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Cooks Training for Faith, Activity, and Nutrition project with AME churches in SC

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Abstract

Purpose—This study describes the development and evaluation of a participatory training for cooks in African American churches.

The 8-hour training focused on providing healthy meals within the church food program. It enlisted cooks in hands-on “cooking with the chef” training and menu building exercises, and demonstrated development of flavor in foods through healthy ingredients. Cook ratings from pre- to post-training (possible range: 1 to 10) were evaluated with the Wilcoxon signed rank test.

Results—114 cooks from 57 churches over the period from 7/21/07 to 3/21/11 participated in trainings. Self-rated cooking skill increased from pre- (6.5 ± SD) to post- training (7.9 ± SD), p = .0001. Self-rated confidence in preparing meals also increased significantly (pre: 7.3 ± SD; post: 8.3 ± SD), p =.0001. Qualitative feedback from the cooks’ training has been positive. Two of the more frequently stated changes cooks report are using less salt and using more vegetables and fruits in menus. Lessons learned include: choosing the right church to host the training, teamwork as a key component, need for support system for church cooks, allocation of time for planning as well as shopping for healthy ingredients, and incorporation of flexibility into the training plan.

Keywords

culinary nutrition; cooks training; church cooks; chefs

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1. Introduction

African Americans have higher rates of cancer, heart disease, diabetes and mortality compared to other populations in the United States (Roger, 2012; Flegal, 2010; Siegal, 2012). Consuming higher levels of vegetables and fruits can lower the risk of chronic diseases, such as stroke and cardiovascular disease; however, African Americans typically consume less than the recommended servings of vegetables and fruit per day (Blanck, 2008; Casagrande, 2007). Despite these health disparities, there are important strengths observed within the African American community that can be mobilized. One such strength is faith. The church and religious community have traditionally been important organizing structures and sources of support in the African American community (Campbell, 2007).

Churches are an appealing environment to deliver health promotion programs because many African American churches include a health component as part of their overall mission (Resnicow, 2005; Campbell, 2007). Furthermore, the church setting offers the potential ease of recruiting and tracking participants. There are approximately 593 African Methodist Episcopal (AME) churches in the state of South Carolina with an estimated 276,000 members. Therefore, interventions targeting the AME church have the potential to reach a large number of African Americans in South Carolina. The structure of the AME church allows for organizational level policies to be implemented that may assist in efforts to change health behavior.

Food has important meaning within the AME church (Wilcox, 2010), and a large number of events within the church incorporate serving food to their members. Because church cooks are viewed as the authority on cooking within the church and have the ability to influence many people with the meals they prepare, an important and novel component of a nutrition intervention may be a cook's training, where church cooks learn how to prepare healthy meals and snacks for their congregation. The purpose of this paper is to describe the process and development of a large-scale nutrition intervention, which includes a cooks' training, as part of a multifaceted intervention targeting AME church members in South Carolina (Author, in press). The cooks' training, adapted from an existing nutrition education program (Condrasky, 2006; Condrasky, 2009), was designed as an interactive, hands-on culinary nutrition training for this particular population, centering on their nutritional needs and food preferences.

2. Program description and planning

The Faith, Activity, and Nutrition (FAN) program is a multifaceted intervention that is aimed at improving the overall health of South Carolinians attending AME churches. The main objectives were to increase physical activity and promote healthy eating behaviors among the African American population (Wilcox, 2010). Most faith-based intervention studies have focused primarily on the individual (McNabb, Quinn, Kerver, Cook, & Karrison, 1997; Yanek, Becker, Moy, Gittelsohn, & Koffman, 2001; Young & Stewart, 2006), with relatively little attention given to environmental factors and church policy, thus, limiting the reach and sustainability of these programs. However, FAN uses a social ecological model (Cohen, Scribner, & Farley, 2000), targeting the social and support services of the church environment to guide the culturally tailored intervention.

The FAN program used a randomized design with a delayed intervention control group, and took place in three waves. Within each wave, half of the churches were randomized to the immediate intervention group and the other half to the delayed intervention group. At the conclusion of the 15 month intervention, churches that were assigned to the delayed intervention group had the opportunity to fully implement the FAN program.

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The FAN program used a community based participatory research (CBPR) approach (Israel, Schulz, Parker, Becker, & Allen, 2003). In CBPR, the researchers and community members combine knowledge and assets to work together as partners to identify key problems, formulate research questions in culturally sensitive ways, and use study results to help support relevant programs. When CBPR is successful, the community is part of the research team, owns the information gathered, disseminates the research, and continues to benefit from its research experience. In a CBPR approach, the community generally has a sense of ownership over the data and the program, which increases the likelihood that the program will be sustained when the researchers leave.

2.1 Planning committee

The FAN planning committee, which consisted of church elders, pastors, cooks, health directors, and other lay church members, worked with university staff to guide all stages of the project, and had a direct influence on the development, planning, implementation, evaluation, and dissemination of the FAN program (Wilcox, 2010). During the first year of the study, the planning committee met monthly to brainstorm ideas of what the FAN program would entail. For example, during one brainstorming session, members of the committee decided that one way to create a “healthy church” would be to hold a training for church cooks that would help them provide healthy meals and snacks within the church food program. In AME churches, cooks decide what meals are served at church events involving food, and how those food are prepared. Therefore, a cooks’ training had the potential to strongly influence what congregants were served, and thus ate, at church events.

An African American dietician joined the planning committee and assisted the group in adapting the cooking workshop materials for the FAN program. Because she also served as a pastor (although not of an AME church), the dietician held intimate knowledge of church cooks, which lent credence to the recipes and topics developed for the program. She offered personal insight into cooking practices and preferences of the church cooks and participated in the training by providing elements of cultural sensitivity and spirituality. Cultural sensitivity is an issue on the forefront of designing training for any population and was a key issue when delivering training to the FAN cooks.

2.2 Training program

The main objectives of the FAN cooks’ training were to provide a participatory training workshop that trained cooks to provide healthy meals and snacks within the church food program, to enlist cooks in a hands-on cooking with the chef training, to participate in menu building exercises, and to demonstrate the development of flavor in foods through healthy ingredients (Wilcox, 2010). By working alongside professionals, cooks were expected to gain the knowledge and skills necessary to prepare healthy and flavorful foods that nourish and satisfy their congregations as well as themselves.

Cooking with the Chef (CWC) is a five lesson hands-on culinary nutrition program, developed under CU CHEFS® (Cooking and Healthy Eating Food Specialists), which the University designed to promote changes in menu planning, food purchasing, food preparation, and food consumption behaviors. CWC has been tested and administered over an eight-year period in South Carolina with adults from diverse demographics (Condrasky 2006, 2009). CWC employs a professional chef and nutrition educator team. In its initial stages, CWC was aimed at improving the health of financially disadvantaged African Americans. Since then, the program has been expanded to other demographics including parents/caregivers with children in preschool, adult attendees of a community center, school foodservice management professionals and college-aged individuals. For each target audience, the delivery of the program was modified to account for cultural sensitivity.

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The original training program, CWC, was adapted for FAN by focusing on the DASH (Dietary Approaches to Stop Hypertension) Diet Eating Plan. The DASH diet was developed by the National Heart, Lung, and Blood Institute to increase fruit, vegetable and fiber consumption, while decreasing fat and sodium intake. This diet is particularly rich in potassium and calcium, which are thought to be important in lowering blood pressure.

Modifications, guided by the principles of CBPR, were made so that the CWC program was appropriate for the FAN cooks' trainings. The first step in adapting the program was to conduct an online query to the health directors of AME churches regarding a description of foods served in their churches, the layout and equipment available in their church kitchens, and a review of the skill levels of their church cooking staff/volunteers. Next, four focus groups were conducted with a sample of church cooks to assess their specific needs and to ensure the content was applicable to those needs. The needs that emerged through the online query and the focus groups comprised the following general areas: how to purchase appropriate ingredients, requests for variety to the traditional menu standbys, methods to train and equip volunteers and youth to assist in the kitchen, knife skills, recipe standardizations and cooking with less salt.

2.3 Training manuals

CWC practitioners developed two original manuals that were used in previous trainings; one for the participants and another for the chef and nutrition educator facilitators. These two manuals were used as the basis for the FAN manuals; however, modifications were made in order to fit the needs of this particular audience. For instance, the time frame for the FAN training was modified from the original CWC training. CWC is usually offered in five, two-hour sessions while FAN cooks needed to be trained in one, eight-hour session. Therefore, the schedule of the training was adjusted. Second, the main focus of the FAN training differed from the original CWC. It was formatted to incorporate culinary nutrition components of the DASH program including menu planning that focused on the inclusion of herbs/seasonings for flavor enhancement. As a result, additional training topics were added. For example, because heart disease is highly prevalent in the African American population (Roger, Go, Lloyd-Jones, Adams, Berry, et al., 2011), ways to reduce sodium while preparing food was added to the discussion during training. Third, because participants were church cooks who prepare food for larger audiences and have the potential of serving entire congregations, the manual needed to reflect issues associated with the challenge of cooking for large groups in its delivery. Resources that were provided were designed and adapted accordingly. Finally, since many of the meals the church cooks prepare are for church programs, banquets, or other special events, an additional section was added to the training manual that focused on making centerpieces using vegetables and fruits for large gatherings. Resources for local farmers markets, supplemental online resources, and local organizations and contact information were also added to the participant manual.

2.4 Recipe development

Many of the AME church menus are similar to traditional Sunday dinners at home or during the holidays. Typical menus include fried chicken, macaroni and cheese, candied yams, potato salad, rice and gravy, green beans, banana pudding, pound cake, and sweet tea. There was a need to develop healthier recipes based on traditional recipes that were familiar and appealed to congregants. The food items and recipes chosen for the FAN trainings were selected based on a combination of dietary considerations, including the need for more vegetables and fruits, and less sodium and fat.

In many instances, traditional recipes were modified in order to make them healthier. For example, baked chicken or the FAN-inspired Caribbean Chicken with Pineapple could be

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offered as healthy alternatives to fried chicken. Culinary demonstrations on how to cook chicken using sautéing, baking, and poaching cooking methods were presented, offering church cooks alternative cooking techniques that were healthier.

There were also opportunities to use low-fat and fat-free dairy products to reduce the overall fat content of certain dishes, like chicken and potato salad. For example, chicken salad is commonly served at church functions and is seldom prepared in a healthy manner. Traditional chicken salad contains large amounts of mayonnaise and salt, which means a high fat and salt content. Using a CBPR approach, the chefs and church cooks worked together to create a chicken salad that was both tasty and healthy. This new church recipe incorporated plain yogurt with reduced-fat mayonnaise for the binder, and garlic with turmeric for flavor enhancement.

The cooks requested more information on techniques to season dishes other than using salt and pepper. As a result, chef practitioners designed an herb and spice demonstration to incorporate into the training. The chef delivered the demonstration, and the participants were instructed on how to create their own taco spice blend. Chili pepper, garlic, and cumin provided the main flavors for the spice blend which was well liked among the church cooks.

2.5 Participants

Each church was asked to send two kitchen staff members to attend the cooks' training. Participants were either a church cook or served as a hospitality/kitchen committee member. The backgrounds of the participants varied. While some were employed as cooks in school cafeterias or in local restaurants, others simply loved to cook and volunteered at their churches. Very few of them had any formal education or training in the culinary arts or menu development.

Participants were 114 cooks from 57 churches located in four geographically defined districts in South Carolina. A total of 12 trainings were conducted throughout the FAN study period. Demographic data were collected on 100 cooks. Fourteen cooks did not complete the evaluation due to their schedule restraints and/or that they chose not to complete the forms. The cooks taking part in the training had similar demographic characteristics as church members taking part in the FAN intervention. A majority of the cooks were over the age of 50 (80%), African American (99%), attended at least some college (48%), and self-reported as being at least 5 pounds overweight (81%).

2.6 Evaluation instruments

Prior to training, church cooks completed a standard 'cooking with a chef' survey which is described in detail elsewhere (Condrasky, 2011; Michaud, 2007). The 'Cooking with a Chef' survey consist of six scales: cooking attitude, cooking behavior, produce consumption self-efficacy, cooking self-efficacy, self-efficacy for using basic cooking techniques, and self-efficacy for using fruit, vegetables, and seasonings. Table 1 provides a more detailed description of each scale, including what each scale measures, response options, number of items, and a sample question for each scale. In a sample of parents and caregivers of preschool children, internal consistency reliability of each scale was been shown to be acceptable (Cronbach $\alpha \geq 0.78$), with the exception of cooking behaviors, which was low (Cronbach $\alpha = 0.29$) (Michaud, 2008). Content and predictive validity for the scales has also been adequately established (Michaud, 2008).

A two- item measure, created specifically for the Faith, Activity, Nutrition (FAN) cooks' training, was developed to assess cooking skills and confidence in preparing meals. The items were reviewed by an expert panel of culinary arts and nutrition professionals for content validity and administered to a pilot sample of cooks and planning committee

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members to determine that the items were worded appropriately for the intended population. The wording of the two items was subsequently edited for readability and administered to participants before the training began (pre) and again at the end of the day of training session (post). More details of the items can be found in Table 1.

3. Implementation

Each cooks' training was delivered in one, eight-hour session and took place at an AME church centrally located to the participants involved. All of the cook's training sessions followed the established agenda (See Table 2) and script. Throughout the day, nutrition education efforts focused on ways to re-energize meal times while meeting the dietary needs of congregants. Cooks learned about general food safety, the health benefits of eating more vegetables, fruits, and fiber, and the benefits of reducing the consumption of fat, sugar and sodium. The training focused on increasing nutrition knowledge through food choices and cooking applications in the kitchen. This "culinary nutrition" approach combined the application of basic nutrition principals with culinary skills. The goal was to encourage healthy eating behaviors by increasing confidence in food choices and preparation techniques.

Each training day began in the morning with an introduction of the FAN staff and a devotional, followed by an introduction to the FAN cooks' training manual and a discussion of the DASH diet. If the training included more than 20 cooks, the group was split in half, with one half of the group moving into the kitchen while the other half continued with the DASH diet and other nutritional discussions. The kitchen group received an overview of general kitchen safety and a knife skills demonstration that included basic knife safety along with the shapes and sizes of basic knife cuts. Following the demonstration, participants prepared centerpiece fruit and vegetable platters that would be served as a mid-morning snack. Once the first half of the group had finished this task, the second half was brought into the kitchen for the same demonstration and food preparation.

Once the vegetable and fruit platters were completed, the cooks sat down together to share what they had created. They discussed the preparation and nutritional benefits of fruits and vegetables, identified situations where it would be appropriate to serve these platters, and considered what types of snacks could be replaced by fruits and vegetables. The cooks then discussed the recipes they would be preparing for the rest of the day, with particular attention and discussion given to the specific ingredients (e.g., sweet potatoes, ground turkey, berries) that could enhanced the overall nutritional message. All of the recipes were created with the DASH principles in mind. The cooks discussed the various ways in which traditional recipes had been modified to reduce sodium, fat, and calories, along with adding fruits and vegetables. Following these discussions, the cooks moved back into the kitchen and prepared the remainder of the recipes for the day. Once again, if the group was large, it was spilt so that everyone had access to the kitchen and could be involved in recipe preparation.

Recipes that were most frequently prepared were turkey meatballs with low sugar BBQ sauce, Caribbean chicken, whole-wheat and low-fat pasta salad, peach and tomato salsa, black-eyed pea hummus, fresh fruit crunch, and berry blue dessert. Cooks were given instruction on various cooking techniques before they prepared a recipe using that technique. For example, before preparing the Caribbean chicken, a demonstration regarding the basic cooking methods for chicken including searing, roasting, and poaching was given. Chicken breasts were cooked using these methods, and the cooks sampled each and discussed the differences in taste between them. Preceding the preparation of the peach and tomato salsa,

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the cooks were given a demonstration on blanching and shocking tomatoes and peaches in order to facilitate peeling.

When all of the recipes were completed, the cooks joined together to have lunch and each of the cooks shared how their recipe was prepared, and how it was different from a traditional recipe. Following lunch, the cooks were given a demonstration on fiber that involved showing how fiber-rich cereal absorbed increasing quantities of water and how that relates to overall gut health. Participants were also given a demonstration followed by a discussion of creating various spice blends in order to reduce salt in their daily cooking. The training concluded with the cooks breaking into small groups and developing a sample menu, using the knowledge and techniques that had been demonstrated throughout the day's training.

3.1 Follow-Up

Following the cooks' training, churches were sent monthly mailings for 15 months that included information that would assist churches in their efforts of implementing the FAN program. Within each mailing was a "cooks' tool." Each month, cooks were provided with a new "FAN-friendly" recipe along with cooking tips to help promote a healthy lifestyle. The monthly materials reinforced the skills and knowledge covered in the cooks training as well as the FAN goals of eating more fruits, vegetables, and whole grains, along with consuming less sodium and fat. Pastors and FAN coordinators of the participating churches were also sent encouraging mailings, such as trail mix snack packs as a healthy treat and newsletters about how other churches are successfully incorporating the FAN program into their churches.

On the third month post training and every third month thereafter, FAN cooks received technical assistance phone calls from the nutrition educator on the delivery team. The purpose of the calls was to learn what types of programs and/or activities were being implemented. FAN staff asked questions such as, "Have you tried any new recipes?", "Have you made any changes in the way foods are prepared?", and "Have you made any changes in the types of foods that are served at church events?" These calls were also used to address and assist with any problems or challenges the cooks may be facing when implementing healthy eating activities, as well as to learn more about what types of additional support cooks needed from FAN staff. Information gathered during the technical assistance calls was used to improve the FAN program. For example, the cooks requested more cooking sessions during follow-up technical assistance calls. Therefore, booster sessions were created.

Booster sessions, called FAN Flair events, were half-day cooking trainings that were offered to church cooks who had been previously trained. FAN Flair sessions were offered around the Christmas and Easter holidays throughout the 5-year project. The purpose of these sessions was to reinforce the cooking techniques and DASH diet nutrition principles taught at the FAN cooks' training, but with an added holiday twist. During the FAN Flair, cooks took part in culinary demonstrations, sampled healthy and tasty seasonal foods and dishes, and shared tips for DASH food preparation. Cooks were also asked to bring their favorite church recipes for main and side holiday dishes as well as desserts. Cooks worked with the chef and nutrition educator to learn how these traditional recipes could be modified to be healthier and be consistent with FAN goals.

4. Results

Mean pre-training scores and standard deviations for the six scales of the cooking with a chef survey are shown in Table 1. In general, results showed that prior to the cooks' training, participants had fairly positive cooking attitudes (3.6/5.0), average cooking behaviors (2.6/5.0), and were fairly confident in their ability to eat fruit and vegetables (3.4/5.0), to

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complete various cooking tasks (3.7/5.0), to use basic cooking techniques (3.9/5.0), and to use fruit, vegetables, and seasonings (3.8/5.0).

Forty-two participants completed the two-item measure assessing cooking skills and confidence in preparing healthy meals for others pre- and post-training (the other cooks chose not to complete the measure, however some had to leave prior to this last portion of the training. Mean pre/post scores and standard deviations are also shown in Table 1. Results from the Wilcoxon signed ranked test showed a significant pre-post increase in cooks' cooking skills ($p<0.0001$) and confidence in preparing meals for others ($p<0.0001$).

4.1 Feedback

Although the main principles and recipes remained the same throughout, conversations with church cooks, feedback from participants taking part in the earlier trainings (i.e. during the actual training or on the evaluations), and feedback from the chef and nutrition educator led to modifications and improvements in the cooks' training. Furthermore, conversations during the technical assistance calls has also aided in uncovering areas of the training that work and areas that needed improvement. Such feedback has been critical in tweaking the training so that it met the wants and needs of the targeted population.

Anecdotal data on the cooks' training has been positive. The culinary nutrition lessons taught in the cooks' training were reportedly used in the participant's churches. Two of the more frequently stated changes church cooks reported making were that they were using less salt in cooking meals at church and that they were incorporating more vegetables and fruits into meal planning for the congregants. Examples of specific comments from the church cook participants on menu changes are shown in Table 3.

4.2 Lessons learned

Throughout the design, development, and administration of the cooks' training sessions, input from the planning committee and participants was instrumental to the chef and nutrition educator team. Lessons learned over the years are derived from discussions from the planning committee meetings, monthly technical assistance calls to the participants, word of mouth from the cooks during the trainings, and discussions with the research team. The most commonly described lessons learned from the project included particular needs in the training location, importance of teamwork, support for the cook, time constraints, and the importance of flexibility.

Choosing the right church to host the training is essential—Each church and kitchen has its strengths and limitations. However, there are minimum requirements that a church hosting a training needs to have to ensure the program is delivered successfully. The church needs to have a refrigerator, a stove top with an oven, a sink to wash the equipment, adequate counter space for several food preparation stations, and enough space to allow all participants to view culinary demonstrations. Ideally, a separate room for eating would be available to prevent any one room from being overcrowded.

Teamwork is a key component of the training—Teamwork is seen as cross-functional among the many people involved, including both participants and facilitators. The chef and nutrition educator need to execute the program within the given timeframe using time management and organization. The participants and facilitators need to work together to prepare meals successfully, on-time, and served hot. Participants need to cook together and communicate with the facilitators and other participants. The recipes involve many cooking techniques. The participants work in small groups and need to work together to prepare the dishes correctly.

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The church cooks need a support system—The training provides the tools for success, but does not assure the training will be implemented in the church or be well received by the congregants as anticipated. For the program to be successful, the pastor needs to support the efforts of the cooks, making the pastor an integral part of the FAN program. Through the pastor's involvement and encouragement, the cook gains the added support necessary to reach all members of the congregation. The cooperation of the pastor also lends credibility to the efforts of the cooks.

Time is an important factor—Prior to the training, staff needs to allocate the needed time for planning as well as shopping for ingredients. The staff needs to set-up and prepare the ingredients for the participants before they arrive. This includes washing the produce, preparing meats, and setting up the cooks' stations and dining room. Since the training requires a full day, facilitators must keep the program on track as it moves through each agenda section. This should be done while maintaining a positive teaching environment where questions and discussions are not stifled.

Incorporate flexibility—In order to efficiently present the discussion, cooking, and meal service components of the cooks' training, it is important that the facilitators and participants remain patient with the program logistics. The chef and the nutrition educator must be able to adapt to a variety of room and kitchen configurations and equipment. The cooks' training is an eight hour session in which flexibility, as well as creativity, can allow for successful completion of the program objectives in a timely manner, even if the location is less than ideal.

5.1 Other considerations

There are limiting factors that need to be considered when delivering the training. Some of these factors are present in all trainings, and some are unique each time the program is delivered. The church site hosting the training needs to be easily accessible and centrally located to all participants. The goal is for churches to send participants most closely affiliated with food service in the church. Some participants may not be able to commit to the full day, which requires agenda adjustments. Other participants may register but cannot make it to the training. As a result, a make-up session may need to be held for church cooks that were unable to make the training.

6. Conclusions

The inclusion of health in its mission and the expansive audience makes churches an appealing place to deliver health promotion programs. Interventions delivered through churches also have the potential to target their environment and organizational structures, which can positively influence and improve health practices of its congregations (Baruth, 2010). Support from the church may be a critical target in efforts aimed at improving dietary behaviors of church members. Baruth (2010) found that support from the church was related to higher fruit and vegetable intake, more favorable fiber-related behaviors, and more low-fat dietary behaviors.

The cooks in the AME church largely determine what foods are served at church events and how those foods are prepared. Interventions targeting church cooks, which can teach them how to prepare healthier, tasty foods, may help to improve the eating practices of the congregants. In the spirit of CBPR, the FAN cooks' training was adapted from a previously established training (CWC) so that it fit the needs and preferences of the AME population. Such adaptations are essential for promoting sustained change once the intervention period is over. All FAN materials and a modified training is available online: http://www.health-e-ame.com/

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Feedback from the cooks' training has been positive, and the participants report that they have incorporated some of the changes they have learned at training to the cooking practices at their churches. We are hopeful that the cooks' training will be a valuable contribution to current efforts of improving the health of the African American community, and ultimately reducing health disparities.

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Abbreviations

AME	African Methodist Episcopal
CBPR	Community Based Participatory Research
CU CHEFS®	C U Cooking and Healthy Eating Food Specialists
CWC	Cooking with the Chef
DASH	Dietary Approaches to Stop Hypertension
FAN	Faith, Activity, and Nutrition

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Biographies

Dr. Margaret D. Condrasky is an associate professor in the Department of Food, Nutrition, and Packaging Sciences at Clemson University. Dr. Condrasky is a registered dietitian and a certified culinary educator with the American Culinary Federation. Her research focuses on application of culinary nutrition principles with targeted populations.

Dr. Sara Wilcox is a professor in the Department of Exercise Science. Dr. Wilcox is a licensed clinical psychologist with postdoctoral training in cardiovascular disease epidemiology and prevention. Her research focuses on promoting physical activity and healthy eating in underserved communities.

Dr. Meghan Baruth is a research associate in the Department of Exercise Science at the University of South Carolina's Arnold School of Public Health. Her research interests lie in the area of community-based physical activity interventions among underserved and clinical populations.

Chad Carter is a graduate student in the Department of Food, Nutrition, and Packaging Sciences at Clemson University and is a professional chef.

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Jeannette F. Jordan M.S., registered dietitian and Certified Diabetes Educator was a member of the FAN project planning committee and assisted cooks trainings. She is affiliated with the Medical University of South Carolina.

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Highlights

- Self -reported skill rating of cooks increased
- Confidence in preparing meals increased
- Cooks report using less salt and using more vegetables and fruits in menus
- Lessons learned

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Table 1

Cooks' Training Evaluation Tools

Scale	What is measured	Response Options	# Items	Sample Question
Cooking with the Chef Survey Pre-training Evaluation Survey[a]				
Cooking attitude	How cooks feel about cooking, whether they like it or not and their impression of the amount of work involved.	strongly disagree to strongly agree	7	I like trying new recipes.
Cooking behavior	The cooks' usual cooking behaviors.	not at all to about everyday	3	During the past month how often did you reheat or use leftovers in another meal?
Produce consumption self-efficacy	The cooks' confidence in eating fruits and vegetables and their ability to meet the government's recommendations for fruit and vegetable consumption	not very confident to extremely confident	3	Indicate the extent to which you feel confident about eating the recommended 9 half cup servings of fruits and vegetables each day
Cooking self- efficacy	The cooks' confidence in various cooking tasks.	not very confident to extremely confident	6	Indicate the extent to which you feel confident about planning nutritious meals
Self-efficacy for using basic cooking techniques	The cooks' confidence in using standard cooking techniques.	not very confident to extremely confident	12	Indicate the extent to which you feel confident about sautéing
Self-efficacy for using fruit, vegetables, and seasonings	The cooks' confidence in preparing various types of vegetables and fruits along with vinegars, herbs and hot sauces.	not very confident to extremely confident	4	Indicate the extent to which you currently feel confident about preparing fruit (ex: peaches, watermelon)
2-item Pre/Post Training Evaluation[b]				
Cooking skills	The cooks' skill in cooking	Minimal skill to Practically a chef	1	How would you rate your skill in cooking?
Confidence in meal preparation	The cooks' confidence in preparing meals for others	Minimal confidence to Extremely confident	1	How would you rate your confidence in preparing health meals for others?

Note: Ns do not always add up to 100 due to missing data

[a] all subscales were measured on a 5 point scale, with higher scores more favorable.

[b] measured on a 10 point scale, with higher scores more favorable

[d] scores ranged from 1 to 10, with higher scores more favorable

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Table 2

FAN Cooks Workshop Agenda

FAN Cooks Workshop Agenda	
8:30- Introductions and Welcome	• Initial questionnaires • Introduction to the DASH Diet Basics • Make Menu Planning Introduction • Scriptures that can support Faith and Health • General Kitchen Safety Overview • Workstation Setup and Advice • Knife Safety and Tips
9:30- Cutting Techniques for Produce	• Color Your Plate with Vegetables and Fruits • Arrangement Techniques for Healthy Centerpieces • Recipes: Centerpiece Sauces • Fruits and Vegetables for Weekly Menus • Snack break (Fruit Tray) and water and discuss “recipes of the day”
10:30- Fruits and Vegetable Recipe Participation	• Recipes: Pasta Salad, Canned Yams, Berry Blue Salad/Dessert, and Peach and Tomato Salsa Preparation • Blanch and Shock Demo • Flavor and Nutrition on the Menu
12:00- Meat Substitutes Discussion and Recipes	• Recipes: Turkey Meatballs, Low sugar BBQ sauce, Black Eyed Pea Hummus, and Caribbean Chicken • Cooking Techniques for Protein Demonstrations Chicken (sauté, poach, roast demo) • Meats and Legumes Discussion and Examples • Healthy Food Tasting, Tips and Set-ups • Lunch Time and Recipe Discussion
2:30- Whole Grains Hands-on Demonstration	• Menu Planning Made Easy Discussion • Sample Menu Building team activity. • Cooks’ Role Play “introduction of their healthy new menu” for the church congregation. • Get Savvy in the Supermarket
3:30- Spice and Herb Demonstration	
4:00- DASH Diet Recap	• Diet and Recipe Make-over Tips and Examples • Recipes for a Crowd (standardized to 50 portions) • Evaluations and closing remarks

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Table 3

Representative Comments from Church Cook Participants

“I will use the things I learned.”
“I like the fact that everything was presented and offered in a fun easy way. It was all hands on so we all got valuable information about lifestyle changes not just for our churches but for our own house.”
“I enjoyed talk about and planning menu. I like all of the food that we prepared for lunch.”
“I like being able to prepare food without adding salt.”
“I thought everything was interesting.”
“Everything was explained where we could understand it clearly.”