FINDINGS FROM A TRAUMAINFORMED NUTRITION EDUCATION CURRICULUM FOR PEOPLE RETURNING FROM INCARCERATION

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Summary

Individuals reentering and healing from incarceration are often at increased risk for poor dietrelated health outcomes compared to the general population and have limited opportunities for nutrition education. To address this, Impact Justice and the University of California Nutrition Policy Institute collaborated to develop a trauma-informed nutrition education workshop curriculum for formerly incarcerated individuals. Workshops included general information about a healthy diet as well as resources for accessing and preparing healthy food.

We conducted 12 workshops throughout California between October 2022 and February 2023, including 8 in-person, 2 virtual and 2 hybrid in-person/virtual. The workshops were hosted by community-based organizations.

The workshops were evaluated via participant and host surveys and semi-structured interviews with facilitators and participants. Workshop participants reported: (1) increased knowledge about the health benefits of fruits and vegetables; (2) increased knowledge about how to identify and prepare healthy food; (3) an intention to eat more fruits and vegetables; (4) appreciation for the opportunity to share experiences regarding incarceration and nutrition among peers with lived experience; and (5) appreciation for the trauma-informed aspects of the curriculum.

Participants, facilitators, and host organizations all expressed a high degree of satisfaction with the workshops. They expressed a need for more trauma-informed nutrition education for people impacted by the criminal legal systemⁱⁱ and shared recommendations to make future workshops more relevant and meaningful.

¹ A trauma-informed approach includes an understanding of trauma and an awareness of the impact it can have across settings, services, and populations. It involves viewing trauma through an ecological and cultural lens and recognizing that context plays a significant role in how individuals perceive and process traumatic events, whether acute or chronic.¹

[&]quot;The system in the U.S. that encompasses policing, prosecution, courts and corrections. The term "criminal legal" is used instead of "criminal justice" as these systems often do not deliver justice.²

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I. Introduction

Individuals experiencing and returning from incarceration in the U.S. are at increased risk for poor diet-related health outcomes compared to the general population. According to a national survey of formerly incarcerated individuals, the meals provided in prison are often lacking in nutrient quality and are high in sodium and refined carbohydrates, leaving individuals with no other choice but to consume them at risk of poor health during and after incarceration. Access to fruits and vegetables in particular is limited in prison. The same survey revealed that 52% and 55% of respondents reported rarely or never having access to fresh vegetables and fruit respectively while they were incarcerated. Incarcerated people have limited opportunities to shop for and cook nutritious food for themselves, leaving them at a disadvantage when they return to their communities and must learn – or re-learn – how to shop for and prepare their own meals. Individuals returning to the community often have limited food budgets, given costs related to incarceration such as restitution, challenges finding employment paying a living wage upon release, and restricted access to public food assistance programs for some.

II. Intervention

Our project team, comprised of staff at Impact Justice and the University of California (UC) Nutrition Policy Institute (NPI), developed a nutrition education curriculum. The curriculum was developed using a trauma-informed approach, as virtually all incarcerated people have reported trauma related to incarceration⁵, and trauma has been shown to negatively affect individuals' relationships with food. Curriculum materials were developed using evidence-based resources from nutrition education nonprofit Leah's Pantry. The curriculum was reviewed by dietitians, academics, and formerly incarcerated individuals and was revised based on their feedback. Workshops were designed to last between 1.5-2 hours.

The curriculum highlighted the components of a healthy diet, including whole grains, lean proteins, healthy fats, and fruits and vegetables. It emphasized that healthy food can help restore nutrition compromised during incarceration and can provide nourishment to aid in healing from trauma. The curriculum addressed common barriers to healthy eating, such as low budgets, time constraints, limited experience preparing healthy meals, and lack of access to affordable and appealing grocery stores. It included practical tips for selecting, storing, and preparing fresh fruits and vegetables, particularly on a limited budget.

Final Rule: SNAP Eligibility effective June 14, 2019 prohibits anyone convicted of federal aggravated sexual abuse, murder, sexual exploitation and abuse of children, sexual assault, or similar state laws, and who are also not in compliance with the terms of their sentence or parole, or are a fleeing felon, from receiving SNAP benefits.⁴



Local food assistance resources provided to workshop participants.

The curriculum encouraged peer discussion. Facilitators invited participants to reflect on their own experiences and to share strategies for eating a healthy diet.

The workshop also included a review of Eat-CA.org – a website developed by NPI in collaboration with the UC San Diego Center for Community Health that includes detailed information about 24 types of fruits and vegetables, including nutritional content, seasonality, storage methods, and recipes. In-person workshops concluded with a food demonstration and tasting with a simple, affordable recipe from the Eat-CA website.

Our project team also developed and shared handouts with local food resources, including:

- Information about the nutritional and health benefits of local produce items
- Calendar of seasonal fruits and vegetables
- How to access and advocate for fresh, affordable produce, e.g., CalFresh (SNAP)^{iv} and WIC^v, emergency food assistance, other food assistance programs such as fruit and vegetable incentive programs^{vi}, community gardens and local food policy councils

iv CalFresh, also known as the Supplemental Nutrition Assistance Program (SNAP), is a federally funded program that "helps low-income people buy the food they need for good health.9"

^v The Supplemental Nutrition Program for Women Infants and Children (WIC), is a federally funded program that provides nutritious food, nutrition education, and health care referrals to low-income women and their infants and children under 5.¹⁰

vi The California Nutrition Incentive Program provides monetary incentives for CalFresh shoppers to purchase CA-grown produce at farmers' markets and small businesses.¹¹

We contacted 47 community-based organizations, principally "re-entry" organizations providing services to individuals returning from incarceration, to assess interest in hosting us to conduct workshops. Of those, 16 agreed to let us conduct workshops and six collaborated to host workshops together. Host organizations recruited participants from the individuals they served. We refer to these organizations as workshop "hosts" throughout this report.

The workshops were facilitated by members of the project team and three "peer facilitators" with lived experience with incarceration, who work for justice-focused nonprofit organizations and were trained to offer the workshops. All facilitators were compensated for their time and travel.

We held 12 workshops between October 2022 and February 2023. Eight workshops were held in person, two were held virtually on Zoom, and two were held in-person with the option to join virtually (a "hybrid" format). In-person workshops were held in eight California cities across the state: Bakersfield, Compton, Eureka, Fullerton, Merced, Sacramento, San Marcos, and Santa Monica (Figure 1).

Figure 1. Locations of nutrition education workshops



vii Hosts who had existing relationships with reentry-focused organizations partnered together to secure a venue space and increase their marketing efforts. Because of the added networking and community-building opportunities among participants, hosts felt that this would have a positive effect on workshop attendance.

III. Evaluation Methods

We evaluated the workshops through post-workshop surveys with participants and hosts as well as semi-structured interviews with participants and workshop facilitators.

Participant surveys

We administered a 13-item post-only survey to elicit impressions of the workshop; changes in knowledge regarding selecting, storing, and preparing fruits and vegetables; and intentions regarding fruit and vegetable consumption. Of the roughly 135 workshop participants who attended workshops^{viii}, 102 completed participant post-workshop surveys. The surveys were anonymous, and participants were not compensated for completing surveys.

Participant interviews

Survey respondents were asked about interest in participating in a semi-structured follow-up interview. Thirty-five participants expressed willingness, and we were able to complete interviews with eight of them. Interviews lasted 30 minutes on average. The interviews elicited participants' perceptions of the most and least useful elements of the workshops, whether they felt the content was relatable and delivered with an appropriate level of sensitivity, whether they made dietary changes after the workshop, and whether they had recommendations for future workshops. Interviews were conducted between 1 and 5 months^{ix} after the workshops, and participants received \$35 gift cards as thanks for participation.

Co-facilitator interviews

Two of the three non-project team facilitators agreed to participate in semi-structured interviews via Zoom. Interviews lasted a half hour each and touched on facilitators' experiences leading the workshops, their impression of the workshop curriculum and facilitator's guide, their favorite and least favorite parts about facilitating the workshops, and their recommendations for future workshops.

Host surveys

Thirteen of the 16 host organizations participated in an online survey which included 20 questions and was designed to take about 8 minutes to complete. Topics included hosts' experiences organizing the workshops, challenges faced hosting the workshops, whether they felt the workshop content resonated with their members, and recommendations for future workshops. Hosts were not compensated for participation.

viii We did not start taking attendance until the third workshop, so attendance numbers are not exact. Additionally, some participants did not attend the entire duration of the workshop due to other commitments, making it difficult to have an accurate count of participants.

^{ix} All interviews were conducted in March 2023 after completion of the nutrition workshops which were held from October 2022 – February 2023. The time between workshops and follow-up interviews varied from 1-5 months among participants, depending on which workshop they attended.

IV. Key Findings

Participants and hosts reported positive perceptions of the workshops

Participants found the workshops useful, with 95% reporting that they would recommend them to a friend or family member. All hosts noted that they would recommend hosting the workshops to other justice-focused groups (Figure 1).

Figure 1. Host and participant perceptions of the workshops (hosts, n = 13; participants, n = 102)



Nearly all participants reported gaining knowledge about nutrition

Nearly all survey respondents (94%) reported that the workshop provided useful information, with 95% reporting that they learned about the health benefits of fruits and vegetables, 93% reporting they gained new ideas for addressing challenges related to eating more fruits and vegetables, and 86% learning where to get information about selecting, storing, and preparing fruits and vegetables (Figure 1). Eighty-two percent of participants reported an intention to eat more fruits and 87% reported an intention to eat more vegetables.

Figure 2: Select findings from post-workshop participant surveys (n= 102)

After the nutrition education workshop...



Many participants reported changes in their dietary behaviors after the workshops

In follow up interviews with participants after the workshops, several participants mentioned changes to their diet.

"After I attended the workshop, I did start including more vegetables in my diet. Now since the workshop I have begun to not only eat vegetables with dinner, I eat vegetables with breakfast also." - Workshop participant 1

Some participants reported that the workshop encouraged them to make changes in how they cook for themselves and their families:

"It was because of the workshop that I thought about [eating healthily]. I was like, wait a minute, I need to train [my son]. I need to coach him into eating healthy at a very young age." - Workshop participant 2



Workshop participants posing with fresh fruits and vegetables

Participants appreciated the resources provided

Workshop participants valued the information related to accessing and preparing healthy food, noting that such information is often difficult to find:

"Because, you know, people say, 'Oh, just Google it.' Well, if I don't know what to Google, or what the name of the place is, or the organization....There's so many resources out there, but there's no general listing or way to access it. So being provided those links and information was actually very, very helpful." - Workshop participant 3

Participants also expressed appreciation for the handouts as a tool for future reference:

"The handouts were excellent. It seemed like whoever put those handouts together put a lot of time and effort in making them right, because they were very informative and very helpful and something I can use for the rest of my life." - Workshop participant 1

When asked to name the most useful aspects of the workshop in an open-ended survey question, many respondents specifically cited the Eat-CA.org website. Participants appreciated that the recipes shared on the website catered to all levels of knowledge and food preparation experience:

"The recipes helped a lot. I gave them to my wife to try to get alternatives to cooking healthier. So we started eating a lot of greens." - Workshop participant 2

Other participants mentioned appreciating learning how to freeze fruits and vegetables to prevent them from spoiling, how to save money by purchasing food in bulk at a food co-op^x, or how to maximize their food budget by participating in CalFresh/SNAP or the California Nutrition Incentive Program.

"I think that [the workshop] touched on important things, like how food prices are high, and it's just dope to be able to have some resources that can make it more affordable or accessible." - Workshop participant 4



Participant enjoying a post-workshop food demonstration (tostada with grape-jicama salsa).

x A food co-op is a grocery store that is owned and operated by the community that shops there. 12

Participants appreciated that the workshops were tailored to individuals with incarceration experience

Participants felt that facilitators with lived experience with incarceration created trust and an open and safe peer-to-peer learning environment.

"I felt like I was in community with people who understood." - Workshop participant ${\it 3}$

"The lived experience... the familiarity that [facilitators were] speaking about things, that's what I think added some jelly to the peanut butter." - Workshop participant 5

The discussion of food during and after incarceration resonated with participants' personal experiences:

"So when I started to listen to it, and I started to relate to it, I started to think, 'oh, my God, that's me. Like, I can, I can see myself in this." - Workshop participant 2

The facilitators, in turn, appreciated being able to share their personal experiences.

"I think probably the best part of [the curriculum] is it's not so rigid. It allows for those personal experiences to be injected into the presentation." - Co-facilitator 1

"[The facilitator's guide] allowed us to give the information, but also give our own personal experiences and thoughts. And ultimately, that makes it more relatable. I think if you're just doing a checklist, and it's just the information, you probably lose people halfway through it." - Co-facilitator 2

Participant sentiments regarding peer facilitators were echoed by workshop hosts. In post-workshop surveys, 100% of hosts reported that facilitators sharing their own lived experience with incarceration was helpful. All hosts also noted that the facilitators made the workshop material easy to understand and approached the topics of nutrition, incarceration and trauma with an appropriate level of sensitivity.



Workshop facilitators and hosts after a workshop held in a community garden in Compton, CA.

Participants valued addressing trauma and structural barriers to healthy eating

Participants noted that the workshops validated their experiences with food and incarceration in general, and in particular how trauma from incarceration can impact diet and health.

"It was useful to be able to hear the other people that were also incarcerated... their traumas that they have from being incarcerated with the stuff with their food. I remember [a participant] saying he used to eat peanut butter and apples every day to survive. And now he can't even stomach eating peanut butter or an apple. It gives me a better understanding for my [formerly incarcerated] husband. He used to say, 'I don't ever want pancakes or mashed potatoes ever again.'" – Workshop participant 6

Participants mentioned that dealing with food-related trauma can be intimidating, but also empowering. Participants emphasized the newfound freedom with respect to food choices upon re-entry and felt that a new sense of self-efficacy could empower them to make healthier food choices.

"I never really even associate my food habits with my trauma, and it's scary to think about the implications, you know. But at the same time, now that I'm aware of it, I have that choice now. And whenever choice is involved, it's definitely empowering, even though it's scary and intimidating." - Workshop participant 5

Participants appreciated learning about the impacts of structural forces such as systemic racism and food apartheid^{xi} on food choices. Discussion questions like, "What barriers have you faced to accessing healthy food?" often elicited many responses. Participants often snapped their fingers in agreement or nodded their heads when discussing topics like the lack of grocery stores in low-income areas or the large number of fast-food advertisements in communities of color. One participant emotionally described visiting his childhood grocery store as an adult and realizing that the store, which is located in a lower-income, primarily Latino community, had considerably fewer produce options – including some spoiled items – than the grocery store in the more affluent, primarily white part of town.

V. Challenges

Along with the successful aspects of the nutrition education workshops, there were also challenges with respect to implementation and evaluation.

Implementation challenges

Recruiting host organizations proved challenging. Only 16 of the 47 community-based organizations we contacted to host workshops agreed to do so. Many organizations showed great interest during introductory calls but did not respond to follow-up communications. Despite enthusiasm about the idea of a nutrition education workshop, some were reluctant to participate due to concerns about their ability to recruit enough participants. Other organizations wanted to financially incentivize participation, which was beyond the project's scope.

Challenges to online workshops included an inability to include the food-tasting component and more limited peer engagement than in-person formats.

xi Food apartheid refers to the system of racial segregation that creates unequal access to healthy food. 13

The project team developed flyers and a social media communications toolkit to help support outreach; however, 3 of the 13 host organizations that completed the post-workshop survey reported difficulties recruiting participants. Attendance ranged from 35 to 3 attendees. Some participants needed to leave early and were unable to participate in food tastings.

Varying levels of nutrition knowledge and experience presented challenges for the curriculum's "one size fits all" approach. Tailoring future efforts to different needs may prove beneficial.

Evaluation challenges and limitations

Of the approximately 135 workshop attendees, at least 33 did not complete the post-workshop survey because they opted out or left early. A limitation to our findings is the possibility that the individuals responding to the survey may have felt more positively about the workshops than those who did not respond. It is also possible that some social desirability bias existed, with participants responding in ways they felt the research team wanted them to. Participant interviews were only conducted with individuals who completed surveys and agreed to participate in a follow-up interview, which may have also resulted in self-selection bias among those feeling more positively about the workshops than a random sample of participants. In the future, interviews can be conducted with a larger, random sample. Lastly, the workshop facilitators conducted the follow-up interviews, which may have resulted in social desirability bias.



Workshop participants completing surveys.

Recommendations for Improvement

Participants, facilitators, and host organizations shared recommendations for improving the workshops. Participants suggested more information regarding which foods to eat and which to avoid. Peer facilitators suggested delivering workshops to people recently released from incarceration in transitional homes, noting that resources and assistance are most helpful immediately after release. Co-facilitators also suggested collaborating with halfway houses and sober living homes, where residents often have experiences with the criminal legal system. Hosts suggested including more hands-on components, including food preparation, cooking demonstrations and food sampling.

VI. Conclusions

The successful implementation of nutrition education workshops tailored to the needs of individuals returning from incarceration demonstrates a need for these types of initiatives in justice-impacted communities. Nutrition education should be trauma-informed, facilitated by individuals with lived incarceration experience, and include practical resources for accessing and preparing healthy food.

Workshop participants were hopeful that sharing their experiences would demonstrate the need for improved access to nutrition education and healthy food during incarceration, to minimize negative health outcomes among currently and formerly incarcerated individuals. As one workshop participant shared:

"I felt like I was getting some good information. I also felt like I was being heard. And I was hopeful that my sharing my experience, again, it was going to travel back up the pipeline, and impact my community that is still inside." - Workshop participant 3

VII. Acknowledgements



The Nutrition Policy Institute (NPI) envisions a world in which healthy food, beverages, and opportunities for physical activity are accessible, affordable, equitable, and sustainable for everyone. NPI's mission is to conduct and translate policy-relevant research to transform environments for healthy children, families, and communities.



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Impact Justice advances safety, justice, and opportunity through boundary-breaking work that honors and empowers people and is changing expectations about what we can accomplish together.

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