

# THE "ROLLING STORE:" AN ECONOMICAL AND ENVIRONMENTAL APPROACH TO THE PREVENTION OF WEIGHT GAIN IN AFRICAN AMERICAN WOMEN

**Objective:** To test the feasibility of the "Rolling Store," an innovative food-delivery intervention, along with a nutrition education program to increase the consumption of healthy foods (fruits and vegetables) to prevent weight gain in African American women.

**Methods:** Forty eligible African American women were enrolled in the study and randomized to intervention or control groups. A trained peer educator and a Rolling Store operator implemented the study protocol at a local community center.

**Results:** The program retention rate was 93%. Participants in the intervention group lost a mean weight of 2.0 kg, while participants in the control group gained a mean weight of 1.1 kg at six months. Overall participants showed a mean decrease in weight of  $-4$  kg (standard deviation 3.0 kg), but the intervention group lost significantly more weight and had a decreased body mass index at six months. In the intervention group, the average number of servings consumed per day of fruits/fruit juice and vegetables significantly increased at six months.

**Conclusions:** The Rolling Store, at least on the small scale on which it was implemented, is a feasible approach to producing weight loss and improvements in healthy eating when combined with an educational program in a small community center. (*Ethn Dis.* 2009;19:7-12)

**Key Words:** Community-based, fruits and vegetables, African American women

Betty M. Kennedy, PhD; Catherine M. Champagne, PhD; Donna H. Ryan, MD; Robert Newton, Jr, PhD; Beverly K. Conish, MPA; David W. Harsha, PhD; Erma J. Levy, MPH; Margaret L. Bogle, PhD, for the Lower Mississippi Delta Nutrition Intervention Research Initiative

## INTRODUCTION

More than 10% of African American women aged 40 to 59 years old have class III obesity (body mass index [BMI]  $>40$  kg/m<sup>2</sup>).<sup>1-2</sup> The disparity in obesity rates is primarily limited to women; significantly higher rates of obesity exist among African American and Hispanic women than among women of other ethnic groups and men of any ethnic group.<sup>3</sup> A common treatment option for obesity is nutrition education, the aim of which is to restrict total energy intake by eating healthy foods.<sup>4</sup>

Obesity is second only to tobacco use as a preventable cause of death, but the food industry is poorly regulated in terms of advertising and is not held liable for the health consequences of its products.<sup>5</sup> The American Dietetic Association has taken the position that successful weight management requires a lifelong commitment to healthy lifestyle behaviors that emphasize eating habits and physical activity that are sustainable and enjoyable.<sup>6</sup> Subsidies and/or provisions for healthy, traditional foods, plus exercise, may prove beneficial in the prevention of weight gain.<sup>7</sup>

The purpose of this 6-month pilot study was to test the feasibility of the "Rolling Store," an innovative food-delivery medium, along with a nutrition education program to increase consumption of healthy foods (fruits and vegetables) to prevent weight gain in African American women. The hypothesis tested in the study was that access to healthy foods, along with the education of how to prepare these foods, may improve diet quality and promote healthy eating habits.

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## METHODS

### Participants

The study was conducted at a community center in East Baton Rouge Parish in Louisiana. The mayor-president's office of East Baton Rouge Parish approved the study site. In addition, in-kind service (classroom space and storage for study equipment) was provided to conduct the study at the community center. Forty eligible African American women aged  $\geq 18$  years were recruited and randomly assigned: 20 to the treatment group and 20 to the control group. Thereafter, all study participants were assigned to the control group. The study required at least one monthly contact with participants in the control group and at least 24 contacts with those in the treatment group. All participants received calculators, water bottles, and duffle bags as incentives for participating in the study. At the end of 6 months in the study, all participants received a cash stipend of \$75.

Study participants were recruited according to detailed inclusion and exclusion criteria and were supervised by

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From the Pennington Biomedical Research Center, Baton Rouge, Louisiana (BMK, CMC, DHR, RN, BKC, DWH, EJJ); and the United States Department of Agriculture, Agricultural Research Service, Little Rock, Arkansas (MLB).

Address correspondence and reprint requests to Betty M. Kennedy, PhD; The Pennington Biomedical Research Center, 6400 Perkins Rd, PO Box 80025, Baton Rouge, LA 70898; 225-763-3090; Betty.Kennedy@pbrc.edu