

Benefits of Involving the Community in Developing Cancer Prevention Programs:

The Down Home Healthy Living 2.0 Cookbook

Background

- In 2002, Down Home Healthy Living (DHHL) Cookbook was published and distributed by the National Black Leadership Initiative on Cancer (NBLIC)
 - Chef-developed, dietitian-approved recipes
 - Cancer prevention lifestyle tips

- In 2012, NBLIC community coalitions participated in disseminating the Educational Program to Increase Colorectal Cancer Screening (EPICS)
 - 5-year cluster randomized controlled trial
 - 18 US communities

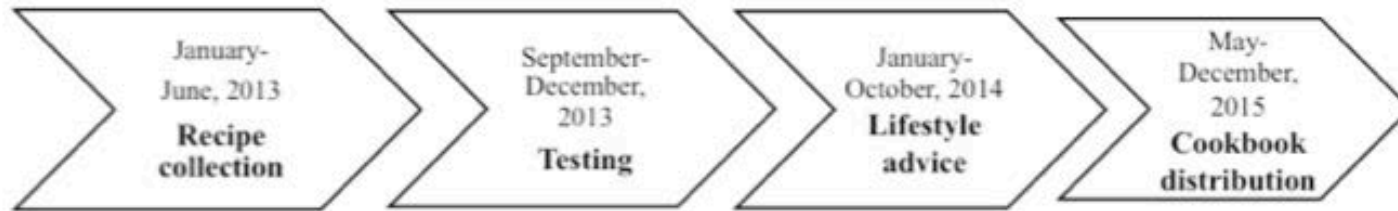
Purpose

**Lifestyle Modification TIPS for the
Down Home Healthy Living
Cookbook** a community grant from the
Prevent Cancer Foundation

- Small media (educational resource) for EPICS
- Document the development of a cookbook of healthy recipes with lifestyle tips to promote awareness of diet-related cancer prevention guidelines (D-RCPGs)
 - Community-engaged process for transforming main dishes, side dishes, snacks, and desserts into healthier options
 - Presentation of advice on dietary intake and physical activity in print and electronic versions of a cookbook

Process

Figure 1. DHHL 2.0 Timeline with Milestones



- Call for recipes from NBLIC community coalitions
- Recipes submitted and reviewed by chef
- Transformed by chef with input from registered dietitian
- Community nutrition education lecture and cooking demonstration held
- Recipes selected from cookbook categories (entrees, snacks and desserts)
- Sensory evaluation completed
- Recipes finalized with community input
- Nutritional analyses completed
- Reviewed scientific literature, existing community resources and consulted experts in the field regarding cancer prevention guidelines
- NBLIC community coalitions organized 60-minute focus group discussions
- Targeted four D-RPGs: portion control; red and processed meat; vegetables/fruits; and whole grains
- Lifestyle tips developed
- Cookbook and lifestyle tips compiled
- 2500 Cookbooks printed
 - 125 distributed to each NBLIC community coalition
- Electronic Cookbooks
 - Academic and community partner websites
 - Newsletters
 - Social Media

D-RCPGs: diet-related cancer prevention guidelines

- 40 recipes were transformed, refined, and prepared by a chef with input from a registered dietitian
 - Nutrition Lecture
 - Cooking Demonstration
 - Taste Test
 - Sensory Evaluation

- Focus group discussions with EPICS participants (n=43; mean age 57.32 with a range of 35-75 years) in Miami, Chicago, Houston, Philadelphia and Los Angeles were conducted to ensure acceptability of lifestyle (diet and physical activity) messages
 - Practical guidance on measuring ingredients
 - Best ways to prepare healthy meals
 - Health benefits of fruits and vegetables
 - Recommendations for physical activity



DOWN HOME HEALTHY LIVING 2.0

**FAVORITE RECIPES OF
COMMUNITY COALITIONS IMPLEMENTING THE
EDUCATIONAL PROGRAM TO INCREASE
COLORECTAL CANCER SCREENING (EPICS)
WITH LIFESTYLE TIPS**



The **National Black Leadership Initiative on Cancer Chicago Coalition** was established in 1989 as a collaboration of physicians, public health practitioners, students and community organizations who believe that education is paramount to reducing and controlling the disparate cancer morbidity and mortality impacting African Americans. Try our Honey Mustard Chicken Thighs, Curried Cauliflower Mash and add a side of string beans for a perfect plate.

Honey Mustard Chicken Thighs

(Serves 4)

Ingredients

½ cup Dijon mustard
¼ cup maple syrup
1 tbsp. rice wine vinegar
1.5 lbs. chicken thighs, skinless
Fresh rosemary, optional for garnish
Salt and pepper

Preparation

- Preheat oven to 450°.
- Mix the mustard, syrup and vinegar in a bowl.
- Coat the chicken thighs with salt and pepper and toss into the mustard sauce.
- Once coated, put the thighs into a non-stick or foil lined baking dish.
- Pour any remaining mustard sauce over the chicken thighs.
- Bake the thighs at 450° for 40 minutes or until a thermometer reads 180°.
- Allow the chicken to rest for 5 minutes before serving.
- Top with fresh rosemary for a garnish.

Per ¼ recipe (5 oz.):

191 calories	14.5g carbohydrate	22.3g protein	4.5g total fat (1.1g sat. fat)
94mg cholesterol	0g dietary fiber	407mg sodium	

Cancer Prevention Guideline: Eat a variety of vegetables and fruits each day.

Lifestyle Tip: Before you eat, think about what goes on your plate and select at least two vegetables per meal.

Email: TBritt@csu.edu

Getting Started

We asked African-American women to identify their top 10 strategies to reduce cancer risk, and here is what they told us:

- 1. What is “Down Home Healthy Living?”**
Selecting a nutritious diet and exercising regularly to lower your chances of getting cancer.
- 2. Why is a healthy lifestyle so important?**
You will live longer, reduce the need for medication and feel better. If you are at risk for cancers like colorectal and breast cancer, eating better and exercising lowers that risk.
- 3. How can you maintain a healthy weight?**
Limit portion sizes, select healthy foods, avoid fried, fatty foods and be physically active.
- 4. What advice do you have for eating less high fat foods?**
Check food labels, make a food plan and watch how much you eat by monitoring portion sizes.
- 5. What are the best ways to prepare healthy meals?**
Put away the deep fryer and bake, roast, broil, boil, steam, grill, stir-fry or sauté instead.
- 6. What are alternatives to salt?**
Try using lemon or lime, fresh and dried herbs, spices and other salt-free seasonings.
- 7. Why is physical activity important?**
It is good for your heart. Walking is best because it burns calories and can help you lose weight.
- 8. Which physical activities do you recommend?**
Easy exercises, like walking, dancing, yoga and lifting weights, are a few examples. Everyday activities, such as walking to the store, cleaning house (using the broom instead of the vacuum) and hanging out clothes, count too.
- 9. What are strategies to help you enjoy physical activity?**
Exercising with a partner, self-talk (motivation), setting a goal and monitoring progress and making it fun were the most common recommendations.
- 10. What are health benefits of eating fresh fruits and vegetables?**
Promotes good digestion, protects against cancer and strengthens your immune system.

Community Engagement

- Community-based participatory research (CBPR)
 - Partnership approach to research
 - Equitably involves organizational representatives in all aspects of the research process
 - Share decision-making and ownership
- Community-based interventions using CBPR are potential tools in promoting health equity
 - Address systematic, environmental, and community-level factors that impact health

Operationalization of CBPR

- Recognize community as a unit of identity.
- Build on strengths and resources of individual skills, social networks, and organizations.
- Facilitate a collaborative, equitable partnership in all research phases, involving an empowering and power-sharing process that attends to social inequalities.
- Foster co-learning and capacity building among all partners.

- Integrate and achieve a balance between data generation and intervention for the mutual benefit of all partners.
- Focus on local relevance of public health problems and on ecological perspectives that attend to the multiple determinants of health.
- Involve system development through a cyclical and iterative process.
- Disseminate results to all partners and involve them in the wider dissemination of results.
- Involve long-term processes and commitment to sustainability.

- DHHL 2.0
 - Distributed to 2500 EPICS participants
 - Included on:
 - Augusta University website
 - NBLIC community coalition websites
 - Prevent Cancer Foundation resource
 - A mobile app to prevent cancer
 - SISTAAH Talk, a breast cancer support group for African American women

[VIDEO]



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Cooking up prevention: 2014 community grantee spotlight

October 23, 2014

Through the support of a Prevent Cancer Foundation [community grant](#), 7,200 African Americans in urban and rural areas in 11 states will receive cookbooks with healthy lifestyle tips on diet, exercise and cancer screening.

With a \$10,000 grant from the Foundation, staff at the Georgia Regents University in Augusta, Georgia, have been collecting tips from African American women in Miami, Chicago, Philadelphia and Los Angeles. When the cookbook is finished, 18 community coalitions will help with distribution.

The "Down Home Healthy Living Cookbook" is being developed as an educational resource for a multi-state colorectal cancer screening intervention. Tips like using the palm of one's hand to measure portion sizes will help provide practical action steps for living healthier lives. The cookbook will also include information on ways to stay active and incorporate whole grains into meals.

[Colorectal Cancer](#) is the second leading cause of cancer-related death in the United States. African Americans have the highest colorectal cancer incidence and mortality rates among any racial/ethnic group.



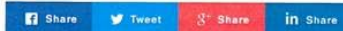
"The Prevent Cancer Foundation community grant has allowed us to incorporate the voices of women into this cookbook. The tips belong to the women. They believe in them and therefore are much more likely to adopt them and achieve their goals for healthier diets and exercise," said Dr. Selina Smith, Director of the Institute of Public & Preventive Health at Georgia Regents University.

The Foundation is proud to support this [2014 community grant](#) project and help make a difference in African American communities by promoting healthy lifestyle behaviors and screening.

Learn more about what you can do to [reduce your cancer risk](#) and about [healthy habits for children and families](#).

Tags: [Cancer Awareness](#) [Cancer Prevention](#) [cancer risk reduction](#) [Community Outreach](#) [Health](#)

[Healthy Eating](#)





HHS Public Access

Author manuscript

Jacobs J Food Nutr. Author manuscript; available in PMC 2015 December 24.

Published in final edited form as:

Jacobs J Food Nutr. 2015 ; 2(2): .

Developing a Cookbook with Lifestyle Tips: A Community-Engaged Approach to Promoting Diet-Related Cancer Prevention Guidelines

Selina A. Smith, PhD, MDiv^{1,2}, Joyce Q. Sheats, RN, MPH¹, Mary S. Whitehead, MPH, CHES³, Ernestine Delmoor, MPH⁴, Thomas Britt, MD, MPH⁵, Cassandra L. Harris, MS, MCHES⁶, Janette Robinson-Flint⁷, L. Monique Porche-Smith, MS⁸, Kayellen Edmonds Umeakunne, MS, RD, LD⁹, and Steven S. Coughlin, PhD¹⁰

¹Institute of Public and Preventive Health and Department of Family Medicine, Medical College of Georgia, Georgia Regents University, Augusta, GA, USA

²Cancer Research Program, Morehouse School of Medicine, Atlanta, GA, USA

³Florida Resources for Enhancing and Sustaining Health, Miami, FL, USA

⁴National Black Leadership Initiative on Cancer, Philadelphia Chapter, Philadelphia, PA, USA

⁵National Black Leadership Initiative on Cancer, Chicago Coalition, Chicago, IL, USA

⁶National Black Leadership Initiative on Cancer, Houston Coalition, Houston, TX, USA

⁷Black Women for Wellness, Los Angeles, CA, USA

⁸International Culinary School at the Art Institute of Atlanta, Atlanta, GA, USA

⁹Bionutrition Core and Body Composition Laboratory, Clinical Research Center, Morehouse School of Medicine, Atlanta, GA, USA

¹⁰Department of Health Science and Sustainability, Division of Public Health, University of Massachusetts, Lowell, MA, USA

Abstract

Supplementing nutrition education with skills-building activities may enhance community awareness of diet-related cancer prevention guidelines. To develop a cookbook with lifestyle tips, recipes were solicited from the National Black Leadership Initiative on Cancer (NBLIC) community coalitions and dietary intake advice from participants in the Educational Program to Increase Colorectal Cancer Screening (EPICS). With guidance from a chef and registered dietitian, recipes were tested, assessed, and transformed; lifestyle advice was obtained from focus groups. The cookbook with lifestyle tips, named "Down Home Healthy Living (DHHL) 2.0," was distributed in print form to 2,500 EPICS participants and shared electronically through websites and social media.

*Corresponding author: Dr. Selina A. Smith, Professor and Director, Institute of Public and Preventive Health, Georgia Regents University, 1120 15th Street, CJ2300, Augusta, GA 30912 Tel: (706) 721-1104; SESMITH@gru.edu.

Community-engaged approach to promoting adherence to diet-related cancer prevention guidelines

Selina A. Smith, PhD, MDiv^{1,2}, Joyce Q. Sheats, RN, MPH¹, Mary S. Whitehead, MPH, CHES³, Ernestine Delmoo, MPH⁴, Thomas Britt, MD, MPH⁵, Cassandra L. Harris, MS, MCHES⁶, Janette Robinson-Flint⁷, L. Monique PorcheSmith, MS⁸, Kayellen Edmonds Umeakunne, MS, RD, LD⁹, and Steven S. Coughlin, PhD¹⁰

¹Institute of Public and Preventive Health and Department of Family Medicine, Medical College of Georgia, Georgia Regents University, Augusta, GA

²Cancer Research Program, Morehouse School of Medicine, Atlanta, GA ³Florida Resources for Enhancing and Sustaining Health, Miami, FL

⁴National Black Leadership Initiative on Cancer, Philadelphia Chapter, Philadelphia, PA ⁵National Black Leadership Initiative on Cancer, Chicago Coalition, Chicago, IL

⁶National Black Leadership Initiative on Cancer, Houston Coalition, Houston, TX ⁷Black Women for Wellness, Los Angeles, CA

⁸International Culinary School at the Art Institute of Atlanta, Atlanta, GA ⁹Bionutrition Core and Body Composition Laboratory, Clinical Research Center, Morehouse School

Medicine, Atlanta, GA ¹⁰Department of Health Science and Sustainability, Division of Public Health, University of Massachusetts, Lowell, MA



ABSTRACT

Supplementing nutrition education with skills-building activities may enhance community awareness of diet-related cancer prevention guidelines. To develop a cookbook with lifestyle tips, recipes were solicited from the National Black Leadership Initiative on Cancer (NBLIC) community coalitions and dietary intake advice from participants in the Educational Program to Increase Colorectal Cancer Screening (EPICS). With guidance from a chef and registered dietitian, recipes were tested, assessed, and transformed; lifestyle advice was obtained from focus groups. The cookbook with lifestyle tips, named "Down Home Healthy Living (DHHL) 2.0," was distributed in print form to 2,500 EPICS participants and shared electronically through websites and social media. **Grant Support:** NIH 1R01CA166785; NIH US4 CA118638

INTRODUCTION

Food consumption is influenced by various interacting factors, including group processes. Supplementing traditional nutrition education with experiential, skills-building activities (e.g., recipe modification, and cookbook development) can enhance awareness of diet-related cancer prevention guidelines (D-RCPGs).

Objectives of this study include:

- 1) to document the development of a cookbook of healthy recipes with lifestyle tips to promote awareness of D-RCPGs in African American communities.
- 2) to describe a community-engaged process for transforming main dishes, side dishes, snacks, and desserts into healthier options.
- 3) to present advice on dietary and physical activity in print and electronic versions of a cookbook.

METHODS

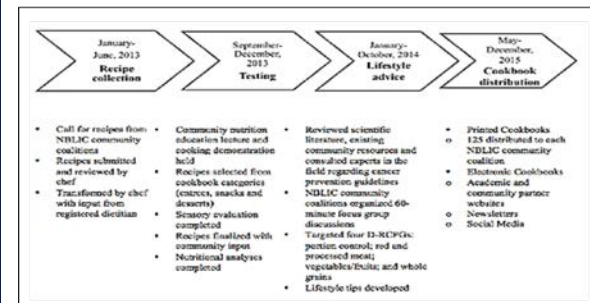
The Institutional Review Board of Georgia Regents University approved this study. This mixed-method study was completed in three phases from 2013-2015.

Phase 1: community coalitions implementing EPICS, a 5-year, cluster randomized control trial conducted in 18 US communities, were invited to submit recipes.

Phase 2: recipes were transformed, refined, and prepared by a chef with input from a registered dietitian. A nutrition lecture, a cooking demonstration, and a taste test were performed. Participants completed a sensory evaluation of the appearance, taste, texture, aroma, and overall acceptability of the dishes. Using a Likert scale, participants were asked to rate each dish from 1 to 5. Nutritional analyses were completed using ESHA Food Processor SQL Version 10.5.2, Nutrition and Fitness Software (ESHA Research, Salem Oregon).

Phase 3: Four focus group discussions among EPICS participants in Miami, Chicago, Philadelphia, and Los Angeles were conducted to ensure acceptability of messages related to lifestyle (diet and physical activity). An interview guide, developed for conducting the discussions, was tested for length, clarity, and organization. Discussions were digitally recorded, transcribed verbatim, manually coded, summarized, and analyzed using Qualitative Content Analysis NVIVO 10 software.

Figure 1. DHHL 2.0 Timeline with Milestones



RESULTS

18 NBLIC community coalitions submitted 40 recipes to the EPICS Coordinating Center.

8 recipes were excluded due to similarity to other submissions (e.g., multiple chicken dishes); lack of adherence to D-RCPGs (e.g., smoked barbecue pork ribs); or poor fit with other submissions (e.g., high calorie desserts). The total number of recipes, N=32.

36 African American men and women, ages 22-86, participated in a 2-hour nutrition education, cooking demonstration, and taste-test of 8 transformed recipes (Table 1).

Most participants (74%) rated dishes as 5 on appearance (extremely attractive); taste (tasted great); texture (great texture); aroma (smelled good); and overall acceptability (extremely acceptable).

Green Beans & Potato Salad with Dill-Lemon Aioli was rated 2 - 3 as unappetizing, off flavor, off texture, unappetizing aroma, and moderately acceptable.

Recipes with overall acceptability of 4 or 5 were included in the cookbook.

Four focus groups (n = 43; mean age: 57.3 years; standard deviation=7.9; range: 35–75 years old) were completed in Miami, Chicago, Philadelphia, and Los Angeles.

Themes emerging from content analysis converged into the following categories:

- 1) practical guidance on measuring ingredients;
- 2) best ways to prepare healthy meals;
- 3) health benefits of fruits and vegetables; and
- 4) recommendations for physical activity.

The cookbook with lifestyle tips, "Down Home Healthy Living 2.0," was distributed in print form to 2,500 EPICS participants and shared electronically through websites and social media.



RESULTS

Table 1. DHHL 2.0 Recipe Sensory Evaluation

Recipe	Appearance	Taste	Texture	Smell	Acceptability	Comments
Turkey Sausage, Kale & White Bean Soup	5	5	5	4	5	"Excellent soup with good flavor" "Seasoned well, didn't miss the salt"
Green Beans & Potato Salad with Dill-Lemon Aioli	2	3	2	3	3	"Weird combination" "Potatoes and green beans not a good mix?"
Pan-Seared Balsamic Chicken	5	4	4	5	5	"Delicious; wanted more" "Balsamic a bit strong"
Baked Parmesan & Herb Crusted Tilapia	5	5	4	5	5	"Nice"
Wokky Greens	5	4	3	5	4	"Great flavor" "Not tender enough"
Dirty Rice	5	4	4	5	4	"Tasty" "Too much for a side dish"
Whole Wheat & Honey Cornbread	5	4	5	4	5	"Smells great"
Peach Crisps Cups	5	5	5	4	5	"Very good and healthy"

DISCUSSION/CONCLUSIONS

Consumers are frequently bombarded with confusing and contradictory information about nutrition and food choices.

The Institute of Medicine (IOM) and other groups have provided readily accessible information to nonscientists to enable people to reduce their risk of diet-related chronic illnesses, including common forms of cancer.

Carefully developed cookbooks and related educational resources can serve as useful sources of information for consumers seeking to lower their risk of chronic illness by adopting or maintaining a nutritious diet.

Few cookbooks and related dietary resources have been developed using community-based participatory approaches.

Culturally appropriate and tailored resources are more likely to be disseminated and widely used by the target audience.

Benefits of Community Involvement

- Primary colorectal cancer prevention
 - Screening
 - Dietary intake
 - Physical activity
- Ownership of the problem *and* the solution
 - NBLIC community coalitions generated the idea
 - Description of community and featured recipe
 - TIPS incorporated the voices of women
- Co-authorship (manuscript, poster presentation)
- Wider dissemination of results
 - Community coalition websites
 - Individual community recipe card

Thank You

Selina A. Smith, PhD, MDiv
Director of Research, Professor, &
Curtis G. Hames, MD, Distinguished Chair
Department of Family Medicine
Medical College of Georgia at Augusta University

SESMITH@augusta.edu