increase and new WIC food package

Future research...

Do results differ by race, ethnicity, and language?

How does the increased CVB affect retention?

Was improved household food security maintained?

How did the CVB increase affect food purchases?

Published Research

1. go.unc.edu/cvbstudy
2. go.unc.edu/cvbbrief
3. Halverson, M. M. & Karpyn, A. (2022). **WIC participants' perceptions of the Cash-Value Benefit increase during the COVID-19 pandemic**, Nutrients.
4. Halverson, M. M. & Karpyn, A. (2022). **Research Brief: WIC participants' perceptions of the Cash-Value Benefit increase during the COVID-19 pandemic**. WIC Hub
5. Marisa Tsai, Lauren Au, Lorrene Ritchie, Christopher Anderson, Catherine Martinez, Shannon Whaley, **Larger WIC Cash Value Benefit for Vegetables and Fruit Is Associated With Lower Food Insecurity and Improved Participant Satisfaction in WIC Families With Children**, Current Developments in Nutrition, Volume 6, Issue Supplement_1, June 2022, Page 231, <https://doi.org/10.1093/cdn/nzac048.045>
6. Martinez, C.E.; Ritchie, L.D.; Lee, D.L.; Tsai, M.M.; Anderson, C.E.; Whaley, S.E. **California WIC Participants Report Favorable Impacts of the COVID-Related Increase to the WIC Cash Value Benefit**. Int. J. Environ. Res. Public Health 2022, 19, 10604. <https://doi.org/10.3390/ijerph191710604>



Thank you!
Feedback? Questions?

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3. Okeke JO, Ekanayake RM, Santorelli ML. Effects of a 2014 statewide policy change on cash-value voucher redemptions for fruits/vegetables among participants in the Supplemental Nutrition Program for Women, Infants, and Children (WIC). *Maternal and Child Health Journal*. 2017;21(10):1874-1879.
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4. Zenk SN, Schulz AJ, Israel BA, James SA, Bao S, Wilson ML. Fruit and vegetable access differs by community racial composition and socioeconomic position in Detroit, Michigan. *Ethnicity & disease*. 2006;16(1):275-280.