



# DASH DIET REDUCES SALT INTAKE IN AFRICAN AMERICAN WOMEN

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## INTRODUCTION

- Hypertension affects more than 25% of adults worldwide, and contributes to more than 62% of strokes, 49% of cardiovascular disease, and 7.1 million deaths annually (Boalani, Randall, & Sinha, 2013).
- Between 2007 and 2010, African American women between the ages of 18 and 44 had significantly higher rates of hospitalizations for hypertension (128 per 100,000 population) when compared to Caucasians (24 per 100,000 population) (Will & Yoon, 2013).
- According to Williams (2009), African American women have a 352% higher mortality rate from hypertension than Caucasian women.
- Compared to other populations, African American women are more likely to be diagnosed with hypertension, more likely to have untreated hypertension, and more likely to suffer adverse clinical outcomes (American Heart Association, 2013).
- Even after diagnosis, many barriers to compliance exist including lack of knowledge regarding the disease process, economic factors that limit access to a prescribed diet regimens, cultural beliefs, and lifestyle norms of the African American population.

## PROBLEM

- Hypertension is a risk factor for cardiovascular disease, which is the leading cause of death among African American women (American Heart Association, 2013).
- Research suggests that a high intake of sodium is associated with high blood pressure (Lee & Gunn, 2010).
- Sodium has become one of the most common ingredients in the American food supply. In the United States, a majority of the sodium consumed in diet comes from processed foods, restaurant dishes, and customary dishes that have added salt or sodium chloride (Lee & Gunn, 2010).
- Traditional cuisine for many African Americans consist of soul foods, which are often high in sodium, fat, cholesterol, and starch content (Spencer, Jablonski, & Loeb, 2012).
- African American women are the primary members of the family who purchase and prepare meals. Therefore, African American women have the potential to influence the family's eating habits by means of role modeling and have the greatest opportunity to encourage change in dietary behaviors among family members (Brown, Geiselman, & Broussard, 2010).

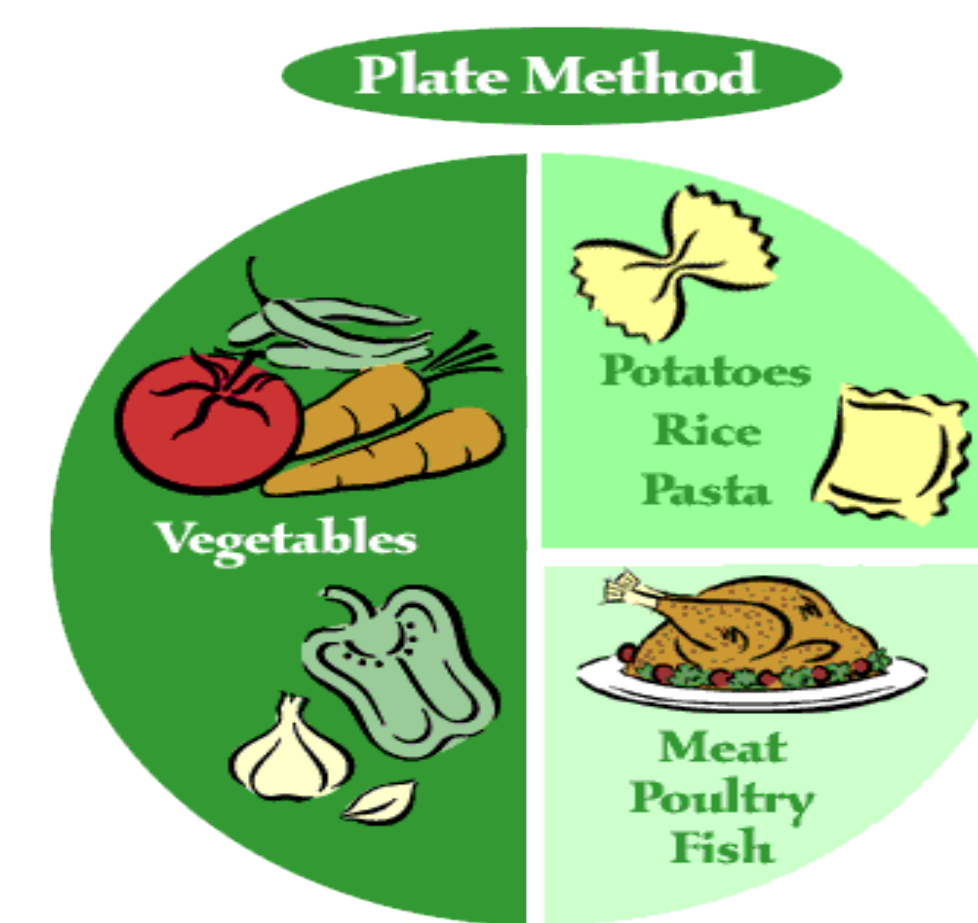
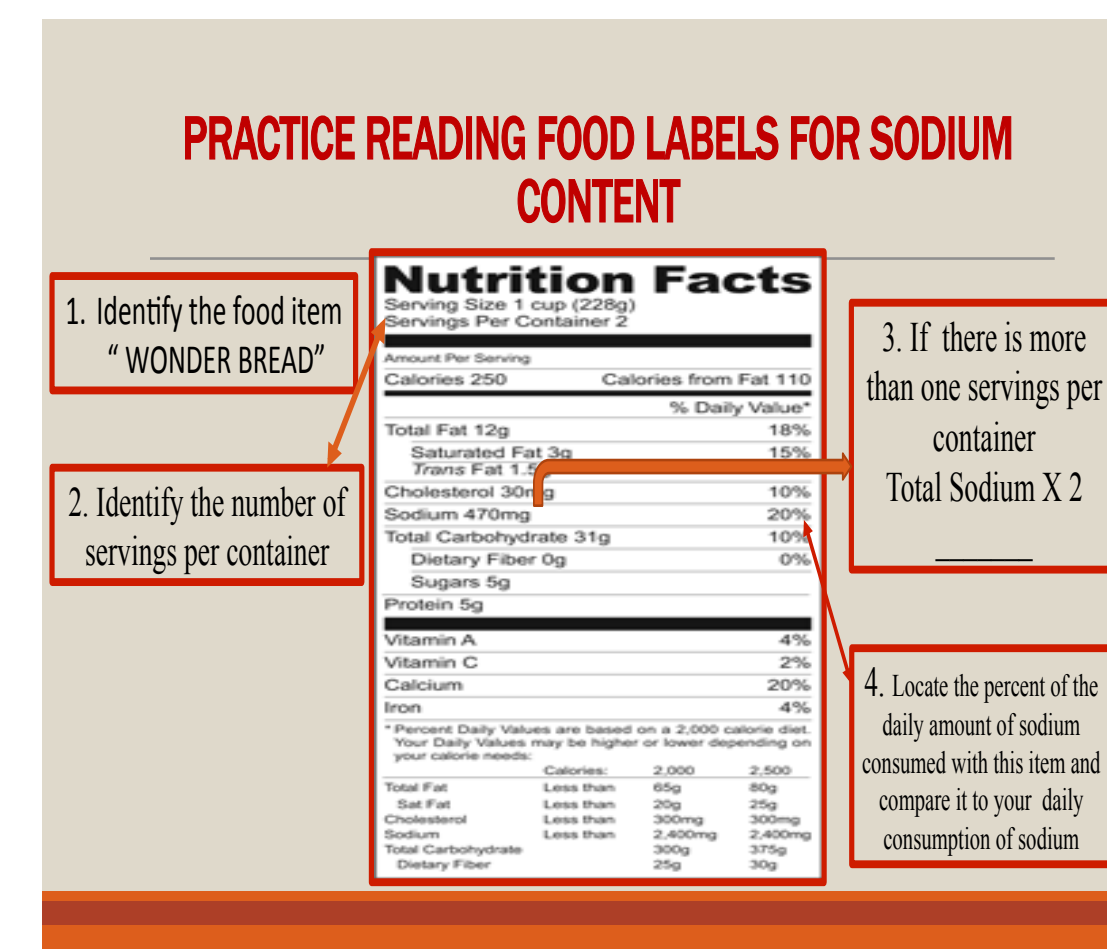
## PURPOSE/SIGNIFICANCE

- The purpose of this project was to use culturally appropriate nursing interventions to improve knowledge about dietary approaches to minimize risks for hypertension, increase confidence in self-care abilities while managing dietary lifestyle changes, and reduce sodium intake among hypertensive African American women.
- Educational initiatives focused on facilitating behavioral changes among hypertensive minorities have the potential to improve their selection and preparation of preferred foods.
- As a result of a culturally tailored education program about Dietary Approaches to Stop Hypertension (DASH) diet, mortality rates among African American women may decrease, optimal blood pressure may be achieved, quality of life will be improved, and adverse outcomes secondary to cardiovascular disease will dissipate.

## LITERATURE REVIEW

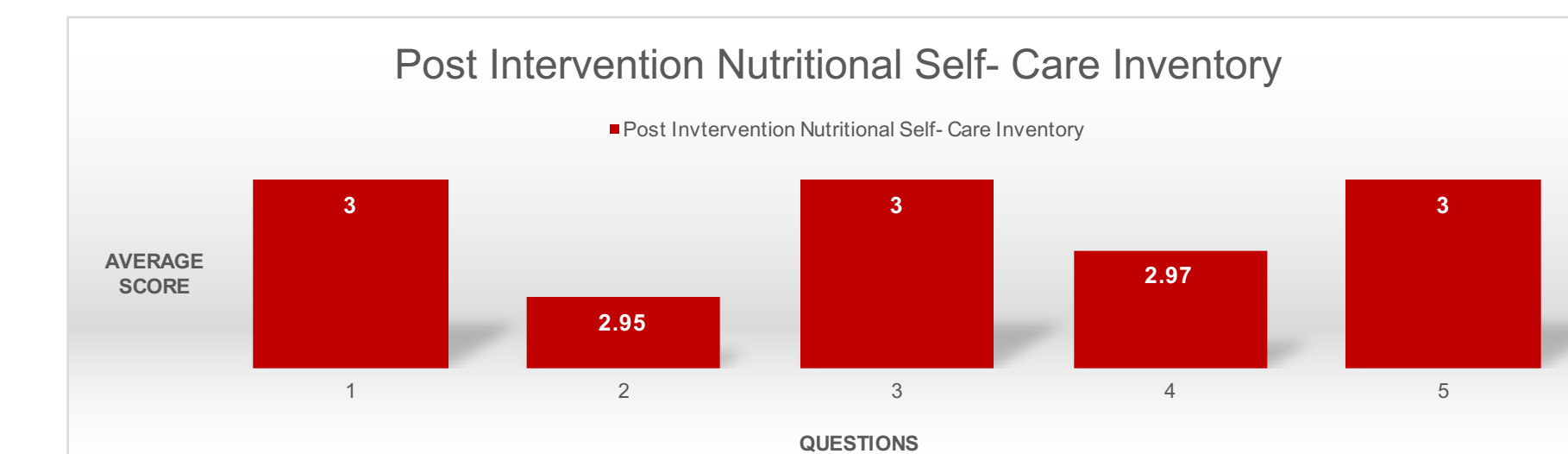
- Orem's Self-Care Theory (2001) was selected as the theoretical framework to guide the project.
  - Concepts utilized include: agent, self-care, self-care deficit, universal self-care requisites, health deviation self-care requisites, nursing system, and self-care agency
- Findings from the review of literature indicated that participants from low SES backgrounds have lower dietary knowledge scores at baseline (Racine et al., 2011). Few studies focused on improving dietary knowledge, self-management, and DASH adherence among African American women.
- Even though African Americans increased their consumption of DASH foods after dietary counseling, they continued to report lower overall adherence to the DASH eating plan compared with white participants. High cost of healthy foods, reduced availability of healthy foods, and less appealing taste of low salt and fat foods might be factors that decrease DASH adherence after participation in educational interventions (Epstein et al., 2012).
- Limited studies provided a detailed explanation of the methods utilized to improve selection, preparation, and adherence of DASH foods among African Americans. The inability to determine which components of the protocol contributed to significant results impedes future replication of the intervention.
- Given the potential benefits of the DASH eating plan for African American women, there remains a need for future culturally appropriate dietary interventions that can increase adherence, improve objective measurements (BP and sodium levels), and subjective measurements which include perceived benefits, dietary knowledge, self-management, and self-confidence).
- Effective strategies are needed to establish a gold standard for DASH interventions, and to maximize the potential benefits of lowering the incidence of hypertension in African American women.

## METHOD/ACTIVITIES



- Methodology:
  - Preparation phase: identified an area of need, obtained access to the facility, solicited donations, recruited participants, purchased items, and completed set up for the event.
  - Implementation phase: An interactive exercise was carried out in which participants were educated about DASH diet, reading food labels, how to substitute foods in recipes, how to shop, and plan meals.
  - Evaluation phase: Participants were asked to complete the pre and post intervention nutritional self-care inventory.
- Activities:
  - Ice Breaker: Starting the Diet Conversation.
  - Overview of Hypertension and Risk Factors
  - Learning How to Read the Food Label Exercise.
  - Learning How to Manage Serving Size and Portion Control Using the Plate Method.
  - Recipe Substitution with DASH DIET ingredients.
  - Shopping for DASH compliant foods on a budget.
  - Cooking Demonstration

## EVALUATION/OUTCOMES



- Participant (N=38) submitted the post intervention nutritional self-care inventory. The average score for Question #1 was M=3 out of 3 demonstrating that everyone was very confident in their ability to integrate healthy lifestyle choices. For Question #2, the average score was M=2.95 out of 3 demonstrating that the participants felt confident adhering to the Dietary Approaches to Stop Hypertension Dietary Plan. For Question #3 the average score was M=3 out of 3 demonstrating that all of the participants felt very confident in their ability to purchase healthy food items. The average score for Question #4 was M=2.97 out of 3 demonstrating that a majority of the participants felt very confident managing a food budget. For Question #5, the average score from the 38 participants was M=3 out of 3 demonstrating that all of the participants felt very confident in their ability to read food labels.

## IMPLICATIONS

- As a result of the intervention, the participants became more receptive to adhering to diet modifications for the management of hypertension. Interventions utilized can be implemented in future practice, as it motivates participants to engage in healthy dietary practices and positive healthcare behaviors.
- Future interventions should be aimed at teaching health professionals culturally tailored education for the management of patients diagnosed with hypertension. Health care providers should partner with minority communities to determine which educational interventions improve patient acceptance of lifestyle changes.
- The project intervention can make a difference in nursing practice as it improves knowledge, emphasizes self-management, promotes compliance, and reduces morbidity and mortality rates.
- This project should be presented in various settings by increasing awareness and interacting directly with the participants about DASH diet and improvement in health outcomes.

## PROJECT TEAM IN ACTION

