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Navigating De-Implementation: Understanding the Impacts, Challenges, and Opportunities of
Agencies Implementing Cooking Matters for Kids and Teens

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2022

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An abstract of

A thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University
in partial fulfillment of the requirements for the degree of
Master of Public Health
in Behavioral, Social, and Health Education Sciences
2024

Abstract

Navigating De-Implementation: Understanding the Impacts, Challenges, and Opportunities of Agencies Implementing Cooking Matters for Kids and Teens

By Victoria Dotto

Introduction: Cooking Matters for Kids and Cooking Matters for Teens provides nutrition education and cooking skills to low-income communities. In August 2023, Cooking Matters Implementing Agencies (IAs) were informed that the program would be de-implemented, leaving IAs scrambling to figure out their next steps. This study strives to understand the impact of de-implementation on Cooking Matters IAs using qualitative methodologies.

Methods: 20 participants representing SNAP-Ed and 10 Cooking Matters IAs from across the United States were recruited to take part in one-on-one interviews and focus groups. Interviews, focus groups, and five supplementary documents were coded and analyzed to identify pertinent themes across data sources.

Results: The de-implementation of Cooking Matters directly impacts participants and IAs, while indirectly impacting participant family members and communities. The de-implementation of Cooking Matters poses multiple barriers to IAs to continue the program post-de-implementation including lack of access to materials and an out-of-date curriculum. However, facilitators to continuing Cooking Matters after de-implementation include seeking alternative sources of funding and partnering with local organizations. Finally, the de-implementation of Cooking Matters offered an opportunity to reflect on ways to improve programming to align with child and adolescent interests, such as including topics surrounding improved cultural integration of recipes and how social media impacts relationships with food.

Discussion: De-implementation can disrupt communities on multiple levels; thus it is important to work with implementing agencies during the de-implementation process for a seamless transition to mitigate negative community impacts.

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Acknowledgments

I want to first express my thanks and gratitude to those who took the time to participate in this study. To those at the implementing agencies who made time to speak with me, thank you for answering the email you received from a thesis student you'd never met. I am incredibly grateful that you chose to share your stories and experiences with me.

Additionally, thank you to my amazing chair Dr. Megan Winker for your support and for continuing to believe in me and push me to do my best throughout this thesis journey, despite all of the obstacles we faced. I am incredibly appreciative that you made the time in your busy schedule to meet with me, I've learned so much under your guidance. I also want to thank Dr. Eric Nehl, for being on my committee and introducing me to the concept of de-implementation, as well as providing mentorship and feedback throughout my thesis process. Additionally, Dr. Miranda Cook, thank you for serving on my committee and for taking me on as an intern at Open Hand, I've enjoyed being able to work with you.

Also from Open Hand, thank you to Katie Leite, Dr. Julie Gazmararian, and the incredible Open Hand Atlanta team for allowing me to shadow Cooking Matters classes and speak with many of you for this study. I am consistently in awe of the work you all do to support nutrition education and food access across Atlanta.

Thank you to Dr. Elizabeth Walker and Dr. Robin McGee for providing me with additional support and advice throughout this thesis process. Thank you as well to my incredibly supportive supervisors Paige Gannon and Dr. Joel Mumma for being flexible when I had to schedule interviews during the workday, and for consistently cheering me on through my time at Rollins. I also want to acknowledge the many mentors who encouraged my interest in research and public health, especially Diane Anton, Dr. William Maelia, and Dr. Andrew Flescher.

Finally, thank you to my parents, especially my dad who always answered my phone calls no matter what time of day or time zone he was in. My friends Jazmin Huerta, Kelsey Miller, and Mahnoor Fatima to whom I'm incredibly grateful for their support and for being a sounding board to me while navigating the thesis process, as well as to Iain Janecka, Katie Tobias, Amy Katz, and Anastasiya Bissanova for being a wonderful virtual audience while practicing my defense. This research was supported by the BSHES Health Equity Research and Practice Award.

TABLE OF CONTENTS

CHAPTER I: INTRODUCTION	1
AN OVERVIEW OF COOKING MATTERS FOR KIDS AND COOKING MATTERS FOR TEENS.....	4
EVIDENCE OF IMPACT	5
SIGNIFICANCE OF THE STUDY.....	10
STUDY OBJECTIVES	10
THEORETICAL FRAMEWORK.....	12
DEFINITION OF KEY TERMS.....	14
CHAPTER II: REVIEW OF LITERATURE	16
INTRODUCTION.....	16
LIFETIME IMPACTS OF CHILDHOOD OBESITY.....	16
PHYSICAL & PSYCHOLOGICAL CONSEQUENCES OF CHILDHOOD OBESITY	17
IMPORTANCE OF DEVELOPING NUTRITION AND COOKING SKILLS EARLY ON.....	18
CURRENT NUTRITIONAL PROGRAMS FOR CHILDREN AND TEENS	21
EFFECTIVENESS OF COOKING MATTERS FOR KIDS AND COOKING MATTERS FOR TEENS.....	27
DE-IMPLEMENTATION OF PUBLIC HEALTH PROGRAMMING	28
SUMMARY OF CURRENT PROBLEM	31
CHAPTER III: METHODS	35
INTRODUCTION.....	35
POPULATION AND SAMPLE.....	35
DATA COLLECTION AND MANAGEMENT	40
INTERVIEW GUIDES AND INTERVIEWS.....	40
DATA ANALYSIS	43
POSITIONALITY STATEMENT	44
CHAPTER IV: RESULTS.....	45
INTRODUCTION.....	45
KEY FINDINGS.....	50
<i>Research Question 1</i>	50
<i>Research Question 2</i>	62

<i>Research Question 3</i>	69
<i>Research Question 4</i>	88
CHAPTER V: DISCUSSION	104
INTRODUCTION.....	104
SUMMARY OF STUDY	104
DISCUSSION OF KEY RESULTS	105
STUDY STRENGTHS AND LIMITATIONS.....	106
RECOMMENDATIONS	107
PUBLIC HEALTH IMPACT.....	111
CONCLUSIONS	112
REFERENCES	114
APPENDICES	126
APPENDIX A: PARTICIPANT RECRUITMENT EMAIL	126
APPENDIX B: PARTICIPANT INFORMATION SHEET.....	128
APPENDIX C: INTERVIEW GUIDE	131
APPENDIX D: CODEBOOK.....	138

Chapter I: Introduction

Introduction

Developing healthy nutrition and food habits is crucial to preventing negative health outcomes related to childhood obesity. Obesity affected 19% of children and adolescents in the United States from 2017-2020 and continues to rise (Centers for Disease Control, 2022). In the short term, childhood obesity can lead to physical issues such as hypertension, high cholesterol, sleep apnea, and joint issues, as well as social and psychological challenges like low self-esteem, depression, and stigmatization (Sanyaolu et al., 2019). These consequences can further contribute to an increased risk of cardiovascular disease, type 2 diabetes, osteoporosis, and stroke later in life (Sanyaolu et al., 2019). Knowledge about healthy eating through comprehensive education programs can mitigate the risk of negative health outcomes in the long term (Sun et al., 2021).

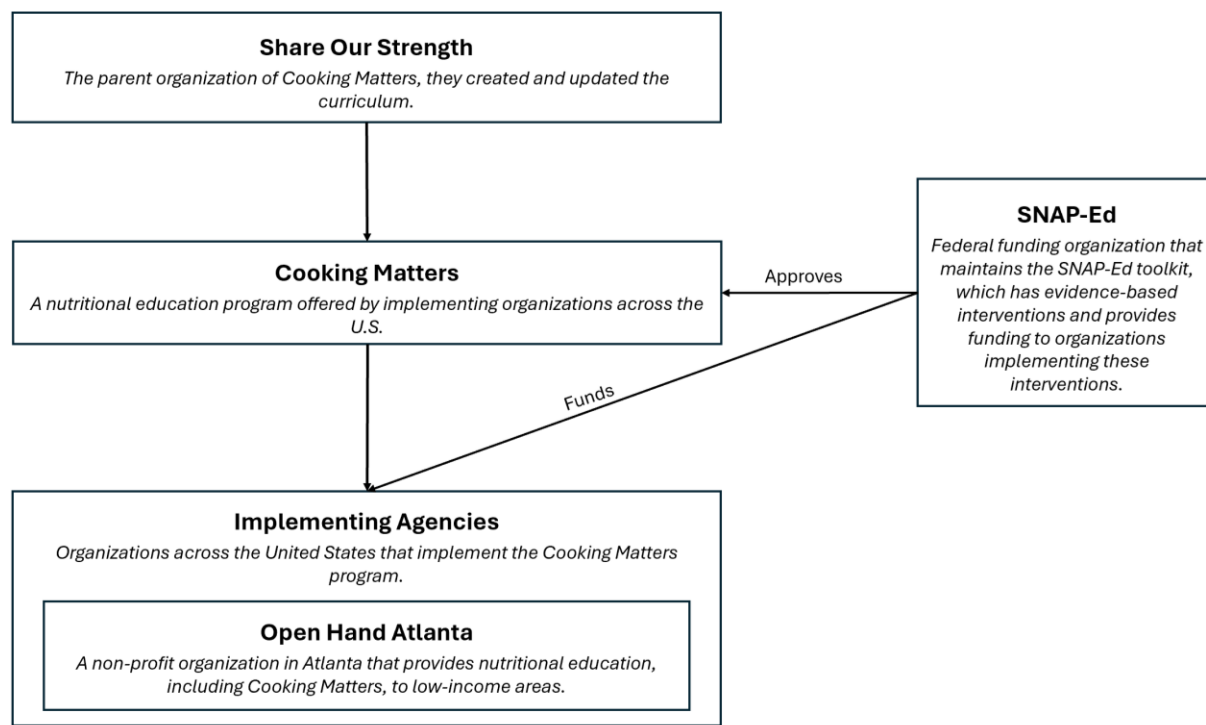
Educational programs surrounding healthy eating aim to provide children and adolescents with the skills and knowledge needed to make nourishing food choices. Programs do this through implementing nutrition education lessons, promoting food literacy, and teaching cooking skills. Nutrition education programs for children and adolescents have previously measured improvements in increased food and vegetable consumption, attitudes toward healthy eating, and food literacy (Rivera et al., 2019; Soldavini et al., 2022; Utter et al., 2017). Subsequently, the use of cooking skills can help with improving self-efficacy in the kitchen and promoting cooking into adulthood (Rivera et al., 2019; Utter et al., 2017).

The Supplemental Nutrition Assistance Program (SNAP) plays a significant role in ensuring that children develop healthy eating habits during critical developmental periods by supporting tailored nutrition education programs in community and school settings. SNAP is one

of the most prominent efforts aiding children facing food insecurity and poverty across the United States (Department of Agriculture & Service, 2020). Of those who benefit from SNAP, 42% are children. Over two-thirds of the children who utilize SNAP benefits are between 5 and 17 years old (Department of Agriculture & Service, 2020). In addition to benefits such as reduced or free school lunches that adhere to the USDA's nutritional guidelines, SNAP also offers nutrition education programming through SNAP-Ed. Nutrition education programs focusing on promoting healthy eating knowledge and food skills can then be adapted into the SNAP-Ed curriculum, where they can be carried out nationwide by Implementing Agencies (IAs) such as Open Hand Atlanta (Rivera et al., 2019).

Open Hand Atlanta, a non-profit organization in Georgia, is a recipient of SNAP-Ed funding, which allows it to run nutrition education programs (Open Hand Atlanta, 2023). One of the SNAP-Ed programs Open Hand offers is a nutritional education program, called Cooking Matters, which involves hands-on cooking sessions while learning about nutrition and cooking skills, as well as promoting confidence in creating a meal (Cooking Matters, 2023). Cooking Matters was developed and is overseen by Share Our Strength (SOS), an organization dedicated to ending child hunger in the United States, and the founders of the No Kid Hungry Movement (Share Our Strength, 2023a; Soldavini et al., 2022). As many different shareholders are involved in the implementation of the Cooking Matters program across the US, **Figure 1** offers a visual of these complex relationships.

Figure 1. Cooking Matters Shareholder Interactions



Since its start in 1993, the Cooking Matters program has been used to provide in-person nutrition education to almost 1 million participants through 160+ IAs across the United States (Share Our Strength, 2023a; Soldavini et al., 2022). Open Hand Atlanta specifically has successfully administered the Cooking Matters program to 553 kids, and 285 teens between 2019 and 2022 (Open Hand Atlanta, 2019, 2020, 2021, 2022). Many IAs, such as Open Hand Atlanta, have relied on this program to implement nutrition education and skills in surrounding communities. Although Cooking Matters is offered to various populations (e.g., adults, older adults), it is currently the only kids- and teens-based nutrition program offered by Open Hand.

An Overview of Cooking Matters for Kids and Cooking Matters for Teens

The Cooking Matters for Kids (CMK) and Cooking Matters for Teens (CMT) curricula each consist of six classes that are two hours long and take place over six weeks. Course materials such as class activities, handouts, suggested recipes, and teaching tips that align with that week's lesson are provided to instructors by the CMK and CMT Instructor Guides.

According to the most recent update of the CMK and CMT curriculum, when instructors decide on the recipe to use during classes, recipes should 1) be low cost, 2) use accessible ingredients, 3) be nutritious, 4) limit the use of special equipment, 5) be quick to prepare, and 6) be simple and explained clearly. Strategies for creating low-cost recipes include using ingredients that are available in bulk, can be used for a variety of meals and snacks, and have a store-brand equivalent. Accessible ingredients include those that can easily be found in a grocery store. Nutritious recipes include those that are low in added sugar and sodium, use whole grains, promote a variety of fruits and vegetables, and use lean cooking techniques (i.e., baking, steaming, grilling). Limiting the use of special equipment includes prioritizing using commonly found cooking equipment such as can openers, vegetable peelers, and measuring spoons. Recipes should be quick to make, with a goal of about 45 minutes to one hour for preparing and cooking the meal. Finally, recipes should be easy to follow and written with clear, age-appropriate language. For the CMK program, a 7th criterion requires recipes to have steps marked with "adult helper" when supervision may be needed to ensure safety in the kitchen.

Cooking Matters for Kids Class Structure

Each CMK lesson is comprised of four different components. An introduction starts off the lessons with an activity and a review of the prior week's lesson. The introduction is followed by a nutrition lesson surrounding that week's topic (i.e., eating whole grains, reading labels). The

nutritional portion of the class includes both nutrition education and reinforcing activities done by the participants. Following the nutrition portion of the class, kids then learn about cooking and food safety. This includes preparing food for the week's recipe and incorporating that week's nutrition lesson into the cooking. The class ends with the kids and instructor(s) eating the meal they prepared together and reinforcing that week's nutritional education.

Cooking Matters for Teens Class Structure

Similar to the CMK curriculum, CMT also begins with an introduction. The CMT introduction involves recalling what was learned in the prior week's lesson, as well as an overview of what that day's lesson will be about. The class structure then goes on to discuss the talking points of that day's lesson, and the corresponding recipe. The third part of the CMT classes focuses on having the teens prepare for the last Cooking Matters class in the series, known as the Extreme Food Makeover. During this final class, teens will get to make a recipe of their choosing. Leading up to the Extreme Food Makeover, teens are divided into teams and assigned tasks to help them prepare for their final class. Similar to the CMK classes, CMT classes end with the teens and instructor(s) eating the meal they prepared together and reinforcing that week's nutritional education. At the end of class, bags of groceries are handed out for teens to take home to their families.

Evidence of Impact

Despite the promise of nutrition education and the Cooking Matters program for improving healthy eating among children and teens, there have been few peer-reviewed evaluations of its success. Only one study in the peer-reviewed literature could be identified that evaluates the outcomes of CMK, and none were identified that evaluates the outcomes of CMT. Soldavini et al., analyzed pre- and post-program surveys from CMK classes to determine

changes in self-efficacy and attitude among the participants (Soldavini et al., 2022). Self-efficacy was measured by healthy eating and cooking, while attitudes focused on healthy foods. All pre- and post-surveys used were from CMK courses conducted between 2012 and 2017 (Soldavini et al., 2022). Both individual and overall program scores saw increases in self-efficacy and attitude by the end of the program six weeks later; however, due to the participants reached by this program having high baseline scores, only a small effect size was noted (Soldavini et al., 2022).

The De-implementation of Cooking Matters

Recent changes to the delivery of the Cooking Matters program have raised notable concerns about its sustainability. On August 2, 2023, agencies who implement the Cooking Matters program received word that its parent organization, SOS, would no longer be updating or supporting the Cooking Matters Curriculum past September 30, 2024 (Share Our Strength, Personal Communication, August 2, 2023). Rather, SOS would shift from focusing on the direct service that is currently offered by the Cooking Matters program to handing out grants and supporting organizations creating policies to aid in family economic mobility (Share Our Strength, 2023a, 2024).

The de-implementation of the Cooking Matters program poses multiple challenges to its current IAs while they navigate the upcoming fiscal year. As detailed below, several key concerns have been raised about the future implementation of the Cooking Matters programming and how Open Hand will be able to continue offering this programming to children and teens with SNAP benefits (Share Our Strength, 2023b, 2023c, 2023d).

Anticipated Loss of Access to Program Materials

The first concern relates to Cooking Matters and access to materials. Cooking Matters materials are still able to be used by Cooking Matters IAs for the time being, however, the materials will no longer be supported or updated by SOS past September 2024. Materials available for the program depend on which curriculum is being used by the Cooking Matters IA and relatedly what funding the agency uses to offer the program. IAs that do not rely on SNAP-Ed funding can use the newer Cooking Matters *Core* curriculum, which is available in an online PDF that can be downloaded directly from the Cooking Matters website. The primary concern with the Cooking Matters *Core* curriculum is that not all IAs can use this curriculum, as many programs rely on SNAP-Ed funding. SNAP-Ed funding can only be used on an intervention that is in the SNAP-Ed toolkit. The Cooking Matters *Core* curriculum was in the process of being evaluated for SNAP-Ed approval to be added to the SNAP-Ed Toolkit. However, all efforts to evaluate the Cooking Matters *Core* Curriculum have ceased in light of SOS's announcement to de-implement Cooking Matters as a whole (Share Our Strength, 2023b).

Organizations that rely on SNAP-Ed funding are required to adhere to the Cooking Matters *Legacy* curriculum, which is part of the SNAP-Ed toolkit. This curriculum currently houses the CMK and CMT programs and their associated materials. However, Cooking Matters *Legacy* materials are only allowed to be purchased through SOS in a physical format. The *Legacy* curriculum, which has SNAP-Ed approval, is not available for download from the Cooking Matters website like the Cooking Matters *Core* curriculum since SOS does not own the design. Cooking Matters IAs using the *Legacy* curriculum can expect to receive the number of materials that were purchased for Fiscal Year 2023 for use in 2024, but IAs would be responsible for purchasing any additional copies of the *Legacy* curriculum. Most importantly, no copies of the *Legacy* material will be available for purchase past September 2024.

Regardless of the Cooking Matters curriculum being used, all IAs will lose access to supplemental program materials after September 2024. This includes shutting down the current website www.cookingmatters.org, as well as the Cooking Matters YouTube channel (Share Our Strength, 2023b). The removal of the website and YouTube channel will include the removal of current recipes used, tutorial videos, and links to additional resources (Share Our Strength, 2023b).

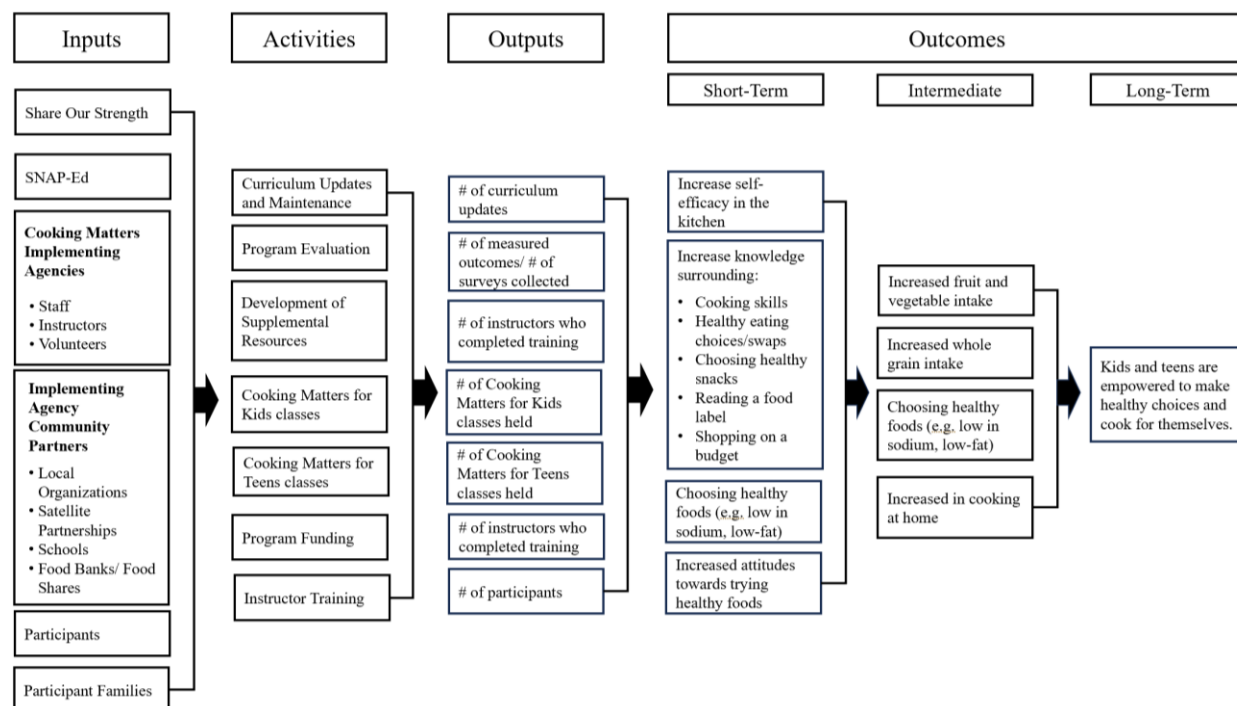
Impacts on SNAP-Ed Funded Implementing Agencies

Beyond the constraints on materials, the discontinuation of Cooking Matters now places IAs who rely on SNAP-Ed funding and use the *Legacy* curriculum at risk of the *Legacy* curriculum being removed from the SNAP-Ed Toolkit. Funding by SNAP-Ed can only be used to implement nutrition education programs that are part of the approved list of programs in the SNAP-Ed toolkit. While the Cooking Matters *Legacy* curricula will be staying in the SNAP-Ed toolkit for the upcoming fiscal year (2024), SOS states that there may be implications surrounding SNAP-Ed funding for Cooking Matters during the 2025 fiscal year. This leaves agencies who rely on SNAP-Ed funding, like Open Hand Atlanta, in a tough position to figure out whether they should wait to see if they will be able to continue their Cooking Matters *Legacy* programming with their SNAP-Ed funds or shift to a completely new SNAP-Ed approved nutrition education program for children and teens.

Potential for a New Organization

Relatedly, another possibility is that a new organization will take over the Cooking Matters curriculum for SOS. While this transition at the parent organization level would provide some stability for IAs and may help to ensure the *Legacy* curriculum can remain in the SNAP-Ed

toolkit, having a new organization take over from SOS before September 30, 2024, provides a very quick timeline for the implementation of Cooking Matters to continue. This may leave inadequate time for the new organization to adjust to overseeing Cooking Matters and hinder IAs implementation of the Cooking Matters program. At the same time, there is also the possibility that the new parent organization may want to prioritize efforts to continue seeking SNAP-Ed approval for the Cooking Matters *Core* curriculum while continuing a shift away from the Cooking Matters *Legacy* curriculum, as SOS began doing in August 2023. The problem with this possibility is that the new *Core* curriculum from SOS does not include programming to provide nutrition education and cooking skills to children and teens. This would leave IAs such as Open Hand Atlanta, who rely on CMK and CMT to deliver nutritional education to younger audiences, unable to use it, disrupting their ability to provide effective, evidence-based, nutrition education programming. The only option IAs would have to reach youth would be to work with parents and caregivers of young children through the *Core* curriculum's adult programming (Share Our Strength, 2023c). **Figure 2** provides a logic model to reinforce the CMK and CMT program activities and outcomes that would be lost in the event of their de-implementation.

Figure 2. CMK and CMT Logic Model

Significance of the Study

The recent de-implementation of the Cooking Matters program through SOS took many of its IAs by surprise. This left many programs, including Open Hand Atlanta, wondering if they should switch to a different SNAP-Ed-approved program after the 2024 fiscal year or find a way to continue offering the Cooking Matters curriculum without support from a national organization. By providing a comprehensive evaluation of the Cooking Matters kids and teens program, this evaluation hopes to determine Open Hand's ability to still offer the program given the potential decreased access to materials and support from the Cooking Matters parent organization—Share Our Strength—starting in September 2024.

Study Objectives

This evaluation seeks to understand the effects of the de-implementation of CMK and CMT on Open Hand Atlanta and other Cooking Matters IAs. This comprehensive examination of

the de-implementation will begin by providing an overview of what will be lost by communities with the loss of access to CMK and CMT. This aim will be addressed by understanding the current impacts of CMK and CMT on IAs, their communities, and public health. This aim will be achieved by speaking with IAs who work face-to-face with their communities and can observe the impact of Cooking Matters

This study will then explore the events that led to the de-implementation of Cooking Matters by SOS. This aim will provide a comprehensive background of how Cooking Matters has changed over its years of implementation. Understanding the context leading up to the Cooking Matters de-implementation will further highlight how SOS began to shift away from supporting the Cooking Matters program and Cooking Matters IAs. This aim will be achieved by speaking with IAs and instructors who have been with the Cooking Matters program before the de-implementation announcement, as well as SNAP-Ed personnel.

Once the background and prior support system of the Cooking Matters program is established, the evaluation will then specify the barriers and facilitators IAs currently face in their goals of continuing to implement CMK and CMT. This will include examining what IAs across the nation are doing to prepare for this transition and what their plans are for maintaining the curriculum. This aim will be achieved by speaking with different IA administrative members, instructors, and SNAP-Ed personnel to establish an encompassing view of the challenges and opportunities faced by IAs during de-implementation.

The final part of this study will evaluate how the Cooking Matters program can be adapted to better suit child and teen nutritional education needs and outcomes. With the possibility of agencies continuing to use the Cooking Matters curriculum for kids and teens after de-implementation, understanding the program's effectiveness, advantages, and shortcomings is

crucial to program maintenance and curriculum updates in the future. This aim includes assessing youth participant engagement, the nutritional outcomes being evaluated, and the alignment of the current curriculum with youth needs and interests. This aim will be achieved by speaking with those who have facilitated both Cooking Matters and other youth nutrition programs as well as with other IAs that have expanded on the CMK and CMT program curricula.

These aims will be evaluated using qualitative methods, and can be summarized into the following research questions to guide this study:

- 1) What are the potential impacts for Implementing Agencies, like Open Hand Atlanta, their communities, and public health as a result of the national de-implementation of the Cooking Matters program by Share Our Strength?
- 2) What are the events and contexts that led to the national de-implementation of the Cooking Matters program by Share Our Strength?
- 3) What are the facilitators and barriers for organizations, including Open Hand Atlanta, to continue the implementation of the Cooking Matters curriculum for kids and teens following de-implementation?
- 4) For those organizations who decide to move forward with implementing Cooking Matters for Kids and CMT, what aspects of the Cooking Matters program should be maintained or adapted to better suit child and teen nutritional education needs, interests, and outcomes?

Theoretical Framework

Program evaluation studies have commonly used the RE-AIM framework when looking at evidence-based interventions and evaluating nutritional education interventions (Huye et al., 2014). This framework is recommended by SNAP-Ed for use when submitting evidence-based

interventions for SNAP-Ed funding approval (U.S. Department of Agriculture, Food and Nutrition Service [USDA FNS], n.d.). This framework focuses on the main constructs of Reach, Effectiveness, Adoption, Implementation, and Maintenance and can be used for both qualitative and quantitative data (Gaglio et al., 2013).

Prior nutrition education interventions have noted significant benefits in using the RE-AIM framework to improve program effectiveness. For instance, when used to evaluate ‘Shaping Up My Choices,’ an in-school nutrition education program, the RE-AIM framework identified positive outcomes regarding self-efficacy and knowledge and decreases in low-nutrient, high-energy food consumption (Dunton et al., 2012). The use of the RE-AIM framework in evaluating ‘Shaping Up My Choices’ also identified the need for improvement surrounding the concepts of *Reach* and *Adoption* (Dunton et al., 2012). Improved *Reach* was identified due to the program only reaching 42% of its targeted participants, while *Adoption* was identified as lacking due to only reaching 39% of classrooms (Dunton et al., 2012).

This study operationalizes the RE-AIM framework to address impacts, contexts, barriers, facilitators, and recommendations for improvement in light of the de-implementation of the CMK and CMT programs. *Reach* is defined as the population of individuals being reached by the CMK and CMT programs, which aim to reach children from 8-12 years old, and teens from 13-18 who rely on SNAP-Ed funding or are located in an area where fifty percent or more of the population is low-income. *Effectiveness* will be evaluated by looking at the outcomes of the program and participant engagement, such as energy levels across classes and differences in participant skills and habits from the first to the last class in the 6-week program. *Adoption* will discuss the implementation of the CMT and CMK programs when working with a new community partner or training staff. *Implementation* will discuss the barriers and facilitators to

using the CMT and CMK curriculum, how Cooking Matters compares to other nutritional educational programs, and any changes that other IAs have made to the curriculum. Finally, and most importantly, given the recent announcement of SOS discontinuing Cooking Matters, *Maintenance* will focus on the next steps to the implementation or de-implementation of the Cooking Matters program at Open Hand and their next steps to continue the program or shift away from the curriculum.

Definition of Key Terms

Cooking Matters for Kids (CMK) – The kid's version of Cooking Matters tailored towards participants between 8-12 years of age (USDA FNS, 2023a).

Cooking Matters for Teens (CMT) - The teen version of Cooking Matters tailored towards teenagers (USDA FNS, 2023a).

Cooking Matters Legacy Curriculum – A SNAP-Ed approved curriculum to deliver nutrition education to low-income families (USDA FNS, 2023a). Curricula considered part of the legacy curriculum include Cooking Matters for kids, teens, families, parents, and childcare professionals (USDA FNS, 2023a).

Cooking Matters Core Curriculum – An updated version of Cooking Matters that is not SNAP-Ed approved and focuses only on low-income adults (i.e., does not include curriculum for youth and teens).

Implementing Agencies (IA) – An organization that currently implements the Cooking Matters curriculum.

Open Hand Atlanta – A local non-profit organization in Atlanta, Georgia that provides nutrition education services, access to healthy meals, and empowering healthy nutrition choices (Open

Hand Atlanta, 2023). Open Hand Atlanta is one of the 160+ Implementing Agencies of Cooking Matters programming and is SNAP-Ed funded.

Share Our Strength (SOS) – The parent organization of Cooking Matters who decided to de-implement the program. They established and maintained the curriculum from 1993-2023. (Share Our Strength, 2023a)

Social Cognitive Theory (SCT) – A theory commonly used in nutrition education programming. This theory looks at the influences of personal factors, environmental influences, and behaviors to target behavior change (Gordillo & Prescott, 2023).

Chapter II: Review of Literature

Introduction

This chapter provides an overview of what is known in the literature on the impact of nutrition education on kids and teens, as well as the context of de-implementation in public health practice. It begins with a background to childhood obesity and its influence on children on families. Following the background, an overview of nutritional program impacts and recommendations will be presented to clarify what has led to nutritional education program success in the past. The chapter will then provide an overview of the Cooking Matters for Kids (CMTK) and Cooking Matters for Teens (CMT) programs and how this aligns with what is known in the literature about effective nutrition education for children and adolescents. Finally, this chapter concludes with a literature review of the potential impacts de-implementation in nutrition programming, like the Cooking Matters program is set to experience in 2024, can have on addressing child nutrition health.

Lifetime Impacts of Childhood Obesity

Nutrition plays an essential role in cognitive development, growth, and maintenance across the lifespan (Rodríguez-Mañas et al., 2023). In the first two years of life, nutrition contributes to weight gain, growth, the development of multiple organs and systems, and plays a critical role in brain development (Rodríguez-Mañas et al., 2023). As children progress to middle childhood and adolescence, nutrition continues to impact growth and development, especially during puberty (Corkins et al., 2016; Rodríguez-Mañas et al., 2023).

Poor nutrition, also known as malnutrition, can be categorized as a person who does not receive adequate nutrition through their diet (Webb et al., 2018). This may be caused by eating inadequate amounts of food, eating nutrient-poor foods that are high in calories, skipping

breakfast, and eating more foods high in sodium, sugar, and saturated fats. Poor nutrition encompasses people who are underweight, overweight, or obese compared to those at a healthy weight according to their body mass index (BMI) range (**Table 1**), (CDC, 2022; Webb et al., 2018).

Table 1. Body Mass Index (BMI) Ranges

BMI Categorization	Range^a
Underweight	<18.5
Healthy/Normal	18.5 - <25
Overweight	25.0 - <30
Obese	> 30.0

^a BMI can be calculated by dividing one's weight (in kilograms) by the square of their height (in meters)

Poor nutrition in childhood and adolescence can lead to cognitive development impairment, obesity, chronic energy deprivation, and mental health impacts (Corkins et al., 2016; O'Neil et al., 2014). Beyond adolescence, poor dietary habits and obesity can lead to chronic diseases in adulthood that are related to poor diet, which include cardiovascular disease, stroke, diabetes, and hypertension (Marcus et al., 2022). Poor dietary behaviors in childhood and adolescence are linked to the continuation of poor dietary behaviors into adulthood (Appannah et al., 2021; Craigie et al., 2011). The consequences of these behaviors can have physical, psychological, and social impacts, which are further discussed in the next section.

Physical & Psychological Consequences of Childhood Obesity

The physical impacts of obesity in adulthood are well-established, however, some of the physical ailments present in adulthood are being discovered in youth with obesity, exposing them to severe health risks early in life. In adults, long-term physical consequences on the body can

include ailments such as hypertension, high cholesterol, glucose intolerance, and diabetes (Sahoo et al., 2015; Sanyaolu et al., 2019). These same medical ailments, such as sleep apnea, diabetes, and cardiovascular disease, are now increasingly prevalent among those living with childhood obesity (Sahoo et al., 2015). Consequences of adolescent obesity may also be prevalent in adulthood, even after a healthy weight is achieved (Sahoo et al., 2015). For example, children who were obese in childhood and lost weight during adolescence had a similar elevated risk of coronary heart disease in adulthood as adolescents who were obese but did not have any weight loss (Juonala et al., 2011; Marcus et al., 2022; Tirosh et al., 2011). Among those who remain obese, it becomes increasingly difficult to treat obesity when spanning from childhood to adulthood (Sanyaolu et al., 2019).

Psychological consequences and social interactions are also impacted by childhood obesity. Compared to adolescents of a healthy weight, adolescents with obesity have higher rates of depression, eating disorders, and poor self-esteem (Sahoo et al., 2015; Sanyaolu et al., 2019). Obesity-related stigma, which is defined as discrimination based on one's size or weight, also contributes to outcomes such as disordered eating, weight bias, and psychological distress (Fulton et al., 2023; Sanyaolu et al., 2019). Within social settings, you who are overweight may be subject to teasing and bullying, which are in turn associated with low body satisfaction, low self-esteem, high depression symptoms, suicidal thoughts, and attempts (Eisenberg et al., 2003; Goldfield et al., 2010). Bullying, stigma, and health problems relating to childhood obesity may negatively impact academic performance as those with childhood obesity miss school more frequently (Sahoo et al., 2015).

Importance of Developing Nutrition and Cooking Skills Early On

Impact of Nutrition and Cooking Confidence Across the Lifespan

Promoting healthy nutrition and cooking confidence in childhood and adolescence can help prevent the onset of obesity and its associated lifelong impacts. While cooking skills and food literacy can be learned at any age, multiple studies have suggested positive outcomes associated with exposure to cooking and dietary behaviors at an early age. Adults who learned cooking skills at a younger age were likely to have better cooking behaviors, practices, and dietary quality compared to those who learned cooking skills in adulthood (Lavelle, Spence, et al., 2016). In comparison, those who learned cooking skills in adulthood were found to have decreased cooking skills, decreased food safety scores, and an increased likelihood of using pre-prepared ingredients compared to their younger counterparts (Lavelle, Spence, et al., 2016). Additionally, those learning cooking skills in childhood had less food waste and consumed less takeout as compared to their adult learner and adolescent learner counterparts, while those who learned cooking skills as adolescents exhibited a greater willingness to try new foods and higher cooking confidence than their adult learner and child learner counterparts (Lavelle, Spence, et al., 2016). Greater cooking confidence can help mitigate barriers to meal preparation and cooking from scratch, both of which are impacted by low rates of cooking confidence (Lavelle, McGowan, et al., 2016; Lavelle, Spence, et al., 2016). Adolescents who reported having some level of cooking ability were found to have increased well-being and decreased depressive symptoms compared to adolescents who did not have any cooking ability (Utter et al., 2016). Adolescents who engage in cooking are more likely to enjoy it as adults. For example, in a study by Laska and colleagues, they found that those who participated in food preparation during adolescence were more likely to enjoy cooking in adulthood (Laska et al., 2012).

Enjoyment of cooking in adulthood can importantly influence nutritional outcomes as well. For instance, Dave et al. found that adults who reported lower levels of enjoyment while

cooking were more likely to report increased fast food consumption, which typically consists of high levels of sodium, saturated fats, and cholesterol compared to home-cooked meals (Dave et al., 2009; Laska et al., 2012). Additionally, having inadequate cooking skills in adulthood is associated with an increase in ready-made (ultra-processed) meal consumption, which is increasingly linked with negative health outcomes such as asthma, obesity, and cardiovascular diseases (Chen et al., 2020; Van Der Horst et al., 2011). Early adults who have self-perceived adequate cooking skills have been found to have better dietary outcomes such as increased vegetable intake and decreased fast food consumption after 10 years (Utter et al., 2018). This evidence suggests that developing cooking skills and healthy nutrition habits in childhood can promote healthy habits and cooking confidence into adulthood and thus should be incorporated into child nutrition education interventions.

Influence of Children on Family Nutrition

In addition to the individual benefits gained from developing cooking confidence and healthy nutrition habits in childhood, children who learn these skills can also pass them along to their families. Prior evidence demonstrates children influence parental meal preparation and grocery shopping habits (Monalisa, 2020; Studer-Perez & Musher-Eizenman, 2022). Parents who went grocery shopping with intentions to stick to a budget and purchase healthy foods found themselves deviating from their intended grocery list and purchasing more unhealthy foods when shopping with children (Wingert et al., 2014). Aside from purchasing healthy foods, children may influence what a parent eats or makes based on a child's attitudes toward specific foods (Winkler et al., 2017). Similarly, children can influence the foods used when cooking meals for families. Upon comparison of meals made with and without the help of a child, the meals that included the child had more calories, more sugar, and less fiber compared to the meals made

solely by the parent (Studer-Perez & Musher-Eizenman, 2022). Promoting nutrition education may encourage healthier choices among kids and teens, which in turn can improve the healthfulness of family meals, parent choices, and grocery shopping habits.

Current Nutritional Programs for Children and Teens

Nutrition education programs seek to promote healthy eating, cooking skills, and gardening among other skills to program participants (Muzaffar et al., 2018). Nutrition education programs aim to change a participant's behavior surrounding nutrition. To achieve the desired behavioral outcomes, many nutrition education programs are rooted in a theoretical foundation, most commonly the Social Cognitive Theory (SCT) (Gordillo & Prescott, 2023; Murimi et al., 2017; Muzaffar et al., 2018). The SCT is used to target behavior change by looking at interactions between a person's behavior (e.g. self-efficacy), environmental influences (e.g. physical surroundings), and personal factors (e.g. beliefs, attitudes) (Bandura, 1986; Gordillo & Prescott, 2023). For improved nutrition, a person's behavior may relate to their cooking skills and confidence in making healthy choices as the evidence above suggests (Gordillo & Prescott, 2023; Murimi et al., 2017). Environmental influences on nutrition behavior may include providing recipes or focusing on how to improve family dynamics during mealtimes (Gordillo & Prescott, 2023). Personal factors can include changing attitudes towards fruit and vegetable consumption (Gordillo & Prescott, 2023; Murimi et al., 2017). Prioritizing theory in nutrition education can help achieve the program's desired outcomes surrounding cooking-skills (Gordillo & Prescott, 2023). The use of the SCT in nutrition education has also been used in conjunction with other behavior change motivators such as goal-setting to improve fiber intake, and positive reinforcement to improve program adherence (Gordillo & Prescott, 2023; Schnoll & Zimmerman, 2001).

The Implementation of Nutrition Education Programs

To date, there have been multiple systemic reviews evaluating the effectiveness of nutritional education programs for children and adolescents across various settings (Dimple & Ramesh, 2023; Li et al., 2020; Murimi et al., 2017; Muzaffar et al., 2018; O'Brien et al., 2021). These reviews have found nutrition education courses have positive outcomes in improving the dietary habits of kids and adolescents (Dimple & Ramesh, 2023; Li et al., 2020; Murimi et al., 2017; Muzaffar et al., 2018; O'Brien et al., 2021). However, some reviews did note conflicting outcomes in aspects such as BMI, potential instances surrounding intervention fidelity, or the poor quality of the studies being evaluated (Li et al., 2020; Murimi et al., 2017; Muzaffar et al., 2018; O'Brien et al., 2021) Moreover, one systematic review identified several key factors that can contribute to successful nutrition education interventions for children between 2 and 19 years old (Murimi et al., 2018).

One key factor to success is using multimodal and multilevel interventions which employ a variety of methods in an intervention, including areas of skill building, education, and trying different foods (Murimi et al., 2018). These interventions also included having teachers and parents engaging in the intervention, such as having teachers involved in administering the intervention curriculum, while having parents promote fruit and vegetable intake at home (Cauwenberghe et al., 2010; Murimi et al., 2018). In addition, Murimi et al. found that higher fidelity interventions, which trained teachers or nutrition experts in the intervention ensuring it was delivered to participants in the way it was intended to be, were also a key factor to success and being able to achieve or partially achieve their objectives (Murimi et al., 2018).

Another factor in intervention success was parental engagement, which surrounds how parents impact a child's nutrition after school (Dimple & Ramesh, 2023; Murimi et al., 2018).

This can be influenced by the foods a parent has in the house, feeding style, and parental modeling (Murimi et al., 2018). Parental involvement among adolescents and children resulted in greater decreases in BMI compared to those without parental involvement (Murimi et al., 2018). While parental engagement was found to be influential across children and adolescents, it was especially important among preschoolers (Murimi et al., 2018).

Other key factors facilitating child nutrition intervention success included age-appropriate/ experiential learning (e.g., use of coloring books for preschoolers, targeting topics of interest to high schoolers); making environmental changes to the targeted knowledge and behavior (e.g., swapping school foods served for healthier options if a program was taught in a school); interventions of adequate duration and exposure (e.g., at least 6 months); and activities that align with the intervention, objectives, and outcome (Murimi et al., 2017, 2018). Additional recommendations for nutrition education interventions involve incorporating cultural norms and values depending on the targeted population and location (Li et al., 2020).

Despite all the evaluation work on youth nutrition education programming, there is still limited peer-reviewed literature surrounding the CMK and CMT programs. Below a review is provided encompassing four common nutrition education interventions used among children and teens, including the CMK and CMT programs. This review highlights their program elements, effectiveness, and likelihood to be maintained. The nutrition education interventions were selected for review due to being available to youth across all ages, their success in promoting nutrition education and cooking skills, and their targeted use in low-income areas and food deserts.

CHEF Bites

CHEF Bites is an after-school nutrition education program that targets Hispanic and Latino children aged 7-16 who receive free and reduced lunch at school (Schmidt et al., 2022). The intervention is grounded in the SCT and focuses on eating healthy breakfast, drinking water, increasing fruits and vegetables, learning to cook and eat at home, and encouraging more plant-based and less processed foods (Schmidt et al., 2022). The CHEF Bites curriculum contains twelve modules that focus on nutrition education, cooking skills, and food tasting throughout a 60-minute session (Schmidt et al., 2022). Classes are led by a registered dietitian, offer the choice between heat or no-heat recipes, and all modules emphasize using local cuisine, while promoting cultural competency (Schmidt et al., 2022).

A short-term evaluation completed upon the end of the Chef Bites program has identified improvements in self-reported whole grain and vegetable consumption, MyPlate knowledge, culinary skills, and changes in talking about healthy eating and picking out foods when assessed in immediate post-test surveys (Schmidt et al., 2022). There are currently no evaluations of the long-term outcomes of the CHEF Bites program. CHEF Bites is currently not part of the SNAP-ED toolkit and is a program local to the San Antonio, Texas region (Culinary Health Education for Families, 2024).

Food Smarts

Food Smarts is a curriculum from the parent organization Leah's Pantry that can be used for a wide variety of audiences, including kids and teens aged K-12 (Leah's Pantry, 2024; USDA FNS, 2023b). Despite being able to be used up to 12th grade, Food Smarts was designed to cater to elementary and middle school students (Leah's Pantry, 2024). As of the most recent update in 2022, Food Smarts has begun to incorporate trauma-informed nutrition education, which includes understanding that nutritional outcomes such as unhealthy diets, chronic disease, and

negative health outcomes may not be due to individual control (Rodriguez et al., 2023). Rather, outcomes may be linked to adverse child experiences, which are inadvertently driving nutrition habits that may have a negative health impact (Rodriguez et al., 2023). Along with trauma-informed nutrition education, Food Smarts also includes topics such as cooking, food safety, and resource management (USDA FNS, 2023b).

Food Smarts offers a flexible curriculum in 30-, 60-, and 90-minute sessions, that can take place between 4-6 weeks per cohort (USDA FNS, 2023b). The recommended time frame, however, is 90-minute sessions over 6 weeks (USDA FNS, 2023b). Nutritional education used in the Food Smarts curriculum is up to date with US dietary guidelines (Leah's Pantry, 2024). Food Smarts is included in the SNAP-Ed toolkit and has reached over 15,000 child and adult participants (Leah's Pantry, 2024; USDA FNS, 2023b). Food Smarts for Kids was evaluated with 4th and 5th graders, however, no published report was able to be found with evaluation outcomes specific to Food Smarts for Kids (Leah's Pantry, 2024). Instead, aggregate outcomes for Food Smarts for Kids (along with 5 other SNAP-Ed curricula) were included in an evaluation of nutrition education programming after California's SNAP-Ed had to modify its delivery of nutrition education due to the pandemic (Linares et al., 2023). Food Smarts for Kids was used at three of the 45 sites implementing SNAP-Ed programming (Linares et al., 2023). While the outcomes of the six different SNAP-Ed curricula were not reported separately, together the outcomes showed increased fruit and vegetable intake (Linares et al., 2023). However, per the SNAP-Ed Toolkit, other notable outcomes include decreases in the consumption of sugary beverages, changes in food safety, and participants eating more than one type of vegetable.

Cooking with Kids

Cooking with Kids is a nutritional education program from the BIG little Project that offers nutrition education for kids from K-5 (Big little Project, 2023a). Lesson activities are tailored by grade, and implementers can choose between lessons for K-1, 2-3, or 4-5 (Big little Project, 2023a). The full Cooking with Kids curriculum has a total of 11 classes, with 1 introductory class, 5 tasting lessons, and 5 cooking lessons (Cunningham-Sabo & Lohse, 2014). The tasting lessons last for one hour, and include activities surrounding nutritional information, food history, science and language arts activities, and farmer letters (Big little Project, 2023a; Cunningham-Sabo & Lohse, 2014). Cooking with Kids tasting lessons are by classroom teachers (Cunningham-Sabo & Lohse, 2014). Cooking lessons last for two hours, and are led by Cooking with Kids food educators (Big little Project, 2023a). These lessons include classroom recipes, nutritional information, shopping lists, and food history while incorporating subjects such as math, botanicals, and language arts (Big little Project, 2023a).

The Cooking with Kids curriculum is evidence-based and promotes their research evaluations readily on their website (Big little Project, 2023b). The most recent evaluation was done by Cunningham-Sabo et al., which reviewed the Cooking with Kids 4-5 grade curriculum (Cunningham-Sabo & Lohse, 2014). Cunningham-Sabo and Lohse found that participants in Cooking with Kids who took part in both cooking and tasting lessons had greater increases in self-efficacy and attitudes towards cooking, compared to participants who participated in just Cooking with Kids tasting classes and the non-treatment comparison groups. Cooking with Kids is included in the SNAP-Ed toolkit, and has reached over 35,000 kids across New Mexico, where the program has been implemented since 1995 (Big little Project, 2023a; USDA FNS, 2023c).

Cooking Matters for Kids and Cooking Matters for Teens

Finally, the Cooking Matters for Kids (CMK) and Cooking Matters for Teens (CMT) programs offer nutrition education classes that engage low-income kids and teens in healthy eating and cooking healthy meals and snacks (USDA FNS, 2023a). CMK and CMT courses are a spin-off from the original Cooking Matters nutritional education course that was originally developed for adults to promote nutrition, cooking knowledge, and confidence (*Cooking Matters*, n.d.; Share Our Strength, 2023a). The Cooking Matters program is rooted in the SCT (Gordillo & Prescott, 2023; Li et al., 2020). While SCT is comprised of several different constructs, Cooking Matters, including CMK and CMT, mostly focuses on environmental factors, self-efficacy, and observational learning (Gordillo & Prescott, 2023; Soldavini et al., 2022). For example, much of the curriculum focuses on the promotion of self-efficacy through improving confidence in cooking skills and healthy eating behaviors (Gordillo & Prescott, 2023; Soldavini et al., 2022). The CMK program targets kids aged 8-12, while the CMT program focuses on those in 6th grade and older (USDA FNS, 2023a). The CMK and CMT classes are two hours each and take place over six weeks (Soldavini et al., 2022). The lesson plans include information for instructors such as teaching tips, suggested recipes, and the goals and objectives for each lesson. Cooking Matters Kids and Teens (i.e., the *Legacy* curriculum) is a SNAP-Ed approved curriculum and allows CMK and CMT Implementing Agencies to work in a variety of settings including after-school programs, camps, and community centers (USDA FNS, 2023a). The effectiveness of the program is further described below.

Effectiveness of Cooking Matters for Kids and Cooking Matters for Teens

As mentioned in Chapter 1, there are currently no peer-reviewed articles on the CMT program and only one for the CMK program. CMK was evaluated between 2012-2017 based on data collected by 35 IAs (Soldavini et al., 2022). The evaluation included a wide variety of ages,

from younger than 7 to older than 13, however, the bulk of participants were 8-11 years old (Soldavini et al., 2022). Surveys were administered to participants at the beginning and end of classes (Soldavini et al., 2022). These pre- and post-tests evaluated the SCT constructs of attitudes (i.e. “I can make healthy choices when I’m out to eat.”) and self-efficacy (i.e. “How do you feel about trying new foods?”) (Soldavini et al., 2022). Overall, Soldavini et al. found statistically significant improvements in overall self-efficacy, individual self-efficacy, and attitudes across all scores (Soldavini et al., 2022). Despite these improvements, there was a noted smaller effect size due to the overall high baseline score of self-efficacy and attitudes across participants (Soldavini et al., 2022). An additional distinction is that this study did not assess behavior change relating to cooking and healthy eating before and after the intervention, and instead solely focused on the attitudes and self-efficacy scores relating to healthy eating and cooking of the participants (Soldavini et al., 2022). While Soldavini et al.’s research is crucial in evaluating SCT-related outcomes of CMK, it is the only peer-reviewed study that evaluates the CMK program (Soldavini et al., 2022). Thus, more research is needed to evaluate CMK outcomes across different IAs, regions, and ages. In addition, the lack of published evaluations of the CMT program provides a gap in the literature surrounding the program’s effectiveness.

De-implementation of Public Health Programming

De-implementation is a relatively new construct in public health. The term de-implementation is typically used when programs or interventions are considered to be ineffective (McKay et al., 2018). De-implementation is a crucial part of the program evaluation process, as it promotes the continuous evaluation of programs and allows for resources to be delegated to other effective evidence-based programs. Interventions may be de-implemented for several reasons (McKay et al., 2018). Some interventions are de-implemented due to not having the

evidence to support the intervention's effectiveness, or continuing an intervention that has been deemed as potentially harmful by new research (McKay et al., 2018). Interventions may also be targeted for de-implementation if another intervention that is targeting similar outcomes is found to be more effective or efficient than the initial intervention (McKay et al., 2018). Finally, interventions targeting issues that are no longer of concern or no longer require intervention can be targeted for de-implementation (McKay et al., 2018). An example of a public health program lacking evidence to support intervention effectiveness that has been flagged for de-implementation consideration is the Drug Abuse Resistance Education (D.A.R.E.) program. Despite being a widely implemented program and being considered evidence-based, the D.A.R.E program's effectiveness has continuously been called into question (Caputi & McLellan, 2017; Caputi & Thomas McLellan, 2017; McKay et al., 2018; Walsh-Bailey et al., 2021).

Factors Influencing De-implementation

The de-implementation process is a key step in providing effective and evidence-based interventions. However, the de-implementation process is a complex one that has many influencing factors. De-implementation may not only be influenced by a lack of evidence or need for the program, other influences such as political, historical, economic, professional, and social resistance can be important factors that play a role in influencing de-implementation (Montini & Graham, 2015; Pinto & Witte, 2019). In addition to these factors, an overlooked area of de-implementation is the exclusion of community input (Pinto & Witte, 2019). An example of this occurred in the de-implementation of the Diffusion of Effective Behavioral Interventions (DEBI) program, which targets HIV prevention. The program was de-implemented after a shift towards the need for more cost-effective, biomedical-based interventions (i.e. PrEP), (Pinto & Witte, 2019). While the DEBI de-implementation was rolling out and promoting more biomedical

interventions, de-implementers did not consider the current DEBI use in communities at high risk for HIV who could not access PrEP or PrEP and HIV Prevention related information (Pinto & Witte, 2019). This exclusion of community encompasses both participants and other shareholders (e.g. clinicians, program personnel), and can lead to mistrust from the community or lead to skepticism of future interventions (Pinto & Witte, 2019). Shareholders may also play a large role in contributing to de-implementation successes and failures, thus their point of view should be prioritized in program de-implementation (Prusaczyk et al., 2020). Consequences such as these provide evidence that communities should be monitored for negative outcomes post-de-implementation, which has also been recommended for communities that had been reliant on DEBI (Pinto & Witte, 2019; Prusaczyk et al., 2020; Walsh-Bailey et al., 2021). Approaches to de-implementation that exclude community input from decisions surrounding the implementation and de-implementation of interventions among community members may contribute to further community mistrust of scientific knowledge (Pinto & Witte, 2019).

The de-implementation timeline can vary, as a rapid or overly slow de-implementation may cause unintended harm (Norton & Chambers, 2020; Prusaczyk et al., 2020). A challenge of de-implementation is when a program has been implemented over a long time, and has been integrated into public health systems, such as how the D.A.R.E program is implemented in schools despite its doubts surrounding effectiveness (Caputi & Thomas McLellan, 2017; McKay et al., 2018).

De-implementation and Nutrition Education Programming

Within nutrition education, de-implementation has been considered for different aspects of nutrition across a variety of settings. Within schools, one example includes the implementation and subsequent de-implementation of a policy promoting the inclusion of BMI

in report cards to help promote childhood obesity prevention (Poole et al., 2023). When shareholders were spoken to regarding the de-implementation of the use of BMI in report cards, problems related to implementation inconsistencies, bullying, internal scandal from the overseeing organization, communication breakdowns, and societal pressure (Poole et al., 2023). Of note, once the de-implementation of BMI was posed to communities, there was no universal acceptance among community members (Poole et al., 2023). Additional areas targeted by de-implementation surrounding nutrition education include reducing negative feeding practices, calling for the abolishment of food-based reward systems in schools, and examining obesity prevention programs offered by schools and, if applicable, the evidence base supporting their use (Kenney et al., 2017; Rosenkranz et al., 2021; Swindle et al., 2022). The de-implementation of Cooking Matters is unique as SOS is a nongovernmental organization that is ending the program, as compared to a government-affiliated parent organization. Despite the exact reasoning for de-implementation by SOS being unknown, the examples mentioned above provide insight into a few causes of de-implementation within nutrition education.

Summary of Current Problem

Cooking Matters is a program that has had a substantial impact at both Open Hand Atlanta and nationwide. CMK and CMT promote nutrition education and cooking skills to low-income areas, providing them with what is one of their few opportunities to access nutrition education. Thus, it is important to ensure that the curricula in CMK and CMT are up-to-date, accurate, engaging, and sustainable. As described in Chapter 1, the de-implementation of Cooking Matters announced by SOS threatens to remove an intervention that has been a staple in many communities over the years. This announcement leaves IAs scrambling to decide if they

should begin to switch to an alternative curriculum, continue using Cooking Matters post-de-implementation, or wait and see if an external organization will step up and take over for SOS.

Even in the context of SOS discontinuing Cooking Matters programming, it remains important to evaluate CMK and CMT to understand the program's strengths, weaknesses, and sustainability. Doing so may help to identify modifications for future curriculum updates and ways that IAs can continue to offer the SNAP-Ed-supported curriculum. Additionally, understanding how the program can be adapted to better suit the nutritional education needs, interests, and outcomes of kids and teens can allow IAs a deeper understanding of current gaps in providing nutrition education. Overall, the findings of this evaluation will help IAs in determining how to provide effective, evidence-based nutritional education beyond Cooking Matters' de-implementation.

Should no organization volunteer to take over the Cooking Matters program, SOS has made program recommendations for IAs to begin to transition to alternative programs and phase out of using Cooking Matters. Programs recommended by SOS that offer programming for kids and/or teens included; Leah's Pantry, Color Me Healthy, Cooking with Kids, Together We Inspire Smart Eating (WISE), and Brighter Bites (Share Our Strength, 2023b). A further comparison of these programs, as well as the four mentioned above, can be found in **Table 2** and **Table 3**.

Table 2. A Brief Overview of Nutrition Education Programs for Kids and Teens

Program Name	Age Range	SNAP-Ed Approved	Duration of intervention	Cooking Skills Taught	Theoretical Basis	De-Implementation Risk
Chef Bites	7-16	No	12 modules	Yes	SCT	No
Food Smarts ^b	5-18	Yes	4-6 Weeks	Yes	N/A	No
Cooking with Kids	5-11	Yes	10 modules + Introductory Class	Yes	SCT	No
Color Me Healthy	4-5	Yes	12 lessons	No	N/A	No
WISE	3-7	Yes	9 Months	Yes	Multiple ^a	No
Brighter Bites	3-12	Yes	16 weeks (schoolyear) OR 8 weeks (summer)	No	SCT	No

^aNo specific theory was noted in the literature surrounding WISE, the theoretical basis was noted to be based on adult learning theories (Whiteside-Mansell et al., 2019).

^bNo program from Leah's Pantry was listed by SOS, the program used in this table is Food Smarts, a SNAP-Ed-approved curriculum
Material summarized in the table was obtained from: (Culinary Health Education for Families, 2024; Cunningham-Sabo & Lohse, 2014; Rodriguez et al., 2023; Schmidt et al., 2022; Soldavini et al., 2022; USDA FNS, 2023a, 2023b, 2023c)

Table 3. A Comparison of Nutrition Education Programs for Kids and Teens: Outcomes and Effectiveness

Program Name	Intervention Components	Program Effectiveness
Chef Bites	Demonstration style or hands-on cooking, nutrition education	Increased self-reported whole grain and vegetable consumption, increased knowledge of MyPlate and culinary skills, changes in talking about healthy eating
Food Smarts	Recipe demonstration, food tasting, activities, kitchen safety, trauma-informed approach	Increased fruit and vegetable intake, decreased consumption of sugary beverages, eating more than one kind of vegetable
Cooking with Kids	Recipes, tasting lessons, interactive activities, shopping lists	Increased self-efficacy and attitudes toward cooking
Color Me Healthy	Picture cards, songs, classroom posters, interactive lessons	Increased consumption of fruits and vegetables as snacks, increased knowledge of healthy eating, increased willingness to try new foods
WISE	Classroom Curricula, Parent Engagement Content, Educator Training	Increased consumption of fruits and vegetables, increased knowledge surrounding nutrition best practices, eating, decreased consumption of sweet foods
Brighter Bites	Weekly produce distribution & recipe tasting, nutrition education in schools, and for parents	Increased consumption of fruits and vegetables, increased consumption of fruits and vegetables as snacks, decreased consumption of added sugars, increase in cooking meals from basic ingredients

Material summarized in the table was obtained from: (Culinary Health Education for Families, 2024; Cunningham-Sabo & Lohse,

2014; Rodriguez et al., 2023; Schmidt et al., 2022; Soldavini et al., 2022; USDA FNS, 2023a, 2023b, 2023c)

Chapter III: Methods

Introduction

This chapter will provide an overview of the identification of shareholders and their subsequent recruitment strategies used in this evaluation. A detailed explanation of the program evaluation will then be discussed, including the qualitative research design, development of semi-structured interview guides, and participant recruitment measures. Five Shareholder groups were purposively recruited to interview to gain a multi-perspective understanding of the CMK AND CMT program implemented at Open Hand given the upcoming de-implementation of the CMK AND CMT program by the parent organization, Share Our Strength (SOS). Across the five shareholder groups, a total of 20 participants completed an interview or participated in a focus group between October 2023 and December 2023. To supplement the information from participant interviews, four publicly available data sources from Share Our Strength and one email communication with SNAP-Ed staff were also included as part of the analysis. A Non-Human Subjects Research Determination Form was submitted by the Principal Investigator (PI) to Emory University's Institutional Review Board, which determined this study exempt from eIRB submission.

Population and Sample

Participant Eligibility

Participants were eligible to take place in this study if they fell in one of the following categories. Participants either (1) have facilitated a CMK and/or CMT class, (2) have experience with the oversight of CMK and/or CMT classes but are not instructors of the program, or (3)

promote SNAP-Ed compliance among SNAP-Ed funded IAs. Additional requirements were that participants spoke English as their primary language and consented to take part in the study.

Recruitment

After eligibility was determined, all participants were then grouped into one of five Shareholder groups to be interviewed.

Shareholder group 1 consisted of CMK or CMT instructors with significant experience facilitating courses at Open Hand Atlanta. Significant experience was defined as instructors who facilitated over three completed CMK or CMT programs within two years of working at Open Hand. This class number considers the decrease in classes during and after the COVID-19 pandemic. Participants in this Shareholder group were recruited as they have first-hand experience working with participants and implementing the CMK and CMT curricula.

The principal investigator and Open Hand administrators identified these participants. In the latter case, an introduction was made between the Open Hand administrator, the potential participant, and the PI. Shareholder group 1 instructors were directly emailed a brief description of the project evaluation (Appendix A) which asked if they would be interested in participating in a one-on-one interview. Additional information provided to participants was included in the participant information sheet (Appendix B). If interested in participating, instructors were directed to fill out a Calendly link to schedule a Zoom meeting based on participant and PI availability. Follow-up emails were sent one week after the initial email was sent. Six instructors were recruited to take part in one-on-one interviews, and five interviews were completed for Shareholder Group 1.

Shareholder group 2 consisted of CMK or CMT instructors at Open Hand Atlanta with some experience. This group included instructors who have taken part in running a few CMK or CMT programs but have not instructed these programs as frequently as those in Shareholder Group 1. A focus group was used for this group as it allowed instructors to collectively discuss and recall instructor experiences. Although this group did not conduct CMK or CMT courses as frequently as Shareholder Group 1, their perspectives reflected familiarity with the program and curricula and helped to identify whether there is consensus on the strengths and weaknesses of the CMK and CMT programs expressed among instructors with significant experience (Shareholder group 1). This group also offered insight into the potential of Open Hand transitioning to a different curriculum, as these instructors had experience with a wider set of nutrition education programming.

All participants in Shareholder Group 2 were invited to the focus group following their bi-weekly instructor meetings through Open Hand Atlanta. Participants were informed before the meeting by Open Hand Administrative members that a focus group discussion would be conducted and recorded with all instructors, and a modified version of the participant information sheet (Appendix B) was also provided. Before the beginning of the focus group, instructors were allowed to leave if they did not wish to participate. Of the six instructors recruited, three accepted and participated in the meeting. One of the participants was also a participant interviewed as part of Shareholder Group 1.

Shareholder group 3 included Open Hand Atlanta's administrative members who helped to oversee CMK or CMT programs but did not facilitate these programs. This Shareholder group provided insight into the behind-the-scenes administrative work needed to craft local partnerships, train instructors, and coordinate with program sites. These administrative members

were identified by the PI and were directly recruited via email. A modified version of the recruitment email (Appendix A) and participant information sheet (Appendix B) were provided to administrative members. Two Open Hand administrators were recruited to take part in one-on-one interviews, and one interview was completed for this Shareholder Group 3.

Shareholder group 4 consisted of SNAP-Ed staff who work with Open Hand Atlanta and oversaw their Cooking Matters program and reports submitted to SNAP-Ed. As many IAs, including Open Hand, are reliant on SNAP-Ed funding, it was critical to understand SNAP-Ed's role in implementing nutrition education programming, like Cooking Matters, and the future implications the de-implementation of the Cooking Matters program has on Open Hand's ability to use SNAP-Ed funding to offer nutrition education programming to kids and teens in the future. SNAP-Ed participants were identified by an Open Hand Atlanta administrator as those who work closely with Open Hand as well as other SNAP-Ed-funded programs across Georgia that implement Cooking Matters. These participants were then directly contacted via email by the PI with more information on the study, and potential interview times. A modified version of the recruitment email (Appendix A) and participant information sheet (Appendix B) were provided to SNAP-Ed representatives. One SNAP-Ed representative was recruited to take part in one-on-one interviews, and one interview was completed.

Shareholder group 5 was the final participant group and consisted of representatives from other agencies across the US, who are currently implementing and have recently facilitated the CMK and CMT program (i.e., within the past 6 months). Specifically, this Shareholder group did not include any participants from Open Hand Atlanta, as Shareholder groups 1-3 already have representation from Open Hand. Shareholder group 5 provided a glimpse of how other IAs run CMK and CMT programs, as well as determined if there was consensus with Open Hand's

experiences surrounding ways the CMK and CMT programs could be improved. This Shareholder group also provided insight into the *Maintenance* construct of the RE-AIM framework by providing an understanding of how the de-implementation of the SNAP-Ed-approved Cooking Matters curriculum nationwide is influencing the current and future nutrition education programming offered at these organizations. These organizations were identified via a Google search conducted by the PI for programs that hosted a CMK or CMT program. Participants were identified via their position in the program that best matched working with Cooking Matters (i.e., Director of Nutrition Education, Community Health Educator, Cooking Matters Manager). Representatives from nine organizations participated in the interviews. All organizations implemented both CMK and CMT, which can be summarized in Table 4.

Table 4. Implementing Agencies Whose Representatives Participated in Interviews

Implementing Agency	Organization Type	US Region
1	Non-profit	Southeast
2	Food Bank	Northeast
3	SNAP-Ed Institute	Southeast
4	Cooperative Extension	Northeast
5	Food Bank	Midwest
6	Food Bank	Southeast
7	Non-profit	West
8	University Extension	Midwest
9	Food Share / University Extension Partnership	West

All contact information along with the Cooking Matters program offered was recorded on a contact sheet. Participants were then contacted via email to introduce the study and gauge interest in participation. If a participant did not have contact information readily available on the

website, or there was uncertainty as to who should be contacted to participate, a recruitment email was sent to the general inquiries email of the organization. Due to the higher-than-expected response rate of this Shareholder group, no follow-up emails were sent. A modified version of the recruitment email (Appendix A) and participant information sheet (Appendix B) were provided to all potential participants. Of the eighteen organizations recruited, nine organizations participated with seven participants completing a one-on-one interview and four participants taking part in focus groups.

Data Collection and Management

Interview Guides and Interviews

Interview guides (Appendix C) for each Shareholder group were developed using the RE-AIM framework (RE-AIM, n.d.) and guidelines for qualitative interviews. Questions were then grouped into the following sections: 1) Interviewee background, 2) Program Participants and Class Atmosphere, 3) Curriculum, 4) Class Outcomes and Expectations, and 5) Impacts of De-Implementation. All five topics were consistent across all interviews; however, interview questions were purposively selected based on each group's distinct expertise of the Cooking Matters curriculum or knowledge of the reasons for and impacts of de-implementing the CMK/CMT curriculum. Additional topics covered based on the Shareholder group being interviewed included administrative tasks, local partnerships, SNAP-Ed funding, and interactions with other Cooking Matters IAs.

Shareholder groups 1, 3, and 4 were all interviewed one-on-one using a semi-structured interview guide, tailored to each group's experiences. Shareholder group 2 was interviewed as a focus group after a weekly instructor meeting at Open Hand Atlanta. This focus group took place at the end of the meeting, and instructors were made aware that their participation was voluntary.

Shareholder group 5 was a combination of one-on-one interviews and focus groups depending on the number of representatives from each IA.

Within all one-on-one interviews and focus groups, additional probing questions were asked as needed to elaborate on the information provided. All one-on-one interviews and focus groups were recorded using Zoom for virtual interviews. All Zoom recordings were saved automatically to the computer of the PI. Once the Zoom recording was downloaded after the interviews, all recording files were immediately uploaded to a secure OneDrive folder to be used for transcription. Any Zoom recordings saved to the PI's PC were deleted immediately after being uploaded. The focus group audio for shareholder group 2 was recorded using Voice Memos, an Apple software, due to issues recording the focus group via PC. The audio recording of the focus group was immediately uploaded to OneDrive and deleted from Voice Memos. Interview recordings were accessible only to the PI and her thesis committee. All audio recordings were transcribed by Otter.ai (Otter.ai, 2024), and all quality assurance to ensure accurate and verbatim transcription was done by the PI. Transcriptions for the interviews were then stored on OneDrive before being uploaded for analysis. Any notes taken during interviews were immediately uploaded to a secure OneDrive folder following the interview.

Supplemental Documents and Webinars

In addition to interviews and focus groups, five additional data sources were used for analysis to more completely understand the implications SOS's decision to discontinue support of the Cooking Matters curriculum has on implementing agencies. These included: one email response from the SNAP-Ed Toolkit Team; the Cooking Matters Transition Update announcement from SOS; Cooking Matters Transition Update FAQs from SOS; and two publicly available recordings of live webinars from SOS held with IAs across the US after announcing the

de-implementation of Cooking Matters. A description of these data sources be found below in

Table 5.

Table 5. Description of Supplemental Documents and Webinars

Renamed Document	Synopsis	Initial Document
Transition Update Webinar 1	Webinar held by Share Our Strength in August 2023 to update Implementing Agencies on their current plans for the de-implementation of Cooking Matters. A question-and-answer session from Implementing Agencies followed.	Cooking Matters Transition Update Webinar 1
Transition Update Webinar 2	Webinar held by Share Our Strength in September 2023 to allow Implementing Agencies to ask questions they did not get to ask in the first webinar.	Cooking Matters Transition Update Webinar 2
Supplemental Document 1	The announcement from Share Our Strength posted to the Cooking Matters Help Desk on September 26, 2023, reiterating the de-implementation of Cooking Matters.	Cooking Matters Transition Update
Supplemental Document 2	A list of questions from Implementing Agencies and answers from Share Our Strength posted to the Cooking Matters Help Desk regarding the de-implementation of Cooking Matters.	Cooking Matters Transition FAQ's
Supplemental Document 3	Email received from the SNAP-Ed toolkit team on January 11, 2024, that clarified the reasons a curriculum from the toolkit would be removed.	SNAP-Ed Toolkit Email

The PI chose to include these additional documents and webinars in place of the absence of interviews with SOS representatives. While multiple SOS representatives were attempted to be recruited as part of this study, all declined stating that their roles had shifted within the organization. These additional data sources were chosen as they provided further information regarding SOS's decision to de-implement Cooking Matters, as well as providing different platforms to address the concerns of IAs regarding their next steps.

Live webinar recordings were transcribed by Otter.ai (Otter.ai, 2024), and all quality assurance was done by the PI using Otter.ai (Otter.ai, 2024) and Microsoft Word. Transcriptions for the webinars, the SNAP-Ed Toolkit email response, and the SOS transition announcement and FAQs were saved to OneDrive before being uploaded to MAXQDA (VERBI Software, 2024) for analysis.

Data Analysis

All recording files were de-identified by their Shareholder group and given a sequential interview number (i.e., Cooking Matters Instructor Interview #4). After verifying and correcting interview transcripts, transcripts were uploaded to the software MAXQDA (VERBI Software, 2024) to be used for data analysis. Any additional notes taken by the interviewer during the interviews were also added to MAXQDA (VERBI Software, 2024) along with the 5 additional data sources specified in Table 5.

Data familiarization was first performed on all interviews and data sources while conducting the transcript verification. Following, ten interviews were selected that reflected both richness and diversity in understanding the implications that de-implementation has on IAs, as well as what could be improved in the CMK AND CMT program to better address child and teen interests and needs. These ten transcripts were then used to develop an initial codebook using

Excel which consisted of both inductive and deductive codes. This codebook was then reviewed and revised with the PI and the Thesis Chair. The codebook was revised a total of three times with each iteration adding new interviews or data sources until deciding on the finalized version of the Codebook (Appendix D), which was then applied to all qualitative data sources. The finalized version of the codebook contained 9 main codes and 31 subcodes.

During this time, additional memos were maintained documenting observations based on similarities and differences across interviews, as well as potential themes and key assertions. In consultation with the Chair, research questions were refined based on the collected data and participant experiences. Once all data was coded, themes and assertions for each research question were then identified by reviewing coded segments, memos, and data sources. The final versions of these themes are presented below in Chapter 4.

Positionality Statement

The author of this thesis grew up in a household considered part of the middle class. She has not participated in nutrition education or cooking classes outside of a mandatory home economics class that was provided by her middle school. While the author has worked with many children and adolescents facing food insecurity, she has never been reliant on food stamps or had to worry about access to healthy foods. The author recognizes these privileges and continuously reflects on her positionality throughout all aspects of the thesis process, especially during data collection and analysis. The author hopes that the information presented in this study will help promote the need for comprehensive nutrition education and food access, as well as highlight the impacts of organizations working in areas currently facing these deficits.

Chapter IV: Results

Introduction

This study utilized the RE-AIM framework to examine the barriers and facilitators, nutritional outcomes, and de-implementation of the Cooking Matters for Kids (CMK) and Cooking Matters for Teens (CMT) programs. As described in Chapter 3, this study utilized qualitative methods to conduct one-on-one and focus group interviews between October and December of 2023. Data from these sources along with transcripts from two Cooking Matters transition webinars, an email from the SNAP-Ed Toolkit, and two documents from SOS surrounding the Cooking Matters transition were coded and analyzed. In total, 22 qualitative data sources were coded and analyzed, and a summary of the total number of each type can be found in Table 6. Below, an overview of participant characteristics and other document sources are provided, followed by the findings for each research question. The primary research questions for this program evaluation were:

- 1) What are the potential impacts for Implementing Agencies, like Open Hand Atlanta, their communities, and public health as a result of the national de-implementation of the Cooking Matters program by Share Our Strength?
- 2) What are the events and contexts that led up to the national de-implementation of the Cooking Matters program by Share Our Strength scheduled for September 2024?
- 3) What are the facilitators and barriers for organizations, including Open Hand Atlanta, to continue the implementation of the Cooking Matters curriculum for kids and teens following de-implementation?
- 4) For those organizations who decide to move forward with implementing Cooking Matters for Kids and Cooking Matters for Teens, what aspects of the Cooking Matters program

should be maintained or adapted to better suit child and teen nutritional education needs, interests, and outcomes?

Table 6. Data Sources Used for Analysis

Data Source	N = 22^a
One-on-One Interview	14 (64%)
Focus Group	3 (14%)
Transition Update Webinar	2 (9%)
Supplemental Documents	3 (14%)

^a n (%)

Participant Demographics

A total of 20 participants completed a semi-structured interview or were involved in a focus group. An overview of participant characteristics can be found in Table 7. Participants represented one state SNAP-Ed organization and 10 different IAs across the US, including Open Hand Atlanta. Participants varied in how long they had been at their IA, however, most worked at their organization for more than 5 years. The most common job title held by participants was Cooking Matters Instructor (25%), followed by Cooking Matters Program Manager or a similar variation (15%).

Table 7. Participant Demographics (n=20)

Variable	N = 20 ^a
Shareholder Group	
Open Hand Atlanta	
Administrator	1 (5%)
CMK AND CMT Instructors with Significant Experience	5 (25%)
Instructors with limited experience implementing CMK AND CMT	2 (10%)
Representatives of Cooking Matters Implementing Agencies	11 (55%)
SNAP-Ed Representative	1 (5%)
Years Worked at Organization	
2>	2 (10%)
2-5	7 (35%)
6-9	4 (20%)
10-19	6 (30%)
20+	1 (5%)
Job Title	
Cooking Matters Instructor	5 (25%)
Nutrition/Health Educator	5 (25%)
Cooking Matters Program Manager	3 (15%)
Nutrition/Program Director	3 (15%)
Registered Dietician	2 (10%)
Development Coordinator	1 (5%)
SNAP-Ed Project Specialist	1 (5%)
Data Collection Method	
One-on-One	14 (70%)
Focus Group ^b	7 (30%)

^a n (%)^b One participant participated both in a focus group and a one-on-one interview

In addition to participant information, information about the organizations they represented was collected. Including Open Hand Atlanta, a total of ten organizations that implement Cooking Matters were represented in this project. Of these organizations, 40% were solely reliant on SNAP-Ed funding, while 60% of organizations did not rely on SNAP-Ed funding but have worked with other local partners who are SNAP-Ed reliant to implement Cooking Matters. The most common US region organizations were located was the Southeast which was represented by 4 of the 10 organizations. All organizations were asked about their plans considering the de-implementation announcement from Share Our Strength. While responses varied, 40% of organizations reported looking into an alternative curriculum, while 30% plan to continue to use the CMK and CMT curriculum. Further information surrounding the demographics of the IAs represented can be found in Table 8.

Table 8. Characteristics of Implementing Agency Organizations (N=10)

Variable	N = 10 ^a
Years Implementing Cooking Matters	
0-9	2 (20%)
10+	8 (80%)
SNAP-Ed Funded	
No	6 (60%)
Yes	4 (40%)
US Region of Cooking Matters Implementing Agencies	
Northeast	2 (20%)
Midwest	2 (20%)
Southeast	4 (40%)
Southwest	0 (0%)
West	2 (20%)
De-Implementation Plans	
Move away from CMK AND CMT to a new curriculum	4 (40%)
Continue to use CMK AND CMT	3 (30%)
Unsure, waiting for more information	2 (20%)
Already discontinued CMK AND CMT curriculum	1 (10%)

^a n (%)

Key Findings

Research Question 1

What are the potential impacts for Implementing Agencies, like Open Hand Atlanta, their communities, and public health as a result of the national de-implementation of the Cooking Matters program by Share Our Strength?

Cooking Matters has been implemented by organizations across the nation since 1993 and has established itself as a staple program within many communities. The impact of this program reaches beyond participants to other members of the community by extension. The first question will discuss the impacts of CMK and CMT de-implementation on (1) Participants, (2) Participant Families, (3) Implementing Agencies, and (4) Community Members.

De-Implementation Impact on Participants

The Loss of Forming Lifelong Cooking & Nutrition Skills. Cooking is an essential skill that provides the ability to take care of oneself and others over time. CMK and CMT promote cooking skills and enjoyment from an early age. While many kids and teens enjoy learning how to cook through Cooking Matters, some participants are more reliant on the skills being taught than others. One instructor compared the differences between the populations they had worked with, stating,

“Generally the kids and teens are happy to have this opportunity to be around food and to be adjusted around food in a way that they might not be at home... some of the teens, like the teens at... the shelter, have to cook for themselves... With the little kids in the summer camp, it feels like just a fun activity... but for the teens, a lot of them are feeding themselves.” (Experienced Instructor 5)

Regardless of their reason for participating in CMK or CMT, youth participants are provided with a sense of pride and self-sufficiency in being able to cook on their own or with limited assistance. For kids and teens who come home to an empty house, learning to cook allows them to have choices about what they eat. One instructor recalled the excitement of some of their participants while learning, saying,

“You see it in their faces that you know that some people learn how to make eggs. That they've never, you know, they never knew how to scramble eggs. ... they can come home and cook a meal for themselves without having to wait for their parents or, or you know, be hungry.” (Some Experience Instructor 1)

Beyond the cooking skills received as part of the Cooking Matters program, participants are also able to try new foods they may not be able to otherwise. Since Cooking Matters classes are targeted towards those who are lower income and have a tight budget, *“Trying an avocado is a little bit easier because it's not their dollar if they don't like it. So I really encourage people in those classes to try new things and try things that they haven't tried, but they've kind of questioned or wondered about.” (Implementing Agency 2, Representative 2)*. Thus, allowing kids and teens to try new foods, and expand their horizons. Trying new foods is currently a measured outcome in CMK, but teens also benefit from the exposure. One instructor who allows their teen classes to have more autonomy and input, recalled, *“I remember a [teens] class I had, and they were, they brought their own, they brought their own fruit to make smoothies. And they wanted to bring some things... like they brought mangoes, and they brought pineapple...they brought [these fruits] because they wanted to try it” (Experienced Instructor #4)*. These exposures to new foods allow kids and teens to understand that there are foods they are unfamiliar with that can

taste delicious. Cooking Matters helps to promote adventurous eating and curiosity surrounding nutrition and cooking.

Beyond learning to cook and being able to try new foods, for some kids and teens, Cooking Matters also exposes students to the possibility of a career in cooking. A few IAs recalled students expressing their desire to become a Chef after participating in the program. For teenage Cooking Matters participants who are graduating high school, participation in the Cooking Matters program can provide skills and open doors to teens that were previously closed. One IA recalled that within their state, they partnered with high school programs to align with teens who had an interest in cooking. This partner further promoted the benefits of teens participating in Cooking Matters and how the skills they learn transfer to statewide needs, stating that.

“Especially with teens, there's some job development when you bottom line think about it that might also help to support individuals in thinking about a career in culinary arts or working at a restaurant in our hospitality industry, which is very big here in this state, and cultivating people to have a passion for food in general.” (Implementing Agency 2, Representative 2).

The skills and education kids and teens are learning in the Cooking Matters program have a tremendous impact on both the present well-being and future goals of its participants.

Loss of a Supportive Cooking Environment. Similar to the opportunity provided by Cooking Matters to have an opportunity to learn how to cook, kids and teens are provided a space to learn and grow in a supervised space that allows participants to use tools that are normally off-limits to them. The discontinuation of Cooking Matters programming will result in a loss of a space that allows kids and teens to cook outside of their homes and help them develop

these skills they may not be allowed to do otherwise. One partner emphasized the importance of teaching kids and teens to cook outside of their homes, and praised the space that Cooking Matters was able to create, stating,

“I know that a lot of parents feel very protective about their kitchen space and aren’t comfortable with their kids doing these things ... we’re going to have to learn how to cook anyway. So let’s teach them in a safe space, let’s teach them how to do it properly. So that when they’re older and have to do this every day for themselves, they can.”

(Implementing Agency 8)

This lapse in developing cooking skills in the home was also noted by IAs as being due to family members working overtime and not being able to teach their kids to cook, lack of kitchen utensils or access, or the sharp decrease in Home Economics classes, of which in the past has been how many kids and teens were exposed to cooking.

Diminished Availability of Nutrition Education. CMK and Teens programming also focuses on areas of healthy nutrition such as MyPlate, low-sugar beverages, and increased consumption of fruits, vegetables, and whole grains. These outcomes have all shown improvements in evaluation surveys according to the IAs and instructors interviewed. In addition to these targeted outcomes, some IAs and instructors also emphasized additional nutrition education outcomes such as food safety. When asked about kid and teen takeaways from completing the curriculum, one IA emphasized,

“I want you to just know how to be safe around your food. So how do we wash it safely? ... you just rinse it. We want to start with a safe surface safe, clean surface, right, and a stable surface, especially for cutting ... I want them to know that that basic of being food safe” (Implementing Agency 8)

As this quote highlights, instructors emphasized the importance of nutrition education being taught beyond just the measured outcomes put in place by SOS. In light of SOS's de-implementation announcement, some IAs expressed worry about what the discontinuation of Cooking Matters may mean for nutrition education being offered to kids and teens in the future--especially given the decreases in Home Economics and nutrition education programs in schools.

Another instructor highlighted the importance of creating healthy nutrition habits with kids and teens, so they can continue to practice good nutrition over their lifespan. They spoke about the impacts of nutrition education on kids and teens in contrast to programming for elderly participants, stating,

"I'm worried that yeah, we're just going to lose the program. And we're not going to have anything for kids and teens... I love teaching the seniors, but unfortunately, your older adults tend to be stuck in their ways. And I'm not going to be able to necessarily change a whole lot. Where's I think getting these kids and teens is what's important. Helping them make these healthy decisions now versus trying to change them in the future. So I just think I'm worried that we are going to lose these kids and teens classes."
(Experienced instructor 1)

Inability to Promote Cooking Confidence. Not only are kids and teens thriving off of the safe space to learn about cooking skills and nutrition education, but these aspects of CMK and CMT leave participants with a newfound sense of confidence. One instructor spoke about the increase in skills, nutrition education, and willingness to try new foods and how they intertwine with confidence, noting,

"The skill levels... kids definitely gained skills in the kitchen and just confidence around food, confidence around answering questions that we ask, and then the willingness to try

new foods drastically increases. I think the more ownership that someone has over creating their meal, and actually cooking for themselves, the more excited they are to try something new.” (Other Implementing Agency 5)

While confidence in cooking skills is only measured by Cooking Matters surveys across the teen participants, nearly every interview and focus group participant mentioned increased confidence across youth participants of all ages. Some IAs attribute this to the way the curriculum is developed to emphasize the overlap between nutrition education and cooking skills.

Loss of the Presence of a Trusted Adult. As Cooking Matters classes are conducted throughout their six weeks, participants and instructors spend a lot of time together. While kids and teens are learning about nutrition education and cooking skills from instructors teaching the curriculum, they also learn more about one another through conversations beyond the Cooking Matters curriculum. As one IA stated, *“As they get more comfortable with you, too, they open up and they talk more. And sometimes that’s a good thing, and sometimes it’s not, because sometimes, then they become a little bit more testy. But it’s all good.” (Implementing Agency #4)*

While many instructors see similar changes in engagement and comfort among youth participants, a few other IAs and instructors pointed out the less lighthearted side of these relationships, such as when discussions turn to more serious topics such as eating disorders. While this topic is not explicitly covered in the Cooking Matters curriculum, IAs report the topic being addressed across a few CMT classes after coming up in discussions. One instructor recalled when one of these discussions came up in class,

“One of the girls came up [to me] and said she has a friend who sounds like she might be suffering from anorexia. So something that then I can tell her [is] she needs to talk to a

trusted adult. As I think that one of the problems with teens can be that they don't feel like they're listened to. And so giving them that trusted adult who can at least maybe encourage them, make them understand they're not alone, I think that can be beneficial.”
(Experienced Instructor #1)

Discussions surrounding sensitive topics such as this may not be readily accessible to kids and teens who are not participating in Cooking Matters. Instructors who can create a trusting relationship with their participants can act as a resource for having serious conversations, promote awareness, and offer support as needed. De-implementing Cooking Matters or shifting to a curriculum that may not have as many sessions with instructors may jeopardize these crucial instructor-participant relationships.

De-Implementation Impact on Families

Loss of Reach to Participant Families. Although parents and family members of CMK and CMT participants do not directly receive nutrition education and cooking skills from Cooking Matters, they receive some nutrition education secondhand as a result of their children participating in the programs. One IA recalled when they were discussing honey wheat bread with their CMK class, that participants were shocked to learn that honey wheat bread was in fact, not a healthy choice. So shocked, that,

“When they heard, they're like, ‘Wait, wait, my mom makes me eat that.... And you're telling me it's not good for me?’ Like, no. And they never fail: ‘Can I take a picture of that and send it to my mom?’. Go right ahead. Pull your phone out, take a picture of it, send it to her, show it to her.” *(Implementing Agency 1)*

Beyond nutritional education surrounding food contents, CMT program participants also learn how to shop in grocery stores through the Store Tours. These Store Tours teach teens about

shopping for food on a budget, a skill that is immensely helpful to parents who “*now know that these particular children can help with the shopping.*” (*Experienced Instructor 4*). This may help alleviate some of the day-to-day duties that fall on parents and allow teens to help with chores beyond those assigned in the home. In addition to grocery shopping, unlike the CMK curriculum, the CMT curriculum calls for teens to be given a bag of groceries after each class, which in some cases “*could be supplementing a lot of what [the family has] got in a refrigerator*” (*Implementing Agency 6*). Teens can then use these groceries to cook the meals they made in class with their families.

In addition to helping with groceries, other participants who have completed the program rely on their newfound cooking skills to help their parents or look after siblings. One instructor recalled a participant “*She was like 13 and her mother worked two jobs. She said, now I can come home, and I can, I can make dinner for my brothers...I can feed my brothers.*” (*Experienced Instructor 4*). Completing the Cooking Matters program empowers participants to be self-sufficient in cooking meals for themselves and their families as needed. Losing access to the CMK and CMT curriculum can lead to slightly increased strain on families as parents won’t be able to rely on the help of their kids and teenagers for help surrounding cooking and grocery shopping. As mentioned, many parents of participants are already balancing multiple jobs, and may not be able to teach their kids and teens these skills otherwise. The loss of Cooking Matters may shift a greater burden on parents and leave kids and teens without the fundamental skills learned in CMK and CMT.

De-Implementation Impact on Implementing Agencies

Fear of Running Out of Material. With the announcement of the de-implementation of CMK and CMT came fears about the loss of access to materials, which put IAs in a tough

situation regarding how to get creative with continuing these programs, Some Cooking Matters partner organizations have access to PDF versions of the Cooking Matters for Teens and CMK curriculum. At one point, SOS had stopped printing the CMK and CMT curricula books prompting them to post the curricula as a PDF for IAs to use. These PDFs used to be available through Salesforce. While Salesforce will be no longer used for Cooking Matters post-de-implementation, IAs who still have access to the PDFs may be at an advantage. One partner shared their plans to use these PDFs stating,

“Two of the curriculums are on as PDFs. So the other thing is, who's going to patrol that when they're gone? Just saying, like, is Share Our Strength really going to spend time and money in terms of saying you can't use this anymore? ... Like, who's going to be the one overseeing that, they don't even have people to oversee the current transition.”

(Implementing Agency 2, Representative 1).

Another partner acknowledged currently using PDFs to print books, but only when asked by instructors. They stated,

“Cooking Matters for teens, we've been utilizing that curriculum, but it's just unique because Cooking Matters corporate, they don't provide the books for those. So that was something that we've just had to throw out on our end, printing those and how, and we like we'll print the books that they like, if everybody wants, like, all those pages or some health educators just want like, a page or two, that's a reference to what they're teaching within the class. So we kind of modify it through that.” (Implementing Agency 3).

For IAs who have access to the PDFs of these curricula, they may be able to continue to print the curriculum or pages of the curriculum as needed for classes they are facilitating. These

partners are being placed in a situation where they have to choose between abiding by SOS's wishes post-de-implementation or continuing to provide nutrition education to their expectant communities.

Loss of an Easy-to-Implement Program. One common acknowledgment of the CMK and CMT curriculum that was noted by multiple participants was how easy the curriculum was to learn and implement due to its comprehensive layout. One participant who oversees some of the training in her organization noted,

“There are some people that are just like ‘Hey, yeah, bring it on,’ you know? The curriculum is so well defined. If you look through the instructor guides are really, really self-explanatory in terms of how you can engage with individuals, the recipes, the ideas, you know, everything is right there. So from a teacher standpoint, if you have any teaching experience, it's all beautifully laid out.” (Implementing Agency 2).

De-Implementation Impact on Communities

Local Partnerships in Jeopardy. In addition to offering CMK and CMT classes through their organization, some IAs utilize local partnerships and satellite programs to expand their reach. These additional areas of support for IAs have allowed organizations to expand their reach and promote community involvement. Two IAs noted that volunteers played a significant role in implementing Cooking Matters. One partner recalled the impact of volunteers at their IA saying *“We also have a very large volunteer base; we have over 1000 volunteers that have worked with us throughout the time that we've been implementing Cooking Matters. And so now can we bring direct education to the community, but still bring our volunteers in, as well.” (Implementing Agency 5).*

Beyond volunteers, other IAs emphasized their ties with local organizations and schools to deliver CMK and Cooking Matters for Teens. One partner spoke about their relationship with teachers stating *“The program was really great because we were able to reach out to students all over the state of Arkansas ... We really worked with the FACTS teachers, Family And Consumer Science Teachers, to bring those cooking classes to the school.”* (Implementing Agency 1).

Another representative spoke about the desire to host CMK and Cooking Matters for Teens classes from teachers as well, and emphasized that *“We have teachers reaching out all the time just word of mouth like ‘Can this happen at our school? How do we make this happen for our kids?’”* (Implementing Agency 2, Representative 2). Partnering with schools and teachers reiterates the interests of communities to continue CMK and CMT, as well as their willingness to work with IAs to bring this program to the classroom.

Finally, multiple IAs set up satellite programs with their local partnerships. Satellite Partners are organizations or schools that are not near the IA and may require longer travel times to get to. Satellite partners become well-trained on the curriculum by IAs before being trusted to implement the Cooking Matters curriculum without on-site help from the IA. This process includes determining that a local partner can deliver the curriculum as required, while IAs provide the necessary materials to conduct the class. Regarding the use and success of satellite partnerships for implementing CMK AND CMT, one partner emphasized

“This year, we've had more satellite classes with the schools than we ever had before. So that's another way we can reach out, you know, and make sure we're meeting the needs. And usually, we're very selective on what school we give as a satellite [partner].” (Implementing Agency 6).

These satellite partnerships allow organizations to reach areas of their state where IAs may be unable to travel frequently and serve to lighten the load on IAs and instructors. The loss of these partnerships inhibits IA reach and hinders the dissemination of nutrition education to areas that are without it.

Loss of Community Impact by Extension. As mentioned earlier in this section, CMK, and CMT are taught in schools. By extension, IAs mentioned that teachers are learning new information as well by being present in the classroom and listening to the Cooking Matters lessons being taught by instructors. Other IAs have found creative ways of implementing the Cooking Matters curriculum, for example, one IA uses the curriculum to show healthcare workers what foods patients have access to in a food desert,

“Each one of those resident [doctors] will come with me to the store and we will actually do a store tour based on the Cooking Matters curriculum ... so if they're out there doing the education to their patients, we want them to be aware of what this education needs to look like ... we will be doing those residents store tours for the foreseeable future, mainly for the fact because it's such a great component for them to learn about this stuff. And the residents... when they first start off they're like, ‘Why am I here?’ By the time they get done with it. They're like, ... ‘This is awesome. Why didn't I know about this? I didn't know about this.’ ... Because of all the stuff that they just [learned] it makes them feel like ‘I can talk to my patient’s families now about this stuff.’ ” (Implementing Agency I)

Thus, showing that the curriculum can impact community members by providing direct and indirect nutrition education beyond the curriculum’s intended uses.

Research Question 1 Summary

This research question highlighted what IAs, and their communities, stand to lose with the de-implementation of the Cooking Matters program. For CMK and CMT participants, this includes losing a program that helps provide the foundation for lifelong cooking and nutritional education skills and access to nutrition education that is otherwise unavailable to them. This extends to the loss of a supportive cooking environment where youth can make mistakes, learn, and grow their confidence in their cooking skills. For families, this can mean more of a burden on the parents without their teenagers having the proper skills to help with grocery shopping and may leave youth who look after their siblings limited in their food options for dinner if they are unable to cook. Communities may lose partnerships and benefits that Cooking Matters provided beyond its participants. Finally, IAs are put in a position where they have to make challenging decisions about what they should do next, in light of losing a program that is easy to implement and facing a lack of materials that are used to implement it. These consequences that IAs are facing will eventually lead to the participant, family, and community impacts discussed above.

Research Question 2

What are the events and contexts that led up to the national de-implementation of the Cooking Matters program by Share Our Strength scheduled for September 2024?

SOS supported the Cooking Matters program for 30 years before the de-implementation was announced in August of 2023. To understand the successful longevity of the Cooking Matters program, it is important to understand what SOS did to support the program and its IAs (pre-2018). This section will then discuss the shifts in support from SOS leading up to the de-implementation announcement (2018-2023). Finally, this section discusses the reasons SOS decided to shift away from the Cooking Matters programs as well as the initial mixed reaction of IAs (2023).

Before De-implementation (Pre- 2018)

Participants who had been implementing the Cooking Matters program were able to provide insight into what Cooking Matters was like under SOS when it was a top priority and fully supported. While working with SOS, one participant recalled,

“In the beginning...we could go and say, okay, we need to change the survey to this... make modifications to some of the menus that are in the cookbooks, and they used to listen to us. We used to meet once a year ... and we would all get together on best practices on, innovation.” (Experienced Instructor #4).

In addition to the support received from SOS on a national level, IAs also had regional partners who provided curriculum and training support. Upon reflecting on their partnership with SOS and the use of regional partnerships, one IA recalled,

“One of the perks that we loved about a partnership with them was the enrolling process, the training process, having monthly check-in, it was, it might have been quarterly but having a strategic contact within your region that you could reach out to. I thought the onboarding process with Cooking Matters was seamless.” (Implementing Agency 6).

Two participants also expressed that they had been part of supporting Cooking Matters as AmeriCorps members before being hired in their current roles at IAs. As part of Cooking Matters, AmeriCorps members were overseen by SOS and were assigned to different Cooking Matters IAs. These AmeriCorps members provided support to IAs, as well as direct service to the local community. Beyond their partnerships with IAs to provide direct support, SOS also partnered with big names, such as Walmart and the Food Network, as sponsors for Cooking

Matters. When Cooking Matters first started, SOS was able to provide partnerships with its IAs across the country that emphasized support, partner feedback, and best practices.

Waning Support (2018-2023)

While SOS was initially supportive of Cooking Matters, IAs began to notice shifts in the organization around 2018. Regarding regional support from SOS, one partner recalled,

“Our region was really close. And then they redefined roles at Share Our Strength. And people done just had general roles that were supporting everybody, maybe, you know, somebody was the help desk, and somebody was doing logistics, and somebody was doing X, Y, and Z, it looked different.” (Implementing Agency 2, Representative 1).

Another partner agreed, adding *“Whenever they decided that they weren't going to do the yearly conferences, I felt like and then when they changed the re- the divisions of who your partner contact was that I felt like that—that's when it started to dwindle down.” (Implementing Agency 6).*

Tying into the lack of support offered by SOS leading up to the Cooking Matters de-implementation, another area of concern was the termination of updates to the CMK and CMT curriculum. Multiple participants noted that the last update to the CMK and CMT curricula was in 2018, with one participant stating:

“Cooking Matters for Teens, and Kids really hasn't been supported by Share Our Strength over the last couple of years anyway.... they have not supported the programming in terms of providing updated resources or anything like that. So I will say that we've been rolling with the punches.” (Implementing Agency 2, Representative 1).

While some long-term IAs say that Cooking Matters began to show signs of waning support in 2018, other participants thought SOS was sending mixed messages. For instance, SOS

was in the process of developing the Cooking Matters *Core* Curriculum, an updated version of materials that targeted parents, caregivers, and childcare providers which was undergoing evaluation to become part of the SNAP-Ed toolkit. This type of activity meant many instructors still felt blindsided by the decision to de-implement Cooking Matters. Reflecting upon the decision to halt the evaluation of the Cooking Matters *Core* curriculum, one IA representative stated,

“There is no evaluation with a core curriculum at this time. And [it’s] something that I’m frustrated with that Share Our Strength has dropped. Because we really need that [evaluation] to move forward in the next phase of helping to support our partners to implement programming.” (Implementing Agency 2, Representative 1).

Complicating impacts of the COVID-19 pandemic (2020-2023)

The 2023 de-implementation announcement comes at a time when many programs are still recovering from the lingering impacts of the COVID-19 pandemic on the implementation of Cooking Matters. Many organizations noted that the pandemic had decreased their organizational outreach, especially with Kids and Teens classes. One partner recalled,

“We were running into a big barrier just with over the past few years with COVID, it was just really hard to get students because we were fully virtual for about two years. And then we were hybrid ... this past year that just ended was the first year that we were fully in person. And that’s kind of when the youth classes started to pick up a little bit more. And now that we’re kind of into fiscal year 24, in this new school year, and we have a lot more in-person youth classes on the schedule, and so they’re becoming a bit more highly requested.” (Transition Update Webinar 1)

As organizations are beginning to get back on their feet and continue to implement Cooking Matters in their communities, SOS has posed a new challenge to these organizations by taking away their curriculum, just as it was making a comeback.

Implementing Agencies Confusion and Mixed Reactions (2023)

While SOS slowly began to take on a laissez-faire approach to the Cooking Matters curriculum, IAs had mixed reactions to the de-implementation announcement in August 2023. Some participants described shock surrounding the decision to de-implement Cooking Matters, one partner stated:

“Everyone’s shocked. And we’re all just kind of trying to figure out how to pivot or if we need to pivot, it’s pretty up in the air ... there’s a lot of folks that are just kind of waiting to see what happens in the next couple of months.” (Implementing Agency 5).

Others anticipated this outcome, as put by one participant, SOS *“Finally put the nail in the coffin this year” (Experienced Instructor #4)* with their decision to discontinue Cooking Matters. Yet others did not seem to fully grasp the implications of SOS's decision, with one IA who participated in the first transition webinar noting *“This is kind of a beautiful thing to see that for the sustainability of a program like this, that it can be continued to be offered. You know, it does seem like you guys [Share Our Strength] are handling this well. With like a very long and kind of soft transition to hear us out.” (Cooking Matters Webinar 1)*. What was apparent is that this partner had not understood from the webinar that the Cooking Matters program at that moment had no plans to continue should no new organization take over for SOS; the curriculum would not be updated nor continue to be offered for purchase; and the support from SOS had abruptly ended aside from a select few staff members who would temporarily close out the program.

During the “transition” webinars, IAs posed questions about access to materials and next steps for those who were SNAP-Ed reliant, but there was no set answer resulting in a lack of clarity of what IAs should do next. Despite the lack of guidance, ambiguity, and limited support offered by SOS during this transition, IAs were able to continue Cooking Matters through September 2024. One participant mentioned that this was longer than SOS initially wanted stating,

“I think ultimately, they wanted to drop the program as of September of 2023. There was no intention except for partners spoke up to say ‘You can't do this to us. That's a disservice. That's unfair. We've made promises to our partners, or you know, we've already set up classes’ and I think that they were kind of put into the corner to actually have to follow through with those commitments.” (Implementing Agency 2, Representative 1)

Share Our Strength’s Reasoning

While no explicit reason was stated by SOS behind their decision to discontinue supporting Cooking Matters and no one from the organization could be successfully recruited to participate in this study, they stated the following rationale to IAs:

“Over the past few years, we have been moving away from direct service through Cooking Matters courses and tours to provide a broader array of education formats and tools, for digital and in-person access to food skills education to reach parents and caregivers of young children. Now, as part of a strategic realignment to maximize our impact organizationally, we have made the difficult decision to phase out our Cooking Matters work.” (Supplemental Document 2).

The strategic realignment goals SOS announced to IAs in the first transition webinar included their focus on (1) Maximizing access to and participation in federal nutrition programs, (2) Building strategies to increase family economic mobility, (3) Building a movement to end child hunger, and (4) Embedding food skills education into healthcare and early childhood systems (Transition Update Webinar 1). Upon seeing these strategic goals, one IA questioned how Cooking Matters, “a program that fits beautifully within those two bullets that were outlined within that first strategic planning slide” (Transition Update Webinar 1), did not align with the goals stated. In response, one representative stated,

“I would absolutely agree that Cooking Matters is complementary to those areas ... it's not against Cooking Matters, it's just a different direction of priority and of those resources. So what we're talking about within that programmatic area is around some workforce development work, some specific advocacy work, some specific work around food deserts. Again, the Cooking Matters work is incredibly impactful and complementary, but it's not the strategic direction [of Share Our Strength].” (Transition Update Webinar 1)

This determination by SOS further emphasizes the confusion surrounding SOS’s decision to de-implement Cooking Matters when it is still aligned with their strategic goals.

Research Question 2 Summary

This research question’s findings have provided the context that SOS initially was an excellent parent organization of Cooking Matters programming allowing IAs to feel supported, heard, and respected. As the late 2010s came around, IAs began to notice the disappearance of certain events and support systems previously provided by SOS, as well as the discontinuation of support in the CMK and CMT curricula—especially as it relates to the lack of alignment with

current dietary guidelines. IAs received a further blow in implementing Cooking Matters when the pandemic occurred. When SOS finally announced the de-implementation of Cooking Matters, IAs were both shocked and unsurprised, as well as unprepared for the next steps. While SOS appears to have thought through the impacts of de-implementing Cooking Matters on their end, they did not seem to take into account the struggles that would be faced by 160+ IA's implementing their programming. As evidenced by the quotations, IA's felt frustrated and disrespected surrounding the lack of planning and disregard for community impacts as SOS de-implemented Cooking Matters.

Research Question 3

What are the facilitators and barriers for organizations, including Open Hand Atlanta, to continue implementation of the Cooking Matters curriculum for kids and teens following de-implementation?

This section will provide a better understanding of the barriers and facilitators faced by IAs to continue using the CMK and CMT curriculum. As elaborated below, several key barriers to continuing CMK AND CMT were identified including (1) Limited access to Program Materials (2) Out of Date Curriculum with US Dietary Guidelines (3) Lack of Transitional Support (4) Cooking Matters as part of the SNAP-Ed Toolkit, and (5) Inadequate Funding to Address Rising Food Costs. The facilitators section focuses on the assets that organizations currently have which may help continue CMK and CMT post-de-implementation. Topics discussed in the facilitators section include (1) Utilizing Outside Partnerships and Funding Sources, (2) Taking Advantage of Excess Materials (3) The willingness of programs to continue to adapt the curriculum. A summary of facilitators. Summaries of the barriers and facilitators can be found at the end of each section in Table 9 and Table 10, respectively.

Barriers to Implementation

IAs discussed several key barriers to their ability to continue implementing the CMK and CMT programs post-de-implementation. A summary of barriers to continuing implementation can be found in Table 9.

Limited Access to Program Materials. The CMK and CMT IAs rely on resources such as instructor guides and participant books to implement Cooking Matters. Those reliant on the Cooking Matters *Legacy Curriculum*, which includes CMK and CMT, must order materials through SOS and their approved printer as SOS does not own the design for the Cooking Matters program. Cooking Matters IAs can only order these resources through September 30, 2024, thus leaving IAs without material crucial to implementing Cooking Matters. Upon hearing this news, one IA Representative recalled their organization gathering to take inventory of their resources to determine what needed to be ordered before Cooking Matters was de-implemented. They stated,

“I know that as an organization we have collected, like we did a whole pool of all of our nutrition instructors, and okay, how many [books] do you have, we need to get these moved to this person because they're teaching this and you're not going to teach it. So we got to move it up here something like. So that's a struggle... not having access to the materials.” (Implementing Agency 8)

Even though the Cooking Matters curriculum will no longer be updated or supported by SOS, IAs can continue to use the CMK and CMT curricula. For organizations that want to begin to update the curriculum for further use, as of now, SOS asks that Cooking Matters IAs *“refrain from making any adjustments to the Cooking Matters curricula” (Supplemental Document 2)*. Thus, no curriculum updates will be allowed in the imminent future despite both the CMK and CMT curricula not being updated since 2018, which is further described below (“Out-of-Date

Curriculum”). As mentioned earlier in the chapter, the pandemic scaled down the requests for kids and teens. However, Cooking Matters IAs are seeing a rise in requests for Cooking Matters classes post-pandemic, thus the volume of books being provided may not match the need established by local partnerships and the community.

In addition to books and instructor guides, supplementary resources such as social media platforms, a YouTube channel, an app, and the Cooking Matters website have been developed by SOS for IAs to use. However, when asked by IAs whether they would leave these resources up for IAs to use, SOS noted they would begin to take these resources down, stating “...*we also made the difficult decision to retire most of the Cooking Matters digital channels, and products... over the next 12 months.*” (*Supplemental Document 2*).

These online resources are the location of additional program activities, recipes, and other instructor resources. These resources also offer staff training on the curriculum and the discontinuation leaves IAs who rely on instructor training from Cooking Matters in need of finding a new way to train their staff members. This is due to SOS’s statement during their first webinar relaying that they “*will not have staff support for training of the core materials,*” (*Transition Update Webinar 1*). Instead, training will have to occur via their YouTube channel and only be accessible until September 2024.

A final resource discontinued by SOS mentioned by IAs was the Salesforce database. The use of the Salesforce database allowed IAs to have a comprehensive database with everything they needed to provide Cooking Matters to participants and track their data. Specifically, it allowed IAs to track programming (e.g., number of classes, scheduling), log survey outcome data, and keep track of local organizations IAs worked with (e.g., host organizations, satellite partners). As one IA stated,

“The hurdle of we've learned that Cooking Matters has spoiled us with the Salesforce database. Not a lot of other interventions have databases like that, where it's kind of a one-stop shop for everything. So we'll, we'll have to kind of figure out a different way to store a lot of the information that we've been storing and find new processes for that” (Implementing Agency 5).

In transitioning away from Cooking Matters, programs will now need to use their budget and resources to either fund a Salesforce database of their own or figure out a new way of storing their resources.

Out-of-Date Curriculum with US Dietary Guidelines. Across all participants, there was a consensus that the CMK and CMT curricula were out-of-date, with the most recent update occurring in 2018. Participants who were implementing the curricula in 2018 recalled SOS announced they would no longer be supporting the curriculum, which included updating and as mentioned earlier, printing the curriculum. The lack of updates means that the current CMK and CMT curricula are not up to date with dietary guidelines, and thus IAs who are implementing these curricula are using out-of-date information (e.g., incorrect food labels). One IA who relies on SNAP-Ed funding mentioned the lack of updates to the curriculum as a concern even before the Cooking Matters de-implementation, stating,

“Even without Share Our Strength, kind of moving away from Cooking Matters we had kind of already been talking about, specifically with the kids and teens curriculum, maybe seeking out and a more updated version just because ... it's [the curriculum] just kind of tired in some ways. And so I think even before the more recent conversations around, all Cooking Matters started happening, we were kind of already talking about that.” (Open Hand Administrator).

IAs are also concerned about what continuing the Cooking Matters curriculum will look like post-de-implementation, should no parent organization take over the program. One Cooking Matters instructor expressed their concerns about now losing support for SOS,

“And without having that national support...How will you implement an update and refresh and keep it relevant? If you don't have funding for that, and you don't have people to do it, I'm also concerned about ... the validity, the consistency? Of course, you know, who's going to be auditing that? And then the data collection because that tells the story.” (Experienced Instructor #3).

This statement along with others from participants highlights the concerns for not only the lack of curriculum updates but also the continuation of data collection and program evaluations to continue to provide the evidence base for Cooking Matters, which is required for a program to remain approved by SNAP-Ed and thus be implemented with SNAP-Ed funds.

Lack of Transitional Support. Beyond the fears of what the lack of support means for the curriculum, IAs were also faced with a lack of support during the de-implementation process. IAs were notified of SOS's *“Decision to transition many of our Cooking Matters team members” (Transition Update Webinar 1)* which included letting go of staff and moving the remaining members to other projects. This, along with SOS's discontinuation of active support for the Cooking Matters program transfers to a loss of support surrounding Salesforce, Cooking Matters training, Cooking Matters resources, SNAP-Ed partnerships, and program evaluations. For IAs, the de-implementation announcement caused uncertainty for their organization's immediate next steps. Other IAs relayed their frustration with the loss of support amid the uncertainty, with one IA questioning,

“How do you [Share Our Strength] plan to engage with partners [like us] moving forward? Because it felt like we may have been left out in this decision on in terms of, one, the impact that it would have on us and our communities... How will you be communicating with us moving forward? Is it going to be left up to us to ask questions in the helpdesk? Will we have contacts that we will be able to reach out to? Because to me that is not a partnership if we are just left to ask questions and help desk portal.”

(Transition Update Webinar 1)

The lack of support also extended beyond just SOS supporting IAs. Some IAs use satellite partners to deliver CMK and CMT. However, the loss of support from SOS jeopardizes the existence of these partnerships. One IA Representative discussed their organization’s decision to discontinue satellite partnerships as a result of the anticipated loss of support, stating,

“We recently discontinued this because of the changes from SOS, but we as a lead partner also onboarded satellite partners ... we worked with organizations ... who were offering a Cooking Matters and the store tours or Cooking Matters series for their participants. And we were their support in ordering the materials and like collecting their data and evaluation and training their staff on the curriculum.” (Implementing Agency 7)

Should IAs decide to move to a new curriculum, this may also pose a lapse in nutrition education being offered to the community as satellite partners if permitted by an alternative curriculum, will need to be re-trained in the new curriculum as well. The lack of support from SOS at a national level to IAs is impacting community-wide reach and implementation of Cooking Matters, while further amplifying the loss of access to nutrition education in communities.

Cooking Matters as part of the SNAP-Ed Toolkit. Despite some IAs not needing to rely on SNAP-Ed funding to offer the Cooking Matters program, some IAs continue to rely on

SNAP-Ed funding and those who do not often work with other local organizations and satellite partners who are reliant on SNAP-Ed to implement the CMK and CMT curriculums. Those organizations that receive SNAP-Ed funding are only allowed to choose from a list of approved evidence-based interventions in the SNAP-Ed toolkit. The Cooking Matters *Legacy* curriculum, which includes CMK and CMT, is currently one of these approved interventions. While SOS has not announced its plans for the *Legacy* curriculum in the SNAP-Ed Toolkit past fiscal year 2024, many SNAP-Ed-reliant IAs are worried that the *Legacy* curriculum may now lose SNAP-Ed approval. When asked about what permits the removal of an intervention from the SNAP-Ed toolkit, SNAP-Ed toolkit representatives responded with three ways that would constitute a curriculum removal,

“An intervention can be removed from the toolkit for a number of different reasons. The developer could request for the intervention to be removed because they are no longer offering the materials associated with the intervention. During the intervention update period, if the developer does not respond to make any updates, the intervention could also be removed. Additionally, during the intervention update period, if major changes have been made to the intervention, the developers may have to resubmit their intervention proposal.” (Supplemental Document #3)

From this description, the Cooking Matters *Legacy* curriculum is in jeopardy of removal based on the first two ways stated. The first relates to the removal of the intervention should materials no longer be offered by the organization, and as previously mentioned, SOS will no longer be offering the materials for the Cooking Matters *Legacy* curriculum past September 30, 2024. Secondly, removal may be imminent if the creators of the curriculum do not provide the necessary updates. By this standard, the CMK and CMT curricula are up for removal as their

curriculums have not been updated since 2018, and many IAs and Implementors were quick to mention outdated pieces of the curriculum, such as the food label, during their interviews.

While one may think swapping out a food label would be a simple fix, SNAP-Ed-funded IAs have strict guidelines they need to adhere to. These include making any type of modification to the curriculum, which requires an extensive review process for approval. This can be frustrating to IAs who are trying to deliver up-to-date nutrition education according to the specified guidelines. *“Some of the hurdles with like the SNAP-Ed approval and as I said, like, not necessarily being able to like 100% cater the curriculum to the population or whatever and change it how we might want to—that can be challenging sometimes” (Open Hand Administrator 1)*. The inability to make seemingly minor changes and deliver updated nutrition education to CMK AND CMT participants may also raise concerns about program effectiveness. The inflexibility surrounding updates may hinder how an organization can deliver the curriculum to certain populations.

Even if a new parent organization takes over for SOS to run the Cooking Matters program, concerns about having the curriculum updated and evaluated on time to ensure SNAP-Ed approval remains seamlessly in place have been brought forward to SOS. One IA is pushing for another year of the *Legacy* curriculum to be supported in an attempt to alleviate the potential loss of Cooking Matters as part of the SNAP-Ed Toolkit. This partner states,

“I think the challenge is going to be moving forward... [if], the legacy programming is not continued in a SNAP-Ed toolkit. ... there's not enough time for a new implementing partner to be able to help support that work moving forward for the next year. I think it's what Share Our Strength owes us, and I will continue to engage in conversations with them regarding that... the issue will be that a lot of our partners are SNAP-Ed partners,

so that curriculum is no longer in the SNAP-Ed toolkit, then we have a different problem.” (Implementing Agency 2, Representative 1)

Removal of CMK and CMT from the SNAP-Ed Toolkit also puts some IAs in jeopardy of losing their funding source States receive an allotted amount from SNAP-Ed to distribute amongst SNAP participants and SNAP-Ed implementing organizations, such as Open Hand. One participant spoke about what was covered by SNAP-Ed funding for their organization, stating,

“When they [SNAP-Ed] approve our proposals every year... it not only stipulates every project we're doing and any evaluation plan for all of them, but it has a budget for each project, and it tells us how much money we're allowed to spend and SNAP-Ed, that's just, their allocation per person per class is \$1.60. And then I think it's like \$5 for a like end-of-class gift.” (Open Hand Administrator).

Across all IAs, those who relied on SNAP-Ed funding have been concerned about how the potential loss of the Cooking Matters curriculum from the SNAP-Ed toolkit could prohibit organizations who decide to continue using Cooking Matters from receiving funds. Of the four organizations who reported using SNAP-Ed funding, one organization has already moved away from using the CMK and CMT curricula, two organizations are looking into other SNAP-Ed approved curricula, and one organization is still unsure of their next steps. The potential loss of SNAP-Ed funding can also have a significant impact on IA's who do not rely on SNAP-Ed funds but provide CMK and CMT classes to local organizations that do rely on SNAP-Ed funds. Losing SNAP-Ed funding can shift the cost of the program solely onto IA's who are not SNAP-Ed reliant, driving the cost of implementing Cooking Matters up, and potentially limiting the amount of classes that are conducted.

Inadequate Funding to Address Rising Food Costs. Funds and funding sources were discussed across all interviews with IAs as a major barrier to being able to carry out CMK AND CMT after the de-implementation. While SNAP-Ed funding is helpful, it still does pose restrictions and limitations to the instructors facilitating the program. SNAP-Ed allocations to IA's may be limited depending on how much is allocated to their organization, and how many nutrition education classes are run that year. Stagnant amounts of funding from SNAP-Ed can be a source of hindrance in program implementation, due to the increased cost of food. One participant recalls the challenges of working with limits of \$1.60 per person per CMK or CMT class stating

“Food costs, you know, [have] gone through the roof, and [SNAP-Ed] have not increased our food budget. \$1.60 a person. It’s difficult. I, for the most part, make it work. But also when you’re on that fine line, and all it takes is one person to not show up for class and you’re, you’ve blown your budget. That’s really difficult. And I think that... my big fear is we are going to lose more funding through the state.” (Experienced Instructor 1)

However, this food cost challenge is not unique to SNAP-Ed IAs, other IAs face similar challenges. One participant whose organization does not rely on SNAP-Ed funding mentioned, *“I think the biggest problem we're running into is... the bang for your buck aspect of it. So a lot of especially in the healthcare facilities, we you know, you how far can you stretch the dollar?” (Implementing Agency 1)*. This representative continued to highlight the challenge of being able to reach their organization's target populations, while both servicing a food desert and remaining on an allotted budget. Together, this shines a light on the systemic issues with food access and inflation that encroach on providing accessible and effective nutrition education to children and teens.

Table 9. Barriers to Continuing to Implement CMK and CMT

Theme	Definition	Notable Quotes
Limited Access to Program Materials	IAs mentioned issues surrounding obtaining or retaining materials following de-implementation. Materials include but are not limited to activity books, instructor guides, Cooking Matters social media channels, etc.	<i>“They're not doing any more printing. So they're... the participant handbooks won't be available after a certain point. I know that as an organization ...we did a whole pool of all of our nutrition instructors, and okay, how many do you have, we need to get these moved to this person because they're teaching this and you're not going to teach it. So we got to move it up here something like so that's a struggle, right, is not having access, I guess, period. They're not having access to the materials.” (Implementing Agency 8)</i>
Out of Date Curriculum with US Dietary Guidelines	Hindrances posed by the out-of-date CMK and CMT curricula due to the cession of updates by SOS.	<i>“Cooking Matters for Teens, and Kids really hasn't been supported by Share Our Strength...they have not supported the programming in terms of providing updated resources or anything like that. So I will say that we've been rolling with the punches” (Implementing Agency 2, Representative 1)</i>
Lack of Transitional Support	IAs describe the lack of support provided by SOS, or IAs describe any community impacts as a result of the lack of support from SOS.	<i>“So I will say that the implementation process has been clunky. It has felt that a lot of they didn't think through a lot of the potentials until partners started to speak up to say, what about this? What about this? They wanted to drop the program immediately. Unfortunately, we have another year with limited support.” (Implementing Agency 2, Representative 1)</i> <i>“For the last 10 years I, in the program, I felt that it was not supportive. And they had turnover like you could not believe in Cooking Matters, Share Our Strength. And all it was it was just a big boondoggle.” (Experienced Instructor 1)</i>
Cooking Matters as part of the SNAP-Ed Toolkit	Concerns posed by IAs surrounding	<i>“So Share Our Strength did put in for this year that the legacy curriculum would be ... in the SNAP-Ed toolkit for this year... Share Our Strength owes us for them to put it into next year's</i>

Theme	Definition	Notable Quotes
the status of Cooking Matters and its place in the SNAP-Ed Toolkit post-de-implementation		<i>[fiscal year] ... I don't know what Share Our Strength is looking to provide for that new implementing partner, are they going to just hand over the legacy program and the core program? Are they just gonna say the legacy program dies? And that's it, it dies on the vine after this. Or are they going to take that legacy program and allow the new implementing partner to do as they wish with that legacy program? I don't know. Like, that's still unclear. So the piece with SNAP-Ed is that it has to be part of the SNAP-Ed toolkit” (Implementing Agency 2, Representative 1)</i>
Inadequate Funding to Address Rising Food Costs	Program costs surrounding the cost of food and feasibly following the Cooking Matters Curricula	<i>“They can't help it. But they do need to increase the budget. I think that's on the government level, but it's hard to adequately prepare with the inflation and with the cost of food and as hard to do it for \$1.60 So That's one area where we all wish they could improve. Raise the amount per student” (Experienced Instructor 2)</i>

Facilitators to Implementation

In addition to the barriers IAs faced in the goals of continuing to implement the CMK and CMT programs, there were also a few facilitators identified that some agencies were leveraging to navigate SOS's de-implementation. As detailed below, these included (1) Utilizing Outside Partnerships and Funding Sources, (2) Taking Advantage of Excess Materials (3) The willingness of programs to continue to adapt the curriculum. A summary of facilitators to continuing implementation can be found in Table 10.

Utilizing Outside Partnerships and Funding Sources. As mentioned, the potential loss of SNAP-Ed support and funding for the *Legacy* curriculum poses a threat to the continuation of CMK and CMT by IAs that rely on SNAP-Ed funds. However, not all IAs rely on SNAP-Ed funding, providing an option to continue CMK and CMT. A few IAs who did not rely on SNAP-Ed funding said they used outside grants to help fund Cooking Matters. One partner recalled,

"In some parts of the state, there are grants available where people have been able to use grant funding to use to purchase [groceries]. So it's also kind of like sponsorships ... [Outside Organization] had a grant and that was more in the southern part of Michigan. So those people were able to teach certain Cooking Matters curriculums because of they were able to purchase the take-home groceries." (Implementing Agency 8).

Additionally, some organizations shared that these funds could provide some wiggle room and added benefits even when SNAP-Ed funds are being used for Cooking Matters. One agency that does not rely on SNAP-Ed funding recalled some of the CMK and CMT classes they taught while partnering with a local organization that did,

"They [the local organization] do have SNAP-Ed funding that has to be used for their part of the program. And we may have partnered up a little bit when it comes to some of

that stuff—whereas we would buy the groceries and all that stuff for the class, and they would provide the products that go home with their families at the end of the day with the SNAP-Ed funding. ... So we kind of help stretch out the funding when we are able to do this classes like that. (Implementing Agency 1).

Other IAs can augment program costs as they are either a local food share and food bank, or they partner with one to help with implementation costs. While the CMK curriculum does not require groceries for participants to bring home, the Cooking Matters for Teens curriculum does, which some organizations have found difficult to supply. Partnering with a Food Bank or Food Share helps in alleviating such costs. A partner organization that both utilizes grant funding and works closely with a food share noted,

“The only way that we can continue here...is because we have the support from food share to buy, you know, to buy private foods, you know, so that families can take groceries home ... because we don't have extra funding to buy [them]. And that's my understanding other communities, that's what they're doing, they're collaborating with a partner to, you know, to get with a grocery [store], so otherwise they will be able to do it.” (Implementing Agency 9)

In addition to the funds needed to keep Cooking Matters going, the state of Colorado, specifically, has found an organization to completely take over the Cooking Matters program from SOS. One of the SOS representatives told a Colorado IA that *“The program in Colorado is transitioning from a Share Our Strength led program to a Nourish Colorado lead program. So specifically for our state of Colorado, Nourish will be taking over the federal fiscal year 24 contract and continuing to implement Cooking Matters.” (Transition Update Webinar 2).* Thus, IAs in Colorado are in the uniquely beneficial circumstance of being able to continue their CMK

and CMT programming without disruption thanks to Nourish Colorado, which continues to have long-standing roots in Colorado.

Regardless of funding source, all IA organizations maintained the need to continue to offer nutritional education at no or low cost to their satellite partners. As summed up by one IA, *“Hundreds of kids are being reached every year through the program. Hundreds of them, we've been paying, I mean, we pay for the books now and we put it into our budget, [Implementing Agency 2, Representative 1] put it into our budget to be able to buy books so that our [satellite] partners can still offer these classes at no cost. So yeah, it's very important to us.” (Implementing Agency 2, Representative 2).*

Together, these examples emphasize that some IAs are eager and able to continue the Cooking Matters program beyond de-implementation thanks to their ability to utilize diverse funding sources (e.g., applying for grants), work with local partners to offset costs, and fortunately live in a state where an organization can take over Cooking Matters programming.

Taking Advantage of Excess Materials. While looking to continue using CMK and Cooking Matters for Teens, some IAs reported having a short-term solution to continuing to use the curriculum – using their current stockpile of CMK and Cooking Matters for Teens books. Five IAs reported having stockpiles of these books due to the initial loss of support for the CMK and CMT curricula in 2018. One partner state,

“We have a storage unit. And we have a lot of kids' and teens' books stockpiled, because we- for a time, Share Our Strength was no longer printing kids' and teens' books. And so we had to print our own in bulk. And so we have a ton like stockpiled, so I haven't had to order any of those. But now we have to buy our own books, and they are selling the print

kids and teens' books. And so like if we were to run out and need more, we would have to purchase them.” (Open Hand Administrator).

Another IA, whose organization has already shifted away from using the CMK and Cooking Matters for Teens curriculum, posed the idea of offering their overflow of materials to organizations who may need them *“Like I said, we have a storehouse of a bunch of the materials. So I don't know. I mean, if our program isn't going to use them, it would seem that we could give them back to someone or unless they're going to revamp them.” (Implementing Agency 4).*

Willingness to Adapt the Curriculum. Finally, another key asset to IAs who are considering continuing to use the CMK AND CMT curriculum is their willingness to adapt, including curriculum, activities, and the training of new instructors despite the loss of these supports from SOS. In terms of curriculum, one partner recognizes that *“We are just going to have to stay abreast of all the new clinical recommendations, make sure that you know we can make the necessary changes to the curriculum as they come about.” (Implementing Agency 6).* This quote was echoed by other IAs, showing that many who are currently planning to move ahead with Cooking Matters are optimistic about their ability to continue to update and offer the materials.

An additional way IAs talked about adapting to continue the program and combat the loss of participant materials is to forgo using the books in favor of emphasizing the CMK and CMT hands-on activities and cooking. This IA Representative spoke more about their decision to forego the use of the CMK and CMT books by stating,

“I will say that I haven't used participant books in most of my programming. I know that that's supposed to be part of it. But in the classes that I've taught, it hasn't worked well to

have the workbook, either because like the kids aren't interested ... I'm just gonna be flat out honest, they really didn't care about it to take the book or to have it.” (Implementing Agency 8).

For organizations that can continue to use Cooking Matters programming but become low on books after September 30th, 2024, this may be an alternative to continue implementing the curriculum.

Aside from materials, other IAs are providing insight into how they have been implementing instructor training on Cooking Matters in a nontraditional way. While the loss of instructor training videos from SOS was noted as a barrier, some organizations have found a way around this. One participant who oversees the training of Cooking Matters instructors said,

“We haven't trained someone new on the kids and teens in a while because the people we have teaching it have just been doing it for so long, but we just hired a new RD [Registered Dietician] a few months ago. And she that's basically how she was trained on the Cooking Matters for adults' curriculum was just like going to classes with other instructors.” (Open Hand Administrator).

This IA provides insight as to how instructor training on the Cooking Matters program materials can be accomplished without the support of SOS or their training materials. Thus, if IAs are willing to adapt their current training methods, they can use alternative ways of ensuring that instructors are well-versed in the curriculum,

For a few IAs who are willing to adapt the curriculum, as well as those who are in limbo about their next steps, their hope to continue to offer Cooking Matters goes hand-in-hand with their optimism of a new parent organization taking over for SOS to continue and perhaps

improve the program. One IA reflected on how a new parent organization would be beneficial in adapting the program, stating:

“It would be an opportunity for Cooking Matters, whoever takes us on next, to offer options. Such as, okay, you're working with at a youth center. You know, here's for the instructor an opportunity to have a conversation ... if they have vending machines on site you know, looking at what options they have, and maybe helping them have healthier options. So it goes along with the teaching that you're doing and supporting that. Because I think we can do all of this education. We can teach kids how to cook, but if they can't get the right foods to do this, that they can't even get to it then the education point part almost becomes muted. So I think that there's an opportunity there for some really good collaboration and connection for that.” (Implementing Agency 8)

IAs who want to continue the program are open to a new parent organization, and hopeful that they will want to work with IAs to update the curriculum and improve upon the current nutritional education being offered similar to the way SOS used to work with IAs as mentioned in Research Question 2.

Table 10 Facilitators to Continuing to Implement CMK and CMT

Theme	Definition	Notable Quotes
Utilizing outside partnerships and funding sources	Alternative methods of funding sources or partnerships recommended or used by IAs	<i>“Last year, [the grant funding organization] asked those of us who apply for the grants to collaborate with another partner. So we already have this program going. So I basically took the program that we already had and rolled it into a grant and we, we got the funding.” (Implementing Agency 9, Representative 1)</i>
Taking advantage of excess materials	Any IA quotes regarding stockpiling excess materials or finding ways to create extra materials	<i>“And then the Cooking Matters for teens we've been we've been utilizing that curriculum, but it's just unique because Cooking Matters corporate. They don't provide the books for those.... we'll print the books that they like, if everybody wants, like, all those pages or some health educators just want like, a page or two, that's a reference to what they're teaching within the class. So we kind of modify it through that.” (Implementing Agency 3)</i>
Willingness to adopt The curriculum	IAs mention their ability and willingness to continue To use the Cooking Matters curriculum post-de-implementation. This includes but is not limited to adapting the curriculum, activities, and ways of training instructors.	<i>“Because the need is here. So that's the thing we have the need and to make, you know, for these organizations to make these decisions, oh, we're not going to support it anymore ... but we still have a need in our community and we're still going to do it. So we're gonna get the money we're gonna get the funding and we're going to get the materials and we're going to still have the classes.” (Implementing Agency 9)</i>

Research Question 3 Summary

Research question 3 provided insight into the barriers and facilitators faced by IAs to continuing CMK and CMT in light of de-implementation. Notable barriers surrounding the materials and curriculum highlighted loss of access to materials faced by IAs such as availability of the activity books used in classes and access to instructor training resources. The barriers section also discussed the lack of support provided to IAs from SOS and explored how the lack of support extended to impact community partnerships. Finally, the barriers section discussed the impacts that de-implementation would have on the presence of Cooking Matters as part of the SNAP-Ed Toolkit and the increasing cost of supplying food for CMK and CMT programs. Facilitators encouraged IAs to rely on outside partnerships (e.g., food banks) and alternative funding sources (e.g., grants) to continue to provide CMK and CMT post-de-implementation. Relating to the costs of the program, using excess materials that IAs may have stockpiled or donating materials from IAs choosing to shift to a new curriculum may help mitigate the loss of access to activity books. Finally, programs that were willing to adapt the CMK and CMT curricula offered alternative ways of training staff, foregoing the use of activity books, and brainstorming ways to include different activities that still enhanced the core foundations of CMK and CMT.

Research Question 4

For those organizations who decide to move forward with implementing Cooking Matters for Kids and Cooking Matters for Teens, what aspects of the Cooking Matters program should be maintained or adapted to better suit child and teen nutritional education needs, interests, and outcomes?

The fourth and final research question aims to discuss how CMK and CMT can be improved to meet participants' nutritional education needs, interests, and outcomes in the case that IAs want to move forward with offering this program. This section begins with discussing areas of the Cooking Matters program that should be maintained given their high receptivity among children and teens by looking at the notable activities of CMK and CMT and the use of hands-on activities and visuals. The section then discusses recommendations study participants made relating to activities and topics covered to adapt and improve the Cooking Matters curriculum. Themes are summarized at the end of the chapter in Table 11.

What to Keep from Cooking Matters

Notable Activities of CMK and CMT. The CMK and CMT curricula each come with a variety of activities that instructors can choose to use within their classes. Having the choice of which activity to do can help instructors tailor the curriculum to the energy levels and interests of the class. One notable activity is the Extreme Food Makeover, because *“They [teens] get to be independent, and just practice everything that they've learned and they're just so creative...they're making it themselves.”* (Some Experience Instructor 1). The activity is introduced in week one of the curriculum where participants are put into teams, and every subsequent lesson has a dedicated amount of time to work within their teams. The final lesson during week 6 is when each team will work together to make a healthier version of a recipe that participants had selected in an earlier class. While some instructors noted that they did not do the Extreme Food Makeover due to low-class interest, the majority of IAs and instructors reported that participants highly enjoyed the activities. Some IAs went above and beyond by using optional recommendations from the instructor guide (e.g., using a points system, question-for-a-

question) to improve the activity. One IA shared more about how they implement the Extreme Food Makeover stating,

“And then the last day... they would have points that were scored to them by the teacher. So scores were going up every day... the first-place group got to tell the second and third-place group, you can't use this item. So a pot, a pan, you know something, they can't use it. The second place got to tell the third place that you had to use this ingredient. And so we've had something from mustard to mayonnaise to...habanero peppers one time ... this last fall we did cocoa powder. And the group that won had to make mac and cheese with cocoa powder.” (Implementing Agency 1)

This lesson was referred to as Chopped, Iron Chef, and a cook-off as IAs and instructors described their implementation of the final Cooking Matters class. Ending this lesson allows instructors and participants alike a chance to show off their cooking skills, reinforce the nutrition education component of Cooking Matters, and reflect on how much participants have grown since beginning the program.

Use of Hands-on Activities and Visuals. A second aspect of the program that was praised by IAs was the use of hands-on activities and visuals. One hands-on activity that was mentioned was when participants learned to “Make Soda” by mixing seltzer and juice to promote a healthy alternative to actual soda and reinforce the possible nutritious swaps that can be made. Activities such as this one align with desired outcomes, such as choosing drinks that are low in sugar. Other hands-on activities were paired with a visual impact, which IAs found aided and reinforced the lesson being taught. As one instructor mentioned,

“I don't have to beat them over the head because the visual of that activity engages them and I think that's what Cooking Matters does well is it teaches through action. Activities

are what much more meaningful, you know, that kinetic learning...So it's not very preachy or teaching.” (Experienced Instructor 3)

An example of these visuals included “Putting Whole Grains to the Test”, an activity in both the CMK and CMT curriculum that allows participants to take a piece of white bread and whole grain bread and put them in bowls of orange juice. The white bread will fall apart while the whole grain bread stays intact, showing participants how whole grains and refined grains behave differently in the body. Finally, the activity “Sugar Overload” allows participants a visual of the amount of sugar in different beverages by allowing them to measure the teaspoons of sugar found in their favorite drinks. Thus, tying in a visual amount of sugar to the grams stated on the can is something that may be hard for youth to visualize otherwise.

Existing CMK and CMT Enhancements

Instructor Activity Enhancements. Despite praise for certain elements of the CMK and CMT curriculum, several participants noted key aspects that could be improved. One of these was the use of activity books. In response, some instructors have opted to add a few activities and modifications of their own. For instance, some instructors decided to promote more physical activity. As one participant described, *“If you have an after-school class like that kind of energy buzz ... they don't want to sit down they want to start cooking with their to energy to cook ... it's too chaotic.” (Implementing Agency 5)*. Using activities that promote physical activity can allow participants to expel extra energy before learning and cooking. Examples of these activities have included outside activities such as using activity dice and a relay race where participants sort food into food groups.

Other activities added to the curriculum by instructors centered on reinforcing the nutritional education and cooking objectives of the program. For example, one IA used Food

Models, which are visuals that show the appropriate serving size for several types of foods. When looking at food labels, another instructor would collect empty food receptacles, and bring them to class for participants to read. At another IA, CMT instructors improved upon the Cooking Matters activity Store Wars. Store Wars is an activity in the CMT curricula where teens either go to a grocery store or create a “pop-up” grocery store. Instead of doing these traditional options, one IA invited teens to use their phones and download the Kroger app to learn about how to shop for groceries on a budget and make a healthy meal. As another example, one IA recognized CMT participants’ interest in food brands and marketing and leveraged using outside resources by incorporating the external activity Foodopoly, which discusses which food brands are part of the same company or corporation. Finally, some IAs find diverse ways of using the downtime in the program to promote additional cooking skills, such as washing dishes and learning how to set the table.

Areas for Improvement. Throughout the interviews and focus groups, many participants also spoke about ways to improve the CMK and CMT curriculum, and in this, reflected on topics that had high interest from program participants.

Food Storage and Sanitation. Sanitation and food storage was the first area expressed as needing improvement, as while the curriculum did a respectable job of teaching participants how to wash fruits and vegetables, other areas surrounding sanitation and food storage were lacking. For instance, a few IAs brought up the need for skills, such as cleaning cooking spaces and preventing cross-contamination. In addition, one instructor discussed the importance of the *“proper storage of food, just because I see that as something adults do wrong all the time”* (*Experienced Instructor #3*). Promoting adequate sanitation practices and proper food storage as

part of the CMK and CMT curricula can help ingrain these habits at an early age and prevent participants from making the same mistakes seen by adult participants.

Equipment, Recipes, and Culture. Another topic that IAs thought should be added was the use of cooking equipment by participants. IAs took different views based on the populations they worked with. One IA works in a state with multiple food deserts, and stated their dilemma was,

“You automatically assume my family has x, y, and z. So you go in there thinking I have a stove, I have a skillet. You go in there thinking they have a set of knives that they can use to cut the vegetables with, or the fruit with, or the chicken with. Just automatically assuming people have these things, prior to class, and expecting them to be able to go home and make these meals when they don't have this stuff.” (Implementing Agency 1)

This agency quote highlights that the CMK and CMT curriculum are using recipes and teaching with the assumption that participants have access to the equipment used during Cooking Matters Classes. Even common equipment, like can openers, were recalled by some IAs as not being a given that youth had access to or knew how to use it. Alternatively, some IAs had classes where participants had access to less common equipment, such as an air fryer, and expressed an interest in learning how to use one. Since the Cooking Matters curriculum strictly limits using special equipment, the curriculum is currently unable to meet participant interests. Both over-assuming access to cooking tools and avoiding teaching how to use special cooking equipment when access is available shine a light on the need for recipes that are either specific to these needs or can be modified to meet them.

Aside from changing the recipes surrounding access to equipment, additional gripes mentioned surrounding the Cooking Matters recipes related to them being out of date, under-

seasoned, and not culturally appropriate. For example, youth participants expressed interest to instructors that they wanted to learn recipes outside of the current curriculum. One instructor relayed these interests, stating,

“Kids want to do international cooking because these kids are international kids, they're on social media. So they want to make ramen, and sushi, and adobo, and tacos, and carne asada...everybody says, I can make spaghetti. You know, they've got that down, to some degree. But yeah, I would definitely see an update for the recipes to be a little more on trend.” (Experienced instructor 3)

As this instructor touched upon, participants want both more variety and culturally expansive recipes in Cooking Matters. Some IAs teach Cooking Matters in a different language, or to areas with considerable amounts of cultural diversity. The Cooking Matters curriculum focuses on how to eat healthy on a budget and teaches how to make healthy ingredient swaps. Ensuring these skills translate to recipes participants are more familiar with making at home, will increase the likelihood of them using these skills on a day-to-day basis.

Differing Diets and Nutrition Requirements. Similar to the need for better cultural adaptation of recipes, IAs also discussed how recipes and nutritional education should be tailored to differing diets and nutritional requirements. For instance, some IAs described participants' curiosity in understanding the paleo diet or eating vegetarian. Having an instructor who can explain these diets or lifestyle changes and their nutritional needs can help participants reliably receive this information. Discussing the differences in diet may also open the class to discussions surrounding getting essential nutrients in other ways. As one instructor relayed: *“There were a few teens who were super interested in being vegetarian. But I think the majority of kids and teens aren't aware of plant proteins and don't really think about that... they think of the go-to as*

meat as a protein.” (Experienced instructor 1). Such modifications can not only help the Cooking Matters program in promoting healthy substitutions but are perhaps more affordable. One instructor highlighted the example of canned beans being both a healthier and more affordable, shelf-stable substitute than buying meat. In addition to discussing different diets, some IAs mentioned that participants may have different dietary requirements based on their activity levels, such as those who are athletes. Being able to discuss diverse ways for participants to eat a variety of foods and still get their essential nutrients to be at their best can promote long-term healthy habits and curiosity surrounding food.

Eating Disorders, Social Media Impact, and Discussions Surrounding Food. Another important topic that participants, particularly teens, expressed interest in and is currently lacking from the Cooking Matters curriculum related to the sensitive topics of eating disorders, food trauma, and the impacts of social media related to these topics. As mentioned in research question 1, the instructor recalled having a participant confide in them about a friend who had anorexia. Other IAs have noticed conversations in classes shifting to discuss trends in body image and body proportions. One IA recounts feedback received from their Cooking Matters class participants:

“We have gotten feedback from students sometimes that like, certain things are triggering for teens or... we need to be sensitive to people who have experienced eating disorders or tricky relationships with food. So we definitely try to approach it with sensitivity.” (Implementing Agency 3)

Discussing topics such as eating disorders and body proportions, especially with teens who are consistently using social media, can emphasize that not everything seen on social media is true. Additionally, discussing the signs of eating disorders and food trauma can help

participants have a better understanding of their relationship with food and nutrition. Of note, these are sensitive topics that may be hard to structure a lesson or part of a lesson around. Thus, providing instructors with standardized training on how to answer questions such as these can ensure that instructors feel prepared to discuss these topics and ensure they have up-to-date information.

Within interviews and focus groups, some IAs also expanded upon these topics by noting the need to reframe how nutrition education is taught and being mindful of the language used surrounding food. Some participants mentioned being mindful of how foods could be considered “good” or “bad” and the underlying connotations associated with these labels. In addition, other IAs promoted a more comprehensive discussion-based class that involved instructors asking questions about food being intertwined with their lives. As one IA phrased these considerations and the need for their integration into the CMK and CMT curricula as follows,

“One of the lessons is about making healthy choices when you go out to eat. And I think that is an important cause conversation if you're going out to eat pretty frequently... especially if you're eating a lot of fast food... But one of my students said, ‘Going out to eat is a special treat. And I feel like this lesson is actually shaming me for not wanting to eat healthy on the rare occasion my family takes us out to eat.’ So I do think that some of the lessons in some ways... can seem a little bit shaming of ‘Why are you eating this? Why aren't you making these decisions?’ Which is why I think it's important to have these discussions with the kids but also to have the understanding ... that the lessons are not black or white, there's gray areas, and that we need to be able to talk to these kids about enjoying food while also trying to make healthy choices as able.” (Experienced Instructor 1)

The need to reframe how nutrition education is taught to youth was also exemplified by one of the activities priorly used in CMT that elicited controversial responses – the Blubber Burger activity. While the Blubber Burger activity is still used by some IAs, it is not included in the most updated edition of the CMT curriculum (2018). Blubber Burger was a precursor to the “Sugar Overload” activity mentioned earlier in this section. This activity involved teens using Crisco to measure the amount of fat found on fast food menus and putting it on a bun. One IA who disliked the activity stated

“More on like systemic food issues, rather than like individual level choice, which is hard when you're talking about nutrition. There's stigmas around certain food... there was a blubber burger activity...we do not do that.” (Implementing Agency 7)

Thus, this implies that the use of this activity could be perceived as harmful and that Cooking Matters needs to recognize and reevaluate the way it discusses these topics.

Food Marketing and Food Systems. The final sub-theme that was mentioned by IAs surrounded promoting a better understanding of advertising, marketing, and food systems. Regarding advertising, one IA recalled a discussion they had surrounding food advertisements, stating,

“When they're gonna show a stack of pancakes. Do you know they actually put cardboard between each pancake so they look fluffy, otherwise, it would like look droopy. ... How sneaky advertising can be. That was a conversation I could have had for 45 minutes with a group of seventh graders.” (Implementing Agency #8)

This quote shows the need and youth interest in education surrounding how commercial advertising and marketing from food companies influence food choices. Another partner suggested incorporating an activity surrounding having participants create advertisements for

healthy foods. Looking at the bigger picture regarding food systems and how they impact individuals, IAs stated the need to increase these discussions. One IA said,

“I’d love for the teen’s curriculum to move away from like, individual behaviors and like stigmatizing certain choices and more into like food systems education and just like navigating the food system. And talking about like, why is it hard to eat healthy? Like why is it difficult to access food in the US? And think some food or some nutrition information would be important for doing that.” (Implementing Agency 7)

To combat the lack of food systems discussion, as mentioned in the earlier section surrounding instructor improvements, IAs can find creative and interactive ways of teaching kids and teens how to be aware of different food systems and their impact on nutrition.

Table 11. Summary of How to Maintain or Adapt Cooking Matters to Child and Teen Nutrition Education Needs, Interests, & Outcomes

Theme	Definition	Notable Quotes
What to Keep from Cooking Matters		
Notable Activities of Cooking Matters	Activities in CMK and CMT both praised and mentioned often by IAs	<p><i>“It was a lot of fun to do stuff like that in the fourth-place group had to do the first-place group's dishes ... But then again, the fourth-place group could come in first place, I mean that that can happen. This, we had a third-place group come in first place. Because I mean, they just tried something different. And it worked. You know, you don't know until you try. So it really got their creative minds going whenever we did that, that kind of Chopped class like that with those teen kids. And the competition, kids love competition. So they were really engaged with learning and playing and trying to figure out how this stuff works. So it was kind of fun” (Implementing Agency 1)</i></p> <p><i>“I think my favorite thing about the teens class is the cook-off, that's like, generates the most excitement, I've always seen some really creative things come out of it.” (Implementing Agency 5)</i></p>
Use of Hands-on Activities and Visuals	Activities or quotes mentioned emphasizing the use of hands-on activities or activities providing an interactive visual of the content in the curriculum	<p><i>“Having them read food labels and calculate sugar or, you know, do the most like an orange juice whole grain tests, like hands-on active activities, of course, tend to be more engaging.” (Implementing Agency 7)</i></p>
Existing CMK and CMT Enhancements		
Instructor Activity Enhancements.	Additional activities or changes to the CMK or CMT curriculum by instructors	<p><i>“I have a bin of boxes or cartons, or whatever it is of things that I've just gathered over time, or kids have given me. And so we would use those items are not full of food, of course, they're empty. But you know, we would use hands-on to talk about a nutrition facts label... But you</i></p>

Theme	Definition	Notable Quotes
Food Storage and Sanitation	IAs mentioned the lack of information surrounding food storage and sanitation taught in CMK and CMT classes	<p><i>can also use those things like 'Okay, so you're gonna have, let's say, you are going to have some ice cream, that's totally fine. What do you think we'd have before? Before ice cream? What else do you think we could eat before that? So we could use these model cards, we could use?' ... [the] less workbook based and more materials or props that I could bring in the best. And then talking about it having that open discussion." (Implementing Agency 8)</i></p> <p style="text-align: center;">Areas for Improvement</p> <p><i>"And the teens can learn, like properly throwing out... I had adults as it as a you don't leave the frozen chicken in the sink all day to defrost. They say 'You, don't?'You can't put them in water in the refrigerator, you know? So that, but they [teens] can still learn it." (Experienced Instructor 4)</i></p>
Equipment, Recipes, and Culture	IAs mention or recall participants wanting to learn to use different kitchen equipment, the need for new recipes, and the lack of cultural integration in Cooking Matters	<p><i>"I'll hold up a can opener. And I says, 'Oh, who in here knows how to use this?' Three or four hands go up. I said who doesn't know. And one girl jumped up and said, "' Need to know how to use one of those can openers because it's really important'. I said, "Yes, it is." ... But they don't know how to use a manual can opener ... and many of them [participants] don't have them. I've heard these stories where people say well, we take a knife and we open the can with it." (Experienced Instructor 4)</i></p> <p><i>"More recipes. A lot of the recipes that my students ask for lately, are not in the book even, I will use the adult book for recipes. You know, just because some of the kid's books really don't have that many recipes... think my students asked for, like a healthy fried rice. And that's actually, I think that's a totally reasonable request. ... So I feel like we're just really kind of missing out on a lot of the recipes of what</i></p>

Theme	Definition	Notable Quotes
Differing Diets and Nutrition Requirements	IAs mention or recall participants wanting to learn to about different diets (e.g., vegetarian, keto) or differing nutritional needs (e.g., athletes)	<p><i>people would choose to eat. And revamping it.” (Experienced instructor 1)</i></p> <p><i>“I add more seasoning ... so my kit I actually have what I would consider like your college starter kit of spices, your onion powder, your garlic powder, your smoked paprika, your Italian herb blend, and cayenne because, and hot sauce, teenagers do like spicy stuff.” (Experienced Instructor 3)</i></p> <p><i>“I noticed there's more like an interest on you know, vitamins, what vitamins can do for me, and how I can find vitamins you know, I'm a sport person, you know, I'm running, I want to know how much calories I can have what vitamins will help me you know, to boost my you know, my energy through the day, you know, all those things.” (Implementing Agency 9)</i></p> <p><i>“And definitely more of an emphasis on just that the option for plant protein, not that it's better. But that just to like, remind people that that's an option... there were a few teens who were super interested in the vegetarian [diet]. But I think the majority of kids and teens aren't aware of plant proteins like don't, don't really think about that.” (Experienced Instructor 5)</i></p>
Eating Disorders and Social Media Impact	IAs mention or recall participants asking about topics surrounding eating disorders, body image, and the impacts of social media	<p><i>“So I think that we need to start understanding that eating is not just food, it's what's what they're seeing in the world around. And if they're seeing these impossible body proportions, or you know, new body trend, every couple of years of really thin waist, but larger butts and breasts and things like that they don't understand that foods not going to do that. And that a lot of its filter. So I just think that as we're experiencing new levels of technology and things like that, we need to meet these kids, where they are, and kind of update what food and cooking actually is.” (Experienced Instructor 1)</i></p>

Theme	Definition	Notable Quotes
Food Marketing and Food Systems	IAs mention or recall participants asking about how food is marketed to consumers and the impacts of food systems on nutrition	<i>“They're heavily influenced by social media... they're going to come out with, well, I saw this on TikTok. So like, this must be it, or this, you know, whatever basketball player is being sponsored by Coke, ... those are more those are the things that they're seeing that they're more interested in, they want to know more about supplements. So especially when it comes to like sports, right, and supplements and those energy drinks.” (Implementing Agency 8)</i>

Research Question 4 Summary.

The final research question posed in this study reflected on activities from CMK and CMT that were well received, instructor enhancements, and topics that participants and instructors had expressed interest in including in CMK and CMK. Well-received activities mentioned by IAs included “Putting Whole Grains to the Test”, “Sugar Overload”, and the “Extreme Food Makeover”. Instructors added to CMK and CMT by implementing activities that allowed participants to get physical activity or use external activities such as Foodopoly. This section provided an overview of instructor-recommended topics as well as topics participants showed interest in including food sanitation, food safety, updated recipes, cultural inclusivity, social media, and food marketing to name a few.

Chapter V: Discussion

Introduction

This study provided a comprehensive evaluation of the de-implementation of Cooking Matters for Kids (CMK) and Cooking Matters for Teens (CMT). The RE-AIM framework was used to guide this study including the development of interview guides and research questions. While the RE-AIM constructs typically provide a comprehensive framework to explore the reach and effectiveness of CMK and CMT and its adoption by different Implementing Agencies (IAs), this study focused primarily on the implementation and maintenance constructs. Doing so, allowed a reflection of the context of Share Our Strength (SOS) de-implementing Cooking Matters and careful consideration of what this means for the maintenance and any future implementation of CMK and CMT curricula by IAs. Below, this chapter provides a summary of the study, followed by a brief discussion of key results from each chapter. Following key results, is a discussion of this study's strengths and limitations, before concluding with the recommendations for different shareholders mentioned in this study.

Summary of Study

This study sought to gain a comprehensive understanding of the de-implementation of CMK and CMT by addressing four primary aims (1) the perceived impacts of de-implementation, (2) the context leading to CMK and CMT de-implementation, (3) the perceived barriers and facilitators to continuing CMK and CMT faced by IAs, and (4) areas CMK and CMT could be improved to meet participant needs and interests. This study relied on qualitative data collection using one-on-one interviews, focus groups, and supplementary documentation to understand the research aims addressed above. A codebook was then created, which was used for

the data analysis of the previously mentioned documents. Coded segments were then examined to identify pertinent themes before being presented in the results section.

Discussion of Key Results

This study provides insight into the impacts of the de-implementation of the Cooking Matters program on IAs and by extension their communities and participants. One-on-one interviews and focus groups provided an understanding of the context leading up to the de-implementation of CMK and CMT. This context included the termination of updates to the CMK and CMT curricula, the impacts of the COVID-19 pandemic, and the reasoning for de-implementation provided to IAs by SOS. In addition to context, the consequences of CMK and CMT de-implementation were also explored, emphasizing for participants the loss of foundational cooking skills, nutrition education, access to nutrition education, a supportive cooking environment, and access to a trusted adult. Within IAs, losing access to materials, local partnerships being put in jeopardy, and the loss of an easy-to-implement program were examples of the consequences of de-implementation on IAs. Within this study, IAs also provided insight into barriers to continuing CMK and CMT, such as limited access to materials, an out-of-date curriculum, lack of support from SOS, the cost of implementation, and worries about the future of Cooking Matters and the SNAP-Ed Toolkit. On the contrary, facilitators to continuation were also identified and included using alternative partnerships and funding sources, using excess materials from other IAs or organizational stockpiles, and the willingness to continue to adapt the CMK and CMT curriculum post-de-implementation. Penultimately, interviewees reflected on activities that were well received by program participants, as well as any enhancements made by instructors. Finally, IAs recalled topics participants expressed interest in learning or instructors

felt were lacking, such as food sanitation, food storage, social media, food systems, marketing, and varying nutritional needs based on diet and circumstance.

These results were then used to inform the recommendations provided to different shareholder groups, to help mitigate the debilitating impacts of de-implementation as experienced by Cooking Matters IAs in the future. Further research should be conducted looking at the impacts of de-implementation on communities and shareholders such as IAs. This research may include targeting parent organization de-implementation tactics, improving support for IAs, and gaining a better understanding of long-term implications on communities.

Study Strengths and Limitations

To our knowledge, this study provides the first qualitative evaluation of CMK and CMT programs and is the first piece of publicly available literature surrounding the evaluation of CMT. Additionally, this study began when the initial de-implementation announcement from SOS was made, which allowed the PI to capture the reactions of IA's as they were concurrently navigating the de-implementation in real time and determining their next steps. This study also used multiple qualitative data sources, as the participants recruited and interviewed provided a wide range of expertise and experience, providing further insight into the challenges IAs are facing as a result of SOS discontinuing Cooking Matters. These participants also provided insight into the potential options some IAs may have for moving forward with Cooking Matters.

In addition to the strengths mentioned, this study had several limitations. The first limitation surrounded the perspectives of those who participated in interviews. Despite numerous recruitment attempts, representatives from SOS did not participate in this study. Their perspectives would have provided a deeper insight into the decision to de-implement Cooking Matters as a whole, as well as added additional information on SOS's initial decision to shift

away from the CMK and CMT programs. Despite this, we were able to use two transition webinars held by SOS, a Frequently Asked Questions document provided to IAs by SOS, and an email correspondence with SNAP-Ed as additional data sources to gain some insight into these decisions. Additional perspectives that were missing in this study were the youth participants of CMK and CMT, and the parents of participants of these programs. While participant perspectives were originally intended to be a part of this project, the only CMK class that was accessible to the PI this fall was with participants aged 4-5 years—an age group much younger than the CMK curriculum was intended for, and also not of an age useful for conducting short interviews on the CMK classes. In addition, parents of participants were recruited by hanging up flyers in a school that frequently worked with Open Hand Atlanta to implement CMK, however, no responses were received from this method of recruitment. As this study explored the impacts of CMK and CMT on participants and their families, the exclusion of these participants may have resulted in missed impacts. Future research should work to ensure these voices are incorporated in future evaluations of CMK and CMT.

Recommendations

The above findings of this study provide insight into the implications of the de-implementation of CMK and CMT on different shareholder groups. These recommendations are provided based on the insights of the study results. Recommendations are organized by different shareholder groups. IA recommendations are divided based if the IA is choosing to continue to use CMK and CMT or if the IA will be switching to a new curriculum. Additionally, as of February 2024, SOS has announced that The Food Trust will become the new parent organization of Cooking Matters. Recommendations for their transition to overseeing Cooking Matters based on the results of this study can be found below. Additional shareholder

recommendations are provided for SNAP-Ed and parent organizations considering de-implementation in the future.

Implementing Agencies Choosing to Continue CMK and CMT

1. **Stay up to date on Dietary Guidelines.** Consider incorporating these updates, and reflect these changes accordingly in your CMK and CMT implementation.
2. **Consider innovative models of funding.** This may include applying for grants for extra funding or partnering with schools or community organizations that may be able to offset some of the costs of the program. This may also include partnering with local food banks/food shares/grocery stores to alleviate the need to spend costs on take-home groceries.
3. **Connect with other IAs.** If feasible, speak with other IAs in your state and surrounding states who are continuing CMK and CMT to navigate the next steps/provide support to one another. For those looking to continue using CMK and CMT, consider reaching out to local or state IAs who have decided to move to an alternative curriculum to see if they would consider donating their unused books.
4. **Consider additional curriculum updates.** This may include the topics mentioned in *Research Question 4* or include other improvements mentioned by IAs such as trying to incorporate more physical activity into the curriculum.

Implementing Agencies Looking for a New Curriculum

1. **Reflect with your Cooking Matters staff members.** With other members of your IA who are involved in implementing CMK and CMT, ponder the aspects of each

program that worked well and did not work well and consider these when choosing a new curriculum.

2. **Speak with the community.** If feasible, consider holding focus groups or discussions with prior participants of the CMK and CMT program, as well as their parents to discuss how a new curriculum can be beneficial to the community.

New Cooking Matters Parent Organization

1. **Communicate with IAs.** Stay in contact with the remaining IAs during the transition to taking over. Consider updates such as letting IAs know where you are in the process of the transition to oversee Cooking Matters and provide timely responses to challenges being faced during the transition period.
2. **Consider the past's successes and failures.** Discuss with IA's what has worked well or not worked well from their time working with SOS in the past. As mentioned in *Research Question 2*, SOS did some things that were well-received by IAs (i.e., listening sessions, annual rankings/reports, gold standards, etc.). Consider bringing some of these things back or improving upon them to ensure your IAs are engaged and present.
3. **Be accessible to IA's.** If possible, prioritize being an accessible presence to your IAs. This can be through little efforts such as keeping a camera on during Zoom meetings, or larger efforts such as meeting directly with IAs.
4. **Promote communication between IAs.** Encourage IAs to communicate with one another, and help facilitate these connections. This can be beneficial for IAs to exchange ideas and provide support to one another in the event of future de-implementation.
5. **Be a partner.** Continue to promote a partnership with IA's by being open and transparent, as well as providing support to partners beyond the initial transition phase.

Defining what a partnership is to your organization and sharing this definition with IA's may help accountability on both ends in the future.

6. **The Cooking Matters curriculum.** Consider keeping the *Legacy* curriculum and making updates to CMK and CMT so that SNAP-Ed-funded implementing agencies can seamlessly continue this programming.
7. **Consider additional curriculum topics.** This may include the topics mentioned in *Research Question 4* or include other improvements mentioned by IAs such as trying to incorporate more physical activity into the curriculum.

Future Parent Organizations Considering or Planning to De-implement Programs

1. **Be upfront with your IAs.** As soon as it is feasible, communicate your intentions with your IA's early on about your intent to de-implement the program. Allow them time to understand what de-implementation will mean for their organization and the communities they serve.
2. **Plan ahead.** Consider having a place before beginning the de-implementation process. This may include ensuring that IAs are notified in a timely manner, providing a timeline, and making sure that your organization is ready to answer any questions posed by IAs in carrying out final programs and switching to a new program. Try to ensure that your timeline also provides your IAs timelines enough notice to coordinate their organizational logistics as well.
3. **Be hands-on in de-implementation.** Play an active role in helping IA's transition to a new program that is appropriate for the diverse funding models used by IAs. This may include facilitating direct connections with other organizations, offering training and webinars on program alternatives, etc.

4. **Consider the alternatives.** Before completely starting the de-implementation process, if the program is effective, consider exploring other avenues to allow the program to continue.
5. **Maintain IA partnerships.** Continue to treat your IAs as partners until the de-implementation is complete. De-implementation affects parent organizations, IAs, and communities. Working together to ensure a smooth and comprehensive transition can help all shareholders move to a new program while minimizing stress and disarray.

SNAP-Ed

1. **Distribution of data.** Consider working with parent organizations to coordinate the distribution of aggregate data to IAs. This allows for organizational transparency, as well as letting IAs know how they are doing compared to other IAs and where they can improve.
2. **Handling de-implementation in the future.** Contemplate creating a plan for how to handle the de-implementation of a SNAP-Ed program, and support SNAP-Ed-funded agencies being affected by these changes. This may include requiring parent organizations to notify SNAP-Ed a specified amount of time in advance, so parent organizations and SNAP-Ed can allot time to resolving logistics such as funding, SNAP-Ed Toolkit status, etc.

Public Health Impact

Aside from highlighting the importance of nutrition education in under-resourced areas, this study emphasized the reach of nutrition education programs, specifically CMK and CMT, beyond its participants and accentuated the impacts on families, communities, and IAs. Additionally, this study emphasized prior research stating that communities should be involved

in the de-implementation process, In this case, when initiated by a parent organization such as SOS, as the de-implementation of Cooking Matters left IAs unsupported, uninformed, and scrambling to figure out how to best serve their communities on a limited timeline.

Subsequently, this study promotes the use of qualitative methods when conducting nutritional education research. In this study, qualitative methods provided insight into the impact of nutrition education in communities beyond those measurable by surveys. Insights into the creative ways that IAs were able to provide solutions to the challenges posed by de-implementation may inspire other IAs facing de-implementation to speak with other IAs or look at de-implementation from a new perspective. Finally, the identification of the interests and wants of participants and IAs provided a deeper discussion into areas of nutrition education that may be lacking in nutrition education programs targeted toward youth. The insights shared in this study emphasized the need for nutrition education that not only teaches the foundations of healthy eating and cooking but also provides reliable information in an era of technological advancements and conflicting advice.

Conclusions

The de-implementation of Cooking Matters left many IAs navigating complex challenges in determining how to best provide nutrition education to their communities. This study provided an overview of the impacts of de-implementation across multiple shareholders and members of the community who benefited from Cooking Matters be that directly or indirectly. Additionally, the barriers and facilitators surrounding Cooking Matters's continuation and ways that IAs or a new parent organization can improve upon the current curriculum to reflect participant interests. To conclude, this study elaborates on the benefits of Cooking Matters on youth and within their communities. Subsequently, this study emphasizes the importance of including shareholders who

work directly with the community to implement programs in decisions surrounding program de-implementation, so other IAs do not have to face similar challenges to those imposed upon Cooking Matters IAs by SOS.

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Appendices

Appendix A: Participant Recruitment Email

Hello!

My name is Victoria Dotto, I am a second-year student at the Rollins School of Public Health and a previous Open Hand Atlanta intern. I am currently working on completing my thesis, which is conducting a program evaluation of Open Hand Atlanta's Cooking Matters for Kids and Cooking Matters for Teens classes. From this evaluation, I hope to learn more about the barriers and facilitators to these programs, understand the program's effectiveness, as well as gain an understanding of how the recent de-implementation announcement from Cooking Matters National will impact this program at Open Hand.

I am reaching out to you today as you are an instructor at Open Hand who plays a valuable role in implementing Cooking Matters for Teens or Cooking Matters for Kids classes. I'd like to speak with you about your experience implementing this curriculum and your thoughts on the program. If interested, you would participate in a 30–60-minute interview over Zoom. Your participation in this interview is completely voluntary, and all information will be de-identified, as well as confidential. More information about participation and confidentiality can be found in the attached participant information sheet.

I am hoping to conduct interviews within the next two weeks (October 16, 2023 - October 28, 2023). Below is a link that can be used to sign up for an interview time slot. If none of the times offered are feasible for you, please reach out to me so we can set up a different time!

Interview sign-up link: <https://calendly.com/vdotto/cooking-matters-instructor-interview>

Your experience as an instructor at Open Hand will offer a first-hand view of how Cooking Matters is implemented in the community and is crucial for understanding the ins and outs of engaging in classes. Your participation in this interview will also help identify the next steps in providing nutritional education and skills to kids and teens through Open Hand.

If you have any questions, comments, or concerns, please feel free to respond to this email or contact me at vdotto@emory.edu. I look forward to speaking with you and hearing about your experiences!

Sincerely,

Victoria Dotto

Appendix B: Participant Information Sheet

A Qualitative Analysis of the Cooking Matters for Teens and Cooking Matters for Kids Programs

Principal Investigator: Victoria Dotto

Thesis Committee: Megan Winkler, PhD RN, Eric Nehl, PhD, Miranda Cook, PhD MPH

I would like to invite you to take part in a program evaluation. Before you decide you need to understand why the research is being done and what it would involve you. Please take time to read the following information carefully. Ask questions if anything you read is not clear or if you would like more information. Take time to decide whether to take part.

WHO I AM AND WHAT THIS STUDY IS ABOUT

My name is Victoria Dotto, and I am a second-year Master of Public Health candidate at the Rollins School of Public Health. I am currently working on my thesis, which is focused on evaluating the Cooking Matters for Teens and Cooking Matters for Kids programs conducted at Open Hand Atlanta, as well as understanding more about the implementation and maintenance of the program long term.

WHAT WILL TAKING PART INVOLVE?

If you chose to take part in this evaluation, you would take part in a 30-60-minute interview over Zoom discussing parts of the program including your experience with the Cooking Matters program, its curriculum, barriers, and facilitators to the Cooking Matters for Kids and Cooking Matters for Teens programs. With your permission, the interview will be recorded, but all information will be de-identified. Within 24 hours of the interview, all recordings will be uploaded to a secure, password-protected location and deleted from any devices used to record the interview.

WHY HAVE YOU BEEN INVITED TO TAKE PART?

With the help of Open Hand Atlanta, you have been identified as an instructor who has significant experience working with either the Cooking Matters for Teens and/or the Cooking Matters for Kids program. Your experiences facilitating these programs will provide a valuable perspective from directly working with the program participants.

DO YOU HAVE TO TAKE PART?

Participation in this evaluation is completely voluntary. You have the right to refuse participation and can withdraw from the interview at any time, without consequence. Refusing to participate will not impact your job or role in any way.

WHAT ARE THE POSSIBLE RISKS AND BENEFITS OF TAKING PART?

There are not any direct benefits to your participation in this research, however, results from this evaluation will be used to improve the Cooking Matters programs and nutritional education interventions offered by Open Hand Atlanta. This evaluation poses minimal risk to participants.

WILL TAKING PART BE CONFIDENTIAL?

Your participation in the study will be confidential. If you choose to participate, your information will not be shared with anyone other than the principal investigator (Victoria Dotto) and her thesis committee. If you choose to participate, you will be assigned a participant ID. Any personally identifying information will be removed from interview transcripts and replaced with your assigned ID. If you choose to take part in this evaluation, your participation will not be shared with your employer.

HOW WILL THE INFORMATION YOU PROVIDE BE RECORDED, STORED AND PROTECTED?

All audio recordings, transcripts, and participant information will be stored in a password-protected folder on Emory University's secure server. Data will only be accessible to the principal investigator (Victoria Dotto) and her thesis committee.

WHAT WILL HAPPEN TO THE RESULTS OF THE STUDY?

The results of this evaluation will be presented as a thesis to the Rollins School of Public Health. A copy of these findings will also be provided to Open Hand Atlanta to be used to inform future Cooking Matters Classes. Results may also be presented at a future conference or published upon evaluation completion. In any sort of report or presentation, we will not include any information that will make it possible to identify a participant.

WHO SHOULD YOU CONTACT FOR FURTHER INFORMATION?

For further information, questions, or concerns you can contact Victoria Dotto at Victoria.dotto@emory.edu. Alternatively, you may contact Dr. Megan Winkler, the chair of this thesis, at megan.winkler@emory.edu.

As this project is a program evaluation, this project is considered by the Emory Institutional Review Board as non-human subject's research. However, if you have an issue you rather discuss with someone outside the thesis project team, contact the Emory Institutional Review Board at 404-712-0720 or toll-free at 877-503-9797 or by email at irb@emory.edu.

Thank you!

Appendix C: Interview Guide

Introduction

Hello, (Participant name). My name is Victoria Dotto, and I am a second-year Master in Public Health student at the Rollins School of Public Health. Thank you so much for agreeing to speak with me. This interview is to be used in my thesis to better understand how the de-implementation of Cooking Matters at a national level may influence the continuation of Open Hand Atlanta's Cooking Matters for Kids and Cooking Matters for Teens program and understand how other programs are coping with this decision. Before we begin, do I have your consent to record this interview? All recordings will be strictly used for data purposes, and all information will be de-identified.

(Wait for consent, if yes, begin recording)

This interview will take at most an hour. During this time, I will be asking you about your experiences facilitating Cooking Matters for Teens and Cooking Matters for Kids classes. This interview will also include your thoughts on the curriculum, barriers, and facilitators of the program, and any additional information you'd like to share surrounding these courses. All information will be kept confidential, and all information will be de-identified.

Do you have any questions regarding what I have just mentioned about confidentiality?

(Pause for questions)

Do you (name of participant) consent to participating in this interview?

(Wait for Consent)

Great, thank you! Before we begin, do you have any questions about the interview?

(Wait for questions, move onto below)

Interviewee Background

To start off, I'd like to hear a bit more about your background.

- I. Can you tell me a bit about the organization that you work for?
 - a. How many years have you been working there?
 - b. Does your organization offer both Cooking Matters for Kids and Cooking Matters for Teens?
- II. Can you tell me a bit about your role in relation to the Cooking Matters for Kids and Cooking Matters for Teens programs?
- III. What other nutritional education classes does your organization offer and what is your role in those?
 - a. If an instructor, rephrase as: What other nutritional education classes have you facilitated at your organization? Have you facilitated any classes elsewhere?
- IV. In your opinion, what is the importance of providing nutritional education programs and why do you facilitate the Cooking Matters program?

Program Participants and Class Atmosphere

Thank you for letting me know a bit more about your background relating to Cooking Matters.

For the remainder of this interview, all questions asked will be specifically related to the Cooking Matters for Kids and Cooking Matters for Teens classes. These next few questions will ask a bit about the participants your organization works with.

- I. Starting off, can you tell me a bit about the kids you normally work with?
 - a. Prompts: what are their backgrounds, what locations do you work with, have they ever had any additional nutrition education prior to Cooking Matters classes
- II. How are participants normally recruited to take part in the class?

- a. If part of a larger organization that oversees CMK AND CMT implementation at multiple sites:
- III. How do you normally reach out to programs to implement the Cooking Matters for Teens and Cooking Matters for Kids programs?
 - IV. Can you give me an idea of the general participation and engagement levels of kids that are in the Cooking Matters classes you've facilitated? Are they active or limited?
 - a. Why do you think this is?

This next set of questions focuses a bit more on the behind-the-scenes administrative work that is done before beginning a Cooking Matters for Kids or Cooking Matters for Teens program.

- V. When planning to begin a Cooking Matters for Kids or Cooking Matters for Teens cohort, what are some of the facilitators to implementing the program? What are some of the barriers to implementing it?
 - a. Follow-up if part of a larger organization that oversees CMK AND CMT implementation at multiple sites: Have there been any specific challenges to setting up CMK and CMT programs with local partners? If so, tell me more about those.
- VI. In terms of staffing, how hard or easy is it to train new staff members to facilitate the curriculum?
 - a. What does this process look like?

Curriculum

Thank you! This next set of questions is going to focus more on the curriculum of the Cooking Matters Program.

- I. Which Cooking Matters curriculum, the core, or the legacy, is used at your organization?
 - a. Why is that?
 - b. Follow up: Does your organization rely on SNAP-Ed funding?
- II. Has your organization made any changes to the Cooking Matters curriculum?
 - a. Why/why not?
- III. If you could make changes to the core curriculum, what would they be?
- IV. Are any classes or areas of class more engaging than others? Alternatively, are there any classes that participants are not as engaged in?
- V. What are some areas of nutrition education and cooking do participants express interest in?
 - a. Follow up: In your opinion, does the Cooking Matters for Kids program align with what kids have expressed interest in learning?
- VI. Throughout your experience with Cooking Matters, do you think your organization has been able to deliver the CMK and CMT program as the curriculum implies?
 - a. Follow up: Does the curriculum and overall program align with your organization's long-term goals?

Class Outcomes and Expectations

Moving a bit away from looking at the curriculum and thinking about the expectations at the end of the Cooking Matters classes.

- I. In your words, what are the expectations of the Cooking Matters for Kids and Cooking Matters for Teens classes?

II. Have you noticed any outcomes from the Cooking Matters programs exceeding your expectations or falling short of them?

a. If so, which?

III. What are some differences you've noticed at the beginning of cohorts vs. the end?

From these expectations, I'd like to move to discussing more about some of the outcomes of the Cooking Matters classes. Looking at the surveys offered to the Cooking Matters for Kids classes and Cooking Matters for Teens classes, some of the questions asked to participants and the outcomes assessed are different.

IV. Why do you think the questions and outcomes asked across programs are different?

V. In your opinion, what other nutritional outcomes should be assessed by Cooking Matters?

a. Follow up: how would you recommend this be done?

i. Further prompt if needed: are other curriculums doing this that you know of?

VI. In the time that you have been working with (*Organization*), what are the long-term results showing about CMK and CMT programs and participants? Do they vary or have they been consistent?

VII. What are some things that Cooking Matters classes have done well?

a. Follow up (if not mentioned): What are some things that Cooking Matters classes are lacking?

VIII. How does Cooking Matters compare to other nutritional education courses that your organization offers?

- a. F/U if courses above are not other SNAP-Ed programming: I - To your knowledge, how does Cooking Matters for Kids and Cooking Matters for Teens compared to other SNAP-Ed nutrition education courses?
- IX. Do you think your organization's Cooking Matters for kids and teens programs have been successful?
- a. Why/why not?

Impacts of De-Implementation

To wind down this interview, I'd like to hear a bit about your thoughts on the use of the Cooking Matters curriculum by (Organization Name) in the future.

- I. What are the challenges your organization is facing in continuing CMK and CMT now that it is being de-implemented?
 - a. What, if any, opportunities do you see given this change?
- II. Do you ever speak with other programs that offer Cooking Matters?
 - a. Why/why not? Primarily before or after deimplementation announcement?
- III. Do you think your organization will continue to use Cooking Matters after its deimplementation?
 - a. If so, what recommendations do you have for the Cooking Matters program should it be continued at your organization?
- IV. Is there anything else you'd like to say before we end the interview or any final thoughts regarding Cooking Matters?

Thank you for taking the time to speak with me about your experiences with Cooking Matters for Kids and Cooking Matters for Teens classes through. I appreciate the thoroughness, reflections,

and recommendations that you made during this interview. It was great to hear your perspectives!

Appendix D: Codebook

Code	Definition
Consequences for SOS discontinuing CMK and CMT curriculum	Refers to anticipated challenges of the Cooking Matters de-implementation expected by implementing organizations and any other potential consequences
Community/ Participant/ Family Impact	Refers to impacts de-implementation will have on Cooking Matters participants, families of the participants, and the communities who implement Cooking Matters
Lifelong Skills	Refers to any skills taught in Cooking Matters that provide a foundation for continuing nutrition education across one's lifetime
Effects of CMK and CMT on Family Life	Refers to second-hand impacts of child and teen participation in Cooking Matters on Families
Widescale Impact	Refers to quotes relating to the number of participants who have partaken in Cooking Matters or the impact of Cooking Matters
Implementer Impact	Impacts de-implementation will have on Cooking Matters instructors/ Implementing Agencies
Opportunities given SOS is discontinuing the CMK and CMT curriculum	Refers to opportunities to improve Cooking Matters should it be picked up by a new organization and the reasons why
Requests of a New Partner Org	Refers to responses surrounding the need for a new partner to take over Cooking Matters, and areas where a partner can improve Cooking Matters should they take over
Opportunities for change to Cooking Matters (Broadly)	Refers to general areas for improvement in Cooking Matters
Discontinued Cooking Matters Elements Partners Enjoyed	Refers to prior supports offered by SOS that partners enjoyed and found helpful for implementing Cooking Matters

Code	Definition
Barriers to continuing CMK and CMT past 09/30/24	Refers to any barriers or obstacles mentioned in continuing CMK and CMT post-de-implementation
Lack of Support	Refers to IA experiences mentioning the current and anticipated lack of support from SOS during and after the impact of continuing Cooking Matters
Out-of-Date Curriculum	Refers to barriers to implementation surrounding Cooking Matters itself /loss of support from SOS
SNAP Related Implementation Barriers (not including funding)	Refers to SNAP-Ed-related barriers to continuing Cooking Matters that do not revolve around funding
General Implementation Barriers	Refers to general implementation barriers to agencies using Cooking Matters
Funding	Refers to funding concerns surrounding continuing Cooking Matters
Access to Materials/Material Use	Refers to lack of access to materials or perceived barriers surrounding access to program materials
Facilitators to continue CMK and CMT past 09/30/24	Refers to any facilitators mentioned continuing CMK and CMT post-de-implementation
SOS Efforts to Find a Partner	Refers to quotes mentioning finding a new partner to take over Cooking Matters
Willingness to Adapt Cooking Matters Curricula	Refers to the program's ability to adapt the Cooking Matters curriculum
Non-SNAP-Ed Funding Source	Refers to the use of a Non-SNAP-Ed funding source
Use of Satellite Programs/Partnerships	Refers to organizational partnerships or programs that help in implementing Cooking Matters regardless of de-implementation
Stockpile of Materials	Refers to excess materials/alternative materials used by organizations

Code	Definition
Ease of Learning/Implementing	Refers to ease of training others on the curriculum/implementing the curriculum
Events and Context Leading to De-Implementation	Refers to reasons mentioned or speculated by IAs for why SOS has discontinued Cooking Matters
Pandemic	Refers to any mention of the Covid-19 pandemic influencing the implementation of Cooking Matters
Developmentally Appropriate	Refers to CMK and CMT program considerations for being developmentally appropriate
Gaging participant abilities/ knowledge/ backgrounds	Refers to how participant backgrounds (location, food access, etc.) play a role in how the Cooking Matters curricula are implemented, as well as modifications that have been made
Alignment of Interests	Refers to quotes surrounding participant and instructor interests and topics mentioned to enhance CMK and CMT
Topics to be added (Participants)	Refers to topics mentioned by participants that should be added to the curriculum/discussions that occurred with participants in the past
Topics to be added (Instructors)	Refers to instructor ideas of topics to be added to the curriculum
Topics in CMK and CMT	Refers to areas of interest by participants that are already included in the curriculum
Notable Activities in CMK and CMT	Refers to activities currently in the CMK and CMT curriculums that were well received by participants

Code	Definition
Program Improvement	Refers to feedback surrounding areas of program improvement
Instructor/Organization Edits	Refers to changes to the curriculum made by instructors that have been well-received
Surveys and Feedback	Refers to changes to surveys/outcomes that should be measured
Curriculum Development	Refers to areas of the curriculum that need to be added or changed
Curriculum Flexibility	Refers to comments surrounding current/needs of the Cooking Matters program surrounding flexibility of the curriculum
Strengthening Community Partnerships	Refers to partnerships that implementing organizations want to strengthen within their communities can be facilitated by a supportive parent organization
Program Effectiveness/ Engagement/ Outcomes	Refers to any areas that were noted to be effective in behavioral change, engagement, and participant outcomes