

# Culturally tailored nutrition education interventions: why focus on African American women?

## Abstract

According to the United States (US) 2010 census, African Americans (AA) represent 13% of the US population and are the second largest ethnic minority group in the country. However, as a group, the health status of AA is precarious from cradle to grave. A vast majority (80.5%) of AA women are either overweight or obese. As a result, they are more susceptible to a host of weight-related health issues, including high blood pressure, high cholesterol, arthritis, stroke, heart disease and diabetes. Notably, AA women have been reported to be less preoccupied with dieting and somewhat more tolerant of being overweight than white women. It has also been reported that the social environment of AA women is less negative about obesity than might be commonly assumed and that being overweight is not necessarily synonymous with being unattractive. Several lifestyle intervention trials have been designed specifically to promote physical activity and weight loss among AA. In spite of the fact that behavior changes have been documented in some participants, changes often are not sufficient to produce significant differences. This review paper explores how culturally tailored nutrition education delivered using an innovative approach such as an Internet-based platform may provide a deeper comprehension of the issues AA women face and help this population improve their health status and achieve a better quality of life.

**Keywords:** nutrition education, African American women, culturally tailored interventions, health promotion, internet communication technologies

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**Abbreviations:** AA, African American; WHO, world health organization; BMI, body mass index

## Introduction

According to the United States (US) 2010 census, African Americans (AA) represent 13% of the US population and are the second largest ethnic minority group in the country.<sup>1</sup> As a group, the health status of AA is precarious from cradle to grave. A vast majority (80.5%) of AA women are either overweight or obese. As a result, they are more susceptible to a number of weight-related health issues, including high blood pressure, high cholesterol, arthritis, stroke, heart disease and diabetes.<sup>2</sup>

The World Health Organization (WHO) defines overweight and obesity as abnormal or excessive body fat that may impair health. WHO relies on the body mass index (BMI) cutoffs of 25 to 30 or higher in the assessment of overweight and obesity, respectively.<sup>3</sup> The BMI is a number resulting from dividing the weight in kilograms by the square of the height (Kg/m<sup>2</sup>) and the validity of this measurement has been questioned for years, especially among minorities. There are limitations in the use of the BMI index to define obesity prevalence in ethnic and racial groups.<sup>4</sup> The BMI measure does not adequately identify the percentage of body fat, nor does it distinguish between fat and lean tissue, or directly represent adiposity. AA women and men tend to have higher lean mass and lower fat mass compared to their white counterparts.<sup>3</sup>

Notably, AA women have been reported to be less preoccupied with dieting and somewhat more tolerant of being overweight than white women. Kumanyika et al.,<sup>5</sup> suggested that the social environment of AA women is less negative about obesity than might be commonly assumed and that being overweight is not necessarily synonymous

with being unattractive.<sup>5</sup> Despite being told by a physician that they are overweight that may not be sufficient motivation for AA women to attempt to lose weight. These cultural norms concerning body size may prevent awareness among many AA women about the potential health benefits they and others in their cultural group might achieve through weight loss.<sup>6</sup> This perception, coupled with high fat and high calorie diets; low intake of fruits, vegetables, fiber, and grains; high sodium intake; and high intake of salt-cured, smoked, and nitrite-cured foods contribute to the burden of chronic diseases in this population.<sup>7</sup>

Furthermore, evidence exists that interventions are having less impact on the AA population based on research from several randomized clinical trials demonstrating that AA women achieve smaller weight losses than White peers exposed to the same interventions and that trajectories of weight loss differ for AA and Whites. These findings suggest that programs to promote behavior change elicit lower levels of adherence in AA than Whites.<sup>8</sup> This also indicates that nutrition educators and other health professionals focused on improving diet-related behaviors may need to address motivational issues for weight loss before teaching methods for achieving weight loss.<sup>6</sup>

## Discussion

Reasons for racial/ethnic differences related to obesity interventions include individual, programmatic and environmental influences. Potential individual-level factors involve not just weight loss motivations, but also prior experiences with weight loss programs, attitudes and preferences related to eating and physical activity, and parenting practices. These variables may be influenced by historical and social contexts.<sup>8</sup>

James<sup>7</sup> indicated that nutrition education programs for AA should primarily target women because they usually are concerned with the

family's health, are responsible for the food preparation, set standards for healthful or unhealthful eating, and provide access to other family members. Programs and materials must be culturally relevant and sensitive to their lifestyles and should reflect a positive image of them as consumers. AA women must believe nutrition education and health messages are relevant to them and their loved ones for them to want to make changes.

Mastin et al.,<sup>2</sup> found that minority populations struggling with weight issues, such as AA women, often do not possess basic knowledge and/or hold cultural views that are not conducive for both preventing or overcoming overweight and obesity. These results indicate the need for broad-based health education campaigns tailored for members of this population group designed to alleviate knowledge gaps and enhance self-efficacy.<sup>2</sup> AA women still need information concerning basic nutrition topics such as serving sizes, reading food labels, eating healthfully on a low budget, healthful eating when dining out, and food safety. They also need to learn how to discriminate between reliable and unreliable nutrition information,<sup>7</sup> especially in this era in which the Internet has become the ultimate information highway.

Young et al.,<sup>9</sup> argue that several lifestyle intervention trials have been designed specifically to promote physical activity and weight loss among AA. In spite of the fact that behavior changes have been documented in some participants, changes often are not sufficient to produce significant differences. This calls for a deeper comprehension of the issues AA women face and qualitative methods may provide this understanding.<sup>9</sup> Formative qualitative research assesses people's beliefs, perceptions, and behavior for the purpose of designing culturally appropriate interventions. Analysis of this information can suggest strategies that may be particularly effective with the target audience.<sup>10</sup> According to Young et al.,<sup>9</sup> information derived from focus groups proved enormously useful for the development of their behavioral interventions for AA women.

AA women are often underrepresented in behavioral weight loss intervention trials or outcome results are not reported by ethnicity or gender,<sup>11</sup> plus the lack of a consistent theoretical framework, has made very challenging to establish comparisons across studies.<sup>11,12</sup> Also, it is important to underscore the fact that a greater percentage of AA population lives below the federal poverty line (24.7%) compared to Americans overall; which puts them at a disadvantage when participating in interventions that address only individual health behavior change, because participants who have more choices regarding their environment are at an advantage.<sup>11</sup>

One potential strategy that has received considerably less attention by researchers over the years is the use of Internet-based approaches to promote healthy lifestyles in AA women. The scarcity of studies using the Internet to promote healthy lifestyles among AA women is particularly surprising given the high prevalence of Internet use in this population and the established success of many previous Internet-based programs with predominately White populations.<sup>13</sup> While many culturally targeted approaches to health issues have resulted in efforts like church-based educational campaigns, few have leveraged the possibilities that technology may afford. Yet, given the nature of the challenge (to promote healthier lifestyles) the use of technology can be a promising approach.<sup>14</sup> Moreover, the increasing recognition of the importance of behavior for health and the rapidly escalating cost of healthcare conspire to create a strong need for widespread dissemination of interventions to promote health and prevent disease;<sup>15</sup> so there definitely exists an exciting opportunity to explore

how Internet communication technologies can be culturally tailored to promote healthy eating practices and physical activity in AAWW.<sup>16</sup>

## Conclusion

Identifying the optimum levels for intervention on these complex interconnections is certainly challenging,<sup>11</sup> Nonetheless, it is imperative to strengthen the focus on nutrition education interventions that are not only culturally tailored and have a strong theory base, but also take advantage of the existing technology in order to establish a better defined framework of action and evaluation that can lead to better health outcomes for this population.

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## Conflict of interest

Author declares that there is no conflict of interest.

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