

A Mixed-Methods Study to Examine the Attitudes, Beliefs, and  
Practices Regarding Healthy Eating and Physical Activity Among  
Black Women in Broward County

Submitted by

The Institute for Child Health Policy  
Nova Southeastern University  
Ft. Lauderdale, FL

Evaluation Team Members:

Michelle A. Doldren, MPH EDD  
Principal Investigator

Deborah A. Mulligan, MD FAAP FACEP  
Co-Investigator

Cheng A. Wang, MA MS  
Statistician

July 12, 2010



## **Abstract**

Although it is widely known that improving health practices decreases the risk of virtually every disease, Black women fail to consistently practice healthy eating and physical activity practices. Consensus in the research and exemplified in this study is to focus on helping Black women make healthy choices for themselves, while encouraging family and friends to make healthy choices as well.

A mixed-methods study used focus groups and surveys to examine Black women's experiences with healthy eating and physical activity. Women aged 18 to 45 years were recruited to participate in the research study. Transcripts and surveys were coded and analyzed. The mean body mass index was 29.6--defined as overweight. The mean intake of fruit was 2.0 and the mean intake of vegetables was 1.9. The majority of the women failed to meet the recommended moderate physical activity levels.

Facilitators of healthy eating for participants were the knowledge of the benefits of healthy eating, the ability to preplan, family influences, and serving as a role model. Barriers of healthy eating were the cultural practices of food preparation, the poor taste and cost of healthy foods, and a lack of credible information of healthy eating that specifically targets the women. Facilitators of physical activity were knowledge of the benefits of physical activity, motivation and commitment; and serving as a role model. Barriers to physical activity were family influences, competing priorities, and lack of physical activity information that the women can relate to. This information will provide the basis for generating strategies to increase healthy eating and physical activity for Black women in Broward County, Florida.

## Table of Contents

	Page
Introduction.....	1
Statement of the Problem.....	1
Purpose of the Study.....	5
Methodology.....	6
Participants.....	6
Instruments.....	7
Procedures.....	9
Data Analysis.....	11
Results.....	13
Attitudes and Practices of Black Women in Broward County Related to Healthy Eating.....	13
Physical Activity.....	16
Quantitative Analysis.....	32
Discussion.....	40
Nutritional Practices.....	40
Attitudes and Practices Related to Healthy Eating.....	41
Physical Activity Practices.....	41
Attitudes and Practices Related to Physical Activity.....	42
Perception of Weight and Body Image.....	42
Challenges of Preventive Health Measures.....	44
Limitations.....	47
References.....	49
Appendices	
A    Focus Group Discussion Guide.....	57
B    Participant Questionnaire.....	60
Tables	
1    Responses to Questionnaire of Participants' Age, Ancestry and Ethnicity, Marital Status, and Number of Children.....	33
2    Status, Household Income, and General Health Status.....	34
3    Fruit and Vegetable Intake of Participants.....	39

## Introduction

### Statement of the Problem

Overweight and obesity are major causes of morbidity and mortality in the United States (Flegal, Carroll, Ogden, & Johnson, 2002; Maynard, Serdula, Galuska, Gillespie, & Mokdad, 2006; Mokdad et al., 2003). The 1999-2000 National Health and Nutrition Examination Survey data show that 64% of U.S. adults are overweight, with one out of five in this group being obese (Flegal et al., 2002). Bronner and Boyington (2002) explained that the problem has been further compounded by the National Institutes of Health Heart, Lung and Blood Institute's new standard for defining overweight, in that the body mass index (BMI) cutoff point changed from 27.3 to 25.0.

Overweight and obesity occur from interrelated correlating factors of genetic, metabolic, behavioral, and environmental factors (Stein & Colditz, 2004). However, the basic premise is that the increase of energy consumption, decrease of energy expenditure, or a combination of both has led to a positive energy balance that is marked by the obesity epidemic occurring in the United States (Stein & Colditz, 2004). Trends that contributed to the obesity epidemic include higher per capita energy availability, increased percentage of food consumed outside of the home, greater soft drink consumption, and increased portion sizes (Stein & Colditz, 2004).

**Background and justification.** Obesity is more prevalent among African Americans than other racial and ethnic minority populations (Kumanyika et al., 2007). Furthermore, Black women have a disproportionately higher burden of obesity (Flegal et al., 2002; Kumanyika et al., 2007; Mokdad et al., 2003) compared with Black men. Less than 20% of Black women compared with 33% of Black men have body weights in the range that is considered normal (Kumanyika et al., 2007). In addition, nearly 15% of

Black women are in the extremely obese weight range, which is equivalent to about 100 pounds of excess weight (Kumanyika et al., 2007).

Moreover, in 1998, the direct health care costs attributed to overweight and obesity were estimated to be \$78 billion (Maynard et al., 2006). According to virtually all reports and experts, those who are overweight or obese are significantly more likely to have diabetes, high blood pressure, high cholesterol levels, asthma, arthritis, and fair or poor health status dollars (Maynard et al., 2006). The change in the BMI cutoff was made to reflect the emerging evidence linking overweight to the onset of chronic diseases, such as hypertension, diabetes, cardiovascular disease, and some forms of cancer (Bronner & Boyington, 2002).

Furthermore, data on health status provide significant evidence of poor health outcomes among racial or ethnic minority populations with respect to premature death and preventable disease (Office of Minority Health, 2008). Blacks have the highest overall mortality rate of any ethnic group in the United States (Bernard, Lampley-Dallas, & Smith, 1997). On average, Blacks aged 18 to 84 years have higher incidence rates of hypertension (Ashaye & Giles, 2003); diabetes (Bernard et al., 1997); cardiovascular diseases (Centers for Disease Control and Prevention [CDC], 2000); and certain cancers (Glanz, Croyle, Chollette, & Pinn, 2003). Although, a plethora of knowledge exists about the importance of, and the need to adopt healthier lifestyle behaviors, Black women's overall health status is significantly poorer compared with other ethnic groups (Flegal et al., 2002; Mokdad et al., 2003).

Maynard et al. (2006) explained that the costs associated with overweight and obesity is not likely to diminish without individuals recognizing the need for change and actively engaging in an effort to attain healthier weights. In Broward County, Florida,

there are over 31,000 Black or African American families headed by women making up 39% of all families in the county (Department of Urban Planning and Redevelopment, 2004). In Broward County, Florida, 62% of Black women are overweight or obese and 26% report leading sedentary lifestyles (Florida Department of Health, 2007).

**Deficiencies in the evidence.** According to Bish, Blanck, Serdula, Kohl, and Khan (2005), most African American women are trying to lose or control their weight. However, the knowledge of effective weight-loss approaches primarily come from studies among the White population (Kumanyika et al., 2007; Yancey et al., 2004). Thus, there is a need to understand the attitudes and reasons why Black women lead sedentary lifestyles and maintain an unhealthy diet. It is also necessary to understand the motivating factors for Black women, who are able to maintain a healthy lifestyle through physical activity and healthy eating in order to develop effective interventions tailored specifically for Black women.

Research (Brownson et al., 2005; CDC, 1995; USDHHS, 2008a) showed that healthy eating and regular physical activity lowers people's risk for many chronic diseases, including heart disease, stroke, some types of cancer, diabetes, and osteoporosis. Even with the public health initiatives that have taken place over the years, most Americans, especially Black women have high mortality from diet-related diseases and leading overall sedentary lifestyles. The behaviors that determine weight and status are embedded in the core social and cultural processes and environments of day-to-day life on these populations (Kumanyika et al., 2007). Therefore, identifying effective, sustainable solutions to obesity requires an ecological model that is inclusive of relevant contextual variables (Kumanyika et al., 2007). Sanchez-Johnsen et al. (2004) found that the combined effect of higher caloric and fat intake coupled with increased sedentary

behavior and more accepting body image can serve to contribute to the higher obesity rates among Black women. Therefore, identifying effective, sustainable solutions to obesity requires an ecological model that is inclusive of relevant contextual variables (Kumanyika et al., 2007).

Recommendations are to develop innovative programs that are specifically designed to meet the needs of diverse populations because a significant difference between recommended guidelines and what Americans actually practice exists.

Researchers (Ard, Rosati, & Oddone, 2000; Bronner & Boyington, 2002; Gans et al., 2003; Kanders et al., 1994; Karanja, Stevens, Hollis, & Kumanyika, 2002; Kreuter et al., 2003; Kumanyika et al., 1993; Walcott-McQuigg et al., 2002; Yancey et al., 2001) are developing original interventions to specifically target Black women in efforts to improve their health outcomes (blood pressure; cholesterol; glucose levels; weight). Specifically, programs, such as the lifestyle enhancement awareness program (Walcott-McQuigg et al., 2002) designed to target Black women, include 16 weekly educational sessions.

Weight loss for lifestyle enhancement awareness program participants was significantly correlated with participation, with women who continued in the program experiencing greater and sustained weight loss (Walcott-McQuigg et al., 2002). Other health promotion programs targeting Black women include the Steps to Soulful Living program (Karanja et al., 2002) and Baltimore Church High Blood Pressure Program (Kanders et al., 1994). Participants in Steps to Soulful Living program, a 6-month intervention program, and Church High Blood Pressure Program, an 8-week intervention, experienced significant reductions in weight compared with those who failed to actively participate. One essential implication from these programs is that participant motivation and sustained interest significantly modifies the association between program

effectiveness and participant improved health outcomes. Furthermore, these programs were developed to meet the needs of Black women primarily located in other geographical regions. Thus, developing a lifestyle modification program specifically meeting the needs of Black women primarily living in Broward County, Florida, is paramount to improve health among this population.

### **Purpose of the Study**

The study is a descriptive study that utilized mixed-methods inquiry in the form of qualitative focus groups and quantitative surveys to examine the experiences, attitudes, and beliefs of Black women living in Broward County, Florida, as it relates to healthy eating and physical activity. The researcher used qualitative analysis and descriptive statistics to fully understand and appreciate participants' perspectives. These data added to the body of knowledge that can be utilized used by researchers to develop behavioral interventions tailored specifically for Black women in Broward County, Florida. Specific objectives included examining health status, practices, and readiness for change; and identifying culturally competent, evidenced-based factors that can be utilized by researchers for incorporation into health intervention programs specifically for the population.

## **Research Questions**

Three research questions guided this study:

1. What are the attitudes and practices of Black women in Broward County as it relates to healthy eating?
2. What are the attitudes and practices of Black women in Broward County as it relates to physical activity?
3. What are the challenges associated with practicing preventive health measures among Black women in Broward County, Florida?

## **Methodology**

The major goal of this investigation is to increase understanding of the attitudes and behaviors of Black women in Broward County regarding healthy eating and physical activity. The data provided serve as a needs assessment that can be utilized by researchers to develop a lifestyle enhancement health programs for Black women living in Broward County, Florida. The study utilized the use of focus groups and surveys where each participant took part in a focus group and completed a questionnaire.

## **Participants**

A convenience sample method was used to recruit 40 Black women between the ages of 18 and 45 years in Broward County from various community venues (church, civic groups, work site). The women were invited to participate in one of four focus groups with no more than 8 to 15 women per group. Convenience sampling was used to allow the researcher to get an inexpensive approximation of the results without incurring the cost or time required in selecting a random sample. Black women from various

environments were invited to participate through circulation of fliers and word of mouth. Women utilizing local health centers, day care centers, local stores, and selected community-based organizations were targeted. Information about the study was distributed to all partnering organizations. The eligibility criteria for women to participate included (a) being aged 18 years or older; (b) self-identifying as Black or African American women residing in Broward County, Florida; and (c) willingness to fully participate in one of four focus groups and to complete a questionnaire within a 2-hour period. In addition, efforts were made to ensure that women were recruited from various age groups to ensure that women of child-bearing age were incorporated into the study as well.

### **Instruments**

**Focus group discussion guide.** Focus groups are a standard tool in market research that is employed by health researchers to obtain qualitative information for developing and testing health interventions and messages (Patton, 2001). Focus groups enable information to be collected based on the perceptions, beliefs, and values of a group's participants and are particularly well-suited to in addressing cultural characteristics that impact on a population's health status (Calderon, Baker, & Wolf, 2000).

The facilitator followed a focus group guide with a standard introduction and opening question, discussion topics, and probes, although the order of discussing the topics varied across the focus groups that was developed by the facilitator researcher (see Appendix A). The focus group discussion guide included questions about knowledge of physical activity and healthy eating, personal views and experiences surrounding physical activity and healthy eating, and solutions for improving physical activity and healthy

eating. Each focus group discussion was audio-recorded and notes were taken on key issues that arose during the discussion.

**Quantitative questionnaire.** The purpose of completing the questionnaires as a part of this research was to be able to accurately describe the target population. The questionnaire measured health status, healthy days (health-related quality of life), health care access, exercise, diabetes, hypertension awareness, cholesterol awareness, cardiovascular diseases prevalence, asthma, tobacco use, demographics, fruit and vegetable intake, physical activity, emotional support and life satisfaction, and women's health in a 65-item instrument as outlined by questions posed in the BRFSS. Based on the CDC Web site, data and materials produced by federal agencies are in the public domain and may be reproduced without permission. However, the CDC (2008) requests that any published material derived from the data acknowledge CDC's BRFSS as the original source.

The BRFSS is the largest telephone survey system that measures health conditions and risk behaviors in the United States. According to the CDC (2008), there have been nearly 20 different studies that have examined the reliability and validity of the BRFSS. According to the CDC, the most comprehensive BRFSS validity and reliability study was conducted by Nelson, Holtzman, Bolen, Stanwyck, and Mack (2001). Nelson et al. reviewed and summarized more than 200 reliability and validity studies of measures on the BRFSS and studies with measures similar to those on the BRFSS. The measures that determined both high reliability and validity were current smoker, blood pressure screening, height, weight, BMI, and several demographics. Moderate measures of reliability and validity on the BRFSS as determined by Nelson et al. were last mammography received, clinical breast exam, sedentary lifestyle, intense leisure time

activity, and fruit and vegetable consumption. In conclusion, Nelson et al. determined that most of the questions on the core BRFSS questionnaire were at least moderately reliable and valid, and many were highly reliable and valid. Furthermore, a study, examining test-retest reliability of a survey designed to measure physical activity and its correlates among women from a diverse racial and ethnic group, explained that test-retest reliability is not an obstacle to the comparison of associations between physical activity and several hypothesized correlates of activity (Evenson & McGinn, 2005). Specifically, Evenson and McGinn (2005) collected reliability information from an 8.0% sample of the 4,122 women who completed the Women and Physical Activity Survey, which used the BRFSS module on moderate and vigorous physical activity portion of the survey. The same data were collected from seven different sites. In total, 344 women participated, 14.5% were White, 23% were Latina, 53.5% were African American, and 8.7% were Native American (Evenson & McGinn, 2005).

### **Procedures**

This study utilized a mixed-methods design where each participant took part in a focus group and completed a questionnaire (see Appendix B) to understand the attitudes and practices of Black women in Broward and to articulate the barriers and challenges that are associated with preventive health practices, such as healthy eating and physical activity. It was also necessary to understand the motivating factors for Black women, who are able to maintain a healthy lifestyle through physical activity and healthy eating in order to develop effective interventions tailored specifically for Black women. Thus, this needs assessment will be used as a guide for those that would like to improve health disparities amongst this population. Each focus group discussion was facilitated by a research professional with training and experience in conducting focus groups and

qualitative data analysis. The facilitator followed a focus group guide with a standard introduction and opening question, discussion topics, and probes, although the order of discussing the topics varied across focus groups. Focus group discussions included knowledge of physical activity and healthy eating, personal views and experiences surrounding physical activity and healthy eating, and solutions for improving physical activity and healthy eating. Each focus group discussion was audio-recorded, and notes were taken on key issues that arose during the discussion.

Focus groups were held at Nova Southeastern University. Respondents were offered a \$40 gift certificate incentive for participation in the 2-hour focus group session. This study was conducted with the approval of the Nova Southeastern University Institutional Review Board. Respondents were offered a brief break with light refreshments approximately half way through the discussion. During the focus groups, respondents were asked to only use first names in the context of their discussions so that individuals were not identifiable in the resulting transcripts and participants were not asked about any information that pertained to public health identifiers. Furthermore, the transcription did not include names of the participants. There was no mechanism for matching as names were not used in any of the transcripts that were generated during the formative research. After each focus group, participants were asked to complete a questionnaire. Due to the use of the mixed-methods methodology, questionnaires were completed at the end of focus group component to minimize the possibility that items on the questionnaire would influence how respondents discussed topics during the focus group. For the questionnaires, individuals did not write their names directly on the questionnaire. All data were secured in a locked fireproof file cabinet (i.e., tapes, transcripts, questionnaires, and other records). Only the researcher had access to the files.

The \$40 Publix gift cards were provided to respondents and participants provided a signature with no other identifying information; therefore, researchers did not link the incentives to actual study participants and, therefore, the confidentiality of the participants was not jeopardized.

### **Data Analysis**

**Qualitative.** Data collected from the focus groups was analyzed, according to procedures outlined in Patton (2001). Data were reduced by examining key ideas, words, phrases, and recommendations to formulate possible intervention messages. The analytic approach that was primarily employed was content analysis based upon the techniques recommended by Patton. Once a structure was agreed upon among the members of the analysis team, the data were coded and the codes were entered into Atlasti, a qualitative software package. The data analysis team consisted of two people who were trained in the data analysis methodology being utilized. Each focus group transcript was read carefully for the purpose of creating a coding structure that provided a meaningful framework to capture respondents' attitudes, beliefs, and experiences. Next, the analysis team identified the codes that were relevant to each research question and analyzed the data separately by research question and come together to review the coded material as a team. The process involved reading the coded text and identifying salient themes that were relevant to each research question. After this process, the findings that were assessed and agreed upon by both members were collected and blocked quotes and text were entered into a computer software program to generate output for analysis. Coding was an iterative process and evolved over the course of the initial data reduction.

**Quantitative.** The survey data were entered using Statistical Package for the Social Sciences, Version 17, and analyzed using descriptive techniques to describe the

population. Each health status, healthy days (health-related quality of life), health care access, exercise, diabetes, hypertension awareness, cholesterol awareness, cardiovascular diseases prevalence, asthma, tobacco use, demographics, fruit and vegetable intake, physical activity, emotional support, and life satisfaction and women health were included. Variable analysis was completed and organized in groups and frequencies to examine trend detection and to assess consistency comparisons. Furthermore, variable frequencies were tabulated and corresponding percentages were calculated as well. All data were then stored, according to Institutional Review Board guidelines.

## **Results**

Black women residing in Broward County, Florida, participated in the research, which included qualitative and quantitative research methods. A total of 40 women participated in one of four focus groups where each group varied in size with a minimum of 7 participants and the maximum of 13 participants. In addition, all 40 women completed surveys as a part of the quantitative research methods.

This chapter is divided into four sections where formative results are reported in Sections 1 through 3 and quantitative results are reported in Section 4. Section 1 includes analysis of the first research question (What are the attitudes and practices of Black women in Broward County as it relates to healthy eating?), Section 2 includes analysis of the second research question (What are the attitudes and practices of Black women in Broward County as it relates to physical activity?), and Section 3 includes analysis of the third research question (What are the challenges associated with practicing preventive health measures among Black women in Broward County, Florida?). Quotes are the participant's spoken words are verbatim (transcribed). Section 4 consists of the quantitative survey results, which includes demographics, health status, and outcomes, including access, behaviors, physical and mental status; and life satisfaction.

### **Attitudes and Practices of Black Women in Broward County Related to Healthy Eating**

Understanding the attitudes and practices of Black women related to healthy eating is an important aspect of summarizing the needs of this population. The following describes the facilitators as well as, some of the women's views on healthy eating that were presented from the focus group data.

**Knowledge of health benefits.** Personal knowledge served to facilitate healthy

eating as an overall health benefit for many of the women. The women in the study demonstrated an awareness of healthy eating and sought to implement them. Two participants spoke of their efforts to choose healthier options:

I see in myself the healthier options that I choose. Because I see our people dying from things they can prevent just by what they put in their mouth. So that's why I'm so passionate about not eating certain things. And maybe I will reward myself every now and then. But I am very conscious just because I have lost close people to me because of such a disease from eating. If you just ate better. Just what you put in your mouth. And it's a simple decision.

I think, for me, one of the reasons I'm starting, slowly gradually to eat healthier. I got to a point I'm going to be 30 in a year, and I was just like, eventually, I'm going to have kids. Eventually, I want to do certain things. And I started thinking about my body--not just for me but for the future.

Other participants felt that the lack of knowledge of the health benefits of healthy eating also influences the overall behaviors of Blacks. Those participants' responses follow:

I think that's one of them. We don't culturally know what to eat properly. And then we don't know what's considered eating properly or healthy. There's so much more to making conscientious choices about what you should consume and what you shouldn't consume. And a lot of people just don't know what to eat. There's more to eating properly than salad, carrots, and tuna. And there are so many more options.

Nutrition is huge. I think that too has to do with gaining an education, because we don't know. Like she said, you can still eat some of the great things; it's just what you put into them, and how you can take out some of the things that aren't necessities or don't make the food taste great, and replace them with healthier options. I think that, within our culture, this is something we truly do lack. Because in the past, we could only get those things that were fatty and more wholesome, so they could sustain us throughout the day.

Thus, some participants felt that a lack of education also influences behavior for Blacks.

**Modeling healthy eating.** Some of the women expressed that they engaged in healthy eating practices to serve as a model for their family. Three women provided examples of how they have made healthy changes:

Even with my kids, I just wash a tomato, and say here. You have to start them early. Because they do what they're accustomed to.

Because it's not just about me. My husband's 40. I have to show him. My kids see me prepare stuff. I don't fry anything. And I told them why. And they see it. They're learning it. They're being raised that way. I'm happy about that.

But a lot of times you can do it yourself. I had to say, if I get a loaf of bread, it's the same price as the bagel thins. Put the bread back, and get the bagel thins. The kids'll eat it. Put some peanut butter or whipped cream or something on it to make them eat it. I buy Kool Aid and just put less sugar in it. And put ice in it and crush it up like an icy. They drink it down. So you really have to be creative. Cause I want to do it, but I want my kids also seeing me do it. I can't believe they're eating sugar-free jello. I've seen them eating it more than me.

One participant wanted to instill in a daughter that the daughter can enjoy food and exercise with overly focusing on placing restrictions of what the daughter eats.

Because in raising my daughter, I want her to not feel like she has to diet or she has to be restricted in anything she eats. She can enjoy food and love food and exercise and enjoy exercising and be active in all of that.

**Preplanning.** Another facilitator to Black women's participation in the practice of healthy eating is their ability to plan and prepare meals in advance. One participant described how that individual prepares meals for the week and also discussed how preparing those meals can save money:

But you have to say, I'm going to do this. Like on Sunday, I make all my meals for the week. That's my lunch and my dinner, and I just pack it in a Tupperware bowl, put it in the refrigerator, and I just take that to work. It also helps you to save money; if you talk about how much money you're paying to stop for your Starbucks or your stop for your Burger King for a croissant and stuff.

Another participant stated that the act of preplanning meals is a way to breakdown barriers to healthy eating and provided an example of one technique that individual used:

But the way that I know is the best way to beat down some of these barriers is preplanning. And it is my crock pot. I cook. I know somebody says they cook on Sunday for the whole week. I tried that. But that's a lot. But what I do is I make one big something, say the meat--I make a chicken. If I make a chicken, I'm going to cook three chickens on Sunday instead of just one. And that way, we'll have Sunday chicken, and then Monday we're going to have chicken tacos. And then Tuesday we're going to have chicken egg rolls, or chicken salad. I'm going to transform that chicken so many times in a week. And they won't even know.

One participant described how preplanning meals benefits the participant personally in ensuring that weight is maintained and provided a benefit to the family as well:

Preplan. When I leave in the morning, I have my breakfast, my lunch, and my snack. I know I like this. I know I like that. I have it ready for me so I don't have to stop or pick up anything. It takes time. I have to get up a little bit earlier to pack my lunch but it's for me. When I think about it, it's for me. It's going to keep me where I want to be as far as my weight goes. I'm going to be happier at the end of the day that I didn't fall off the wagon. I know that I'm going to have something in the refrigerator that I can prepare real quick for the family because it's not just about me.

**Family influences.** Some of the women expressed that their family served as a role model for healthy eating practices. One participant described how that individual's mother emphasized nutrition and health in the home, another participant provides another example of how the mother influenced that participant's portion sizes, and a third participant noted that witnessing family and friends suffer as a consequence of poor eating also influences the need to make better choices:

I agree and say it's not majority either, but also the education that your family has about nutrition and what you see within your family. So I would have to say, my mom is a PE teacher so it's a little bit different. She's going to have an emphasis on nutrition and health, exercise and things of that nature, and not living such a sedentary life.

But one of the things my mother liked, she incorporated in my eating habits, is that even though you have this big plate, you don't need to fill your plate up with everything and try to get it on. And it's starting to really transfer to my entire life. I remember when I go to a buffet; I can only eat meal and a salad. You're thinking, I want to get this and that. I have to really learn, I don't need all of that, and know when you can cut off. Just because your food's there doesn't mean you have to finish it.

I guess we've seen relatives and friends suffer through bad eating; that triggers within us so maybe I'll do things a little bit differently.

**Attitudes and practices of Black women in Broward County related to physical activity.** Understanding the attitudes and practices of Black women related to physical is an important aspect of summarizing the needs of this population. The

following sections describe the views of the facilitators as well as some of the women on physical activity from the focus group data.

**Knowledge of health benefits.** Personal knowledge served to facilitate physical activity as an overall health benefit for many of the women. One participant noted that more Blacks are engaging in physical activity for the overall health benefits, two participants noted the reasons why they personally engage in physical activity, and the finally two participants noted that the purpose of physical activity is to benefit an overall healthy lifestyle:

Because I find more African American people want to exercise, go to the gym. You seen it everywhere. To me, I think, African Americans are trying maybe not to lose it but to stay in shape, just for their health.

I'm eating much healthier and doing a lot of exercise because I have other health issues.

I personally engage in fitness activities and eating healthy. I like statements like the one I heard you make before. I'm trying not to gain the weight; I'm trying to take control of my weight. I'm trying to stay healthy. And, because there are so many diseases associated with being overweight, I'm trying to stay healthy. It's definitely cheaper to stay healthy. So I definitely engage in exercise and eating healthy. I feel better. I think I look better if I weigh a good weight and I'm not overweight. So that's why I do it.

I think it's about understanding that you need to be healthy from head to toe. It's not just because you're a certain size, a certain frame, being heart healthy, healthy cholesterol no matter what size you are. Just knowing the whole person needs to be well. Exercise--not to lose weight. Exercise is not to benefit, it's just an overall lifestyle, a healthy lifestyle, just to live.

But at the end of the day, I want to live a long, healthy life. Because where I sit and what I experience, I see people whether it be the very, very wealthy. Because no matter how much money you have; if you don't have good health, it means nothing. So for me, my mindset is being changed because I want to make it to that end stage of life and to make it there with health.

**Motivation and commitment.** Many women expressed the inner desire and commitment necessary to engage in physical activity. Some women expressed that their

lack of motivation and commitment is their reason for not engaging in physical activity.

Comments from two participants follow:

Laziness. Sometimes you just don't feel like going. You know that it will help you. Of course, you know that it will benefit you but sometimes (motivation-- maybe I'll say motivation instead of laziness) you just don't feel motivated to go. Oh, I got to do that. Assert yourself. You've worked all week, and you're just tired sometimes.

I think it has to do with motivation. Every morning, my mind tells me I'm going to get up and work out. But it never happens. I have the desire but, by nightfall, I'm like, I didn't do it today. I'll do it tomorrow. And tomorrow comes, and it never happens. So I have the desire, but the motivation is not there. Okay, passing by the mirror. That's motivation. But it's not motivation enough.

Motivation and commitment also served as a motivating factor for the women who engaged in physical activity. One participant does not allow excuses to be made for not engaging in physical activity and two other participants stated one has to commit and not make excuses for not engaging in physical activity:

You have to want to do it. That's the first thing. You have to want to do it and then you have to say, I'm not going to make excuses for not being able to do it. I'm not going to do anything of that nature. Even though I would love to sleep in--goodness knows I would love to sleep in, I have to make sure I get up. Because there's no other time.

If we can't get out of our own way sometimes, we can progress and meet our goals. Just stop making excuses. Set aside a time each day: This is a time that I'm going to the gym.

I think that honestly overall it's just a commitment to an overall lifestyle change. As you were saying, walking more. Whether or not you're going to go to the gym, not making excuses as to whether or not, you can get there. Again, overall, it's just commitment. That was my shift for myself.

### **Modeling Physical Activity**

Some of the women expressed that they engaged in physical activity to serve as a role model for their family. The first participant noted that that participant's child is cognizant of what physical activity is and even inquires about whether or not the child

can engage in it. This participant further explained that an awareness of physical activity growing up a child was not the same as the child's present awareness. Another participant described how that mother engaged the children in physical activity. The third participant explained that personal physical appearance served as a motivator for that individual's engagement in physical activity. Their comments follow:

I think it's really big that we--I have small children; I'm not sure who else. But we use those words around our girls, our kids now. Because that is huge. Mommy, did you exercise today, and she's Age 3. And yes it gets on my nerves. Why are you in my business? No, I didn't exercise today, because that's usually when I'm upset. But it's important that she knows the word, knows it's important, knows that mommy and daddy are doing it together. We do it pretty much every day with a rest day on the 7th day, and we encourage her to do it, too. So it's not like she needs to go sit on the couch and watch us. Come out here. Let's do this. I didn't grow up like that.

And I think that's what presents a lot of barrier for a lot of people. For me, I don't call it exercise. I'm just going outside for a walk. Come guys, get--not in my house. Nobody sits in front of the TV for hours in my house. Come on. Get up, get outside, go shoot some basketball, and then come back in and get your homework done. I just don't call it exercise in my house at all. But I don't allow my kids to be sedentary at all and sit in front of the TV for hours. No way. Not in my house.

I started walking and losing weight. And I messed around and walked past the mirror and really liked what I saw 1 day. I thought, okay. I'm going to make sure I'm always . . . I like. That feeling just made me feel so good, to just happen walk past and catch a glimpse, and actually like what I saw. I want to always walk past a mirror and like what I see. That what drives me. I want to put my clothes on and I want them to look like they do in the magazine. I want that. And if that what drives me to go the gym.

### **Challenges of preventive health measures for Black women in Broward**

**County.** While there are many facilitators to Black women's engagement in preventive health measures, such as healthy eating and physical activity, there are also barriers and challenges that influence the preventive health measure for these women. The following sections will explore the challenges that were presented from the focus group data.

**Knowledge of the BMI.** Some of the women in the group were knowledgeable

about the BMI measurement as an indicator to describe the differences between normal weight, overweight, and obesity amongst the population. One participant explained how the BMI is calculated: “They’re measuring the BMI. And they consider, because I’m 5’5. They go by your height, and then you’re weight. I’m supposed to be 144 pounds.”

Another participant noted that while, understanding the utility of BMI is important, it is important also to incorporate how you personally feel about your appearance. However, the majority of the women expressed concern over using the BMI as a measurement tool. One woman noted that, based on the measurement of the BMI measurement, that individual’s ideal weight would make that person too small. Another woman explained that that individual would be considered overweight or obese based on personal BMI calculations; however, that individual feels that the calculations are not taking into consideration all factors that are involved in the calculations of weight. Their comments follow:

At same time, I understand that carrying too much weight leads to lots of other problems. So I think that for us, for Black women, we have to find a balance between what we think looks good and how we carry ourselves and our appearance, but then also understanding the BMI, understanding eating, and understanding the charts and how to read them. That it does make sense and it means something. But just a balance . . . a middle.

I think the perception of being a woman is different among different cultures. For 5’9,” I’m supposed to be 170 pounds. And I feel like if I were 170 pounds, I’d be this small. So it varies among different cultures. I really don’t think being or following a certain standard is healthy for everyone across the board. That’s just what I’m feeling.

One of the things that I find interesting is that when we talk about weight, whether it be 10 pounds of fat and 10 pounds of muscle weighs the same. So at the end of the day, when we’re talking about the number that is associated with the weight, we’re not taking into account all of those factors. As a Black woman, not born in this country, and having traveled outside this country where you see women who in this country would be considered overweight and even obese. Because when I look at the same BMI measurements, I am supposed to be borderline obese.

While most of the women are aware that the BMI is a measurement for weight, several women who felt that BMI could not measure the overall health of a person. One woman explained that BMI could not be the sole measure for determining health. Another woman felt that it would not be healthy based on a personal ideal weight BMI calculation:

That's more important, besides BMI numbers, certainly, I think it's critical for us to take a look at all the other indicators. What's our blood sugar level? Our glucose level? Our blood pressure? Those are the numbers to me that are really critical. Which invariably if we pay attention to those things, then if there is poundage we need to lose in terms of fat, we'll do that. If that's our focus.

When we see these numbers and charts and what the doctors say. I'm 5'9," and they want me to weigh 140. That's ridiculous. I wouldn't even want to weigh that much. And if you're saying that's what I need to weigh in order to be healthy, then I disagree. This is unhealthy. But then at the same time, I understand that carrying too much weight leads to lots of other problems. So I think that for us, for Black women, we have to find a balance between what we think looks good and how we carry ourselves and our appearance, but then also understanding the BMI, understanding eating, and understanding the charts and how to read them.

**Black women's overall attitude about their appearance.** Many of the women in the group expressed that culturally Black women do not want to appear thin. The women expressed that being thin is not attractive in the Black community. One participant noted that Black women do not want to look skinny. Other participants expressed that it is more acceptable for Black women to have fuller figures because that is what Black men are attracted to. On the other hand, a few women in the group expressed that, due to the cultural norm of what is considered attractive, they always wanted to gain weight. Four participants' comments follow:

I think our culture and the perceptions that we have a lot of to do with it. We don't want to look rail thin. That's not attractive to us. We don't want to look skinny.

I think it's more socially acceptable. Whether it's true or false, I think it's more acceptable for Black women to have bigger hips and butt because Black men like

us that way. So I think as a culture, some of our men are more attracted to an obese woman. And we think of obese as something we see in a television show or [on a person], but in reality, a lot of people are obese by the BMI index. So I think it's socially more acceptable based on how we look. And we have this huge market that's created for jeans that fit a small waist and huge hips.

I agree with that too, that fuller figure tends to be more attractive on a woman of color. And people do feel that there is a need to have that fuller figure to attract the opposite sex. It's not always the case, for many of us, but it is the perception.

Contrary to the norm, I've spent the better part of my life wanting to gain weight. I'm from a culture where fuller figure is considered more attractive.

**Black women's overall attitude about their personal weight.** The majority of the participants expressed that they were not pleased with their current weight and many expressed that they were actively attempting to make a change in their weight. Two other participants explained that they were working on making healthier choices to achieve their ideal weight. One participant noted that, even though weight had been lost, that individual still had more weight to lose.

I'm not happy with my current weight, but I am happy that I'm doing something about it. With doing something about it comes all the energy and appreciating the better food choices that I need.

I'm not happy with my weight. I am working to progressively get more off and become more healthier.

I am very disenchanted with the size that I am. I have a weight goal in mind. And I yo-yo. I go up and down. But I do get up and go out. I am becoming more conscious of my food choices. So I'm glad to be on the track of working on it. But I haven't gotten to where I would love to be as yet.

I'm really trying to lose 20, 30 pounds. I don't have a major problem with my weight, coming from where I was before. I'm alright. But I am trying to lose. If I could lose 20, maybe 30 pounds, I'm fine.

Some participants were concerned about how their clothes fit and their personal health issues. One participant noted that, at the present weight, that individual could not wear the clothing of choice. Another woman explained not being happy with that

individual's weight and personally realized that the weight is contributing to personal health issues.

I don't like the way I can't wear the clothes I want to wear. I also don't like not being healthy with this weight. So that's one of the reasons I've been working out a lot.

I'm not pleased with my weight. I definitely have got some health concerns about high cholesterol. And losing weight would be one of the ways I could accomplish that. I also know I'm not able to function at my best at the weight I am at. So that for me is the driving piece. I want to be off meds, and I want to be able to function a lot better. And I know I have to be able to lose some weight to be able to do that.

There were women who expressed that, while they were content with their current weight, they had concerns about their overall health. One woman was concerned about personal heart health. Another woman expressed a desire for more energy. Still another woman explained that that individual was not healthy. Their comments follow:

Because over time I've learned that it's really not the weight. It's the way my body feels at the current weight I'm at. I would prefer to be healthier, and I've known a healthier me. And I don't know that it's particularly my weight but with regard to my exercising. I don't feel that my heart is working at its best. There's a lot of things I think I could change not only in my diet but in my exercise.

I'm fine with my weight. I just need more energy. I need to get back on the bicycle of actually exercising. Because I find that I'm more lethargic and I don't feel as good overall. I like to be able to get up and go instead of dragging.

I can say that I like my weight. I'm good with the weight that I am now. My health is a different issue. I don't too much like my health, even though I think at a good weight. And that's only because, like I said, the high blood pressure is hereditary. But if I could just get rid of that one thing, then I would be good.

**Black women's overall views about support partners.** The participants suggested that having support partners that they could depend on would assist them with the motivation needed to participate in physical activity. Some women explained that a support partner would be helpful. One woman believed that support from friends and family could assist. Some of the participants' comments follow:

I guess motivation--having someone to keep you going. Having a partner or someone. If you don't have it, it's just you.

Having a workout partner, like a group of your friends. We're going to designate this day for 1 hour or 45 minutes of working out.

So that's what we do. And then we call each other. Because we have to work out at 5:30 or 6 in the morning because of our work schedules. Who wants to get up that early in the morning? You call each other and you keep calling until they pick up the phone. Come on, let's go. Let's go, 30 minutes, and then we come back. You need that from your friends and your families, for sure.

However, there were also just as many participants who felt that support partners are not effective in motivating them to exercise. Some participants explained that support partners could also serve as a nonmotivator for engaging in physical activity:

I was at the gym. I met a girl. Yeah, we're going to keep each other going. Start getting; can't make it today. Got this going on. And then I found myself saying, uh, and stop going. After my friend stopped going, I stopped going. I'm waiting for a friend to get me wanting to start exercising again.

I can say, I started out with two partners, maybe three partners, and what happened was, that 1st week, we were on it. Then Monday came up the next week. One of them said, Girl, I ain't going to be able to go today, but you all go on, and I'm going to catch up with you all tomorrow. Then the other one called: If she ain't going, then I had something else to do, so we can all go Tuesday. And then that leaves me and the second person. And, then, Tuesday, somebody else backs out. And then it's like I'm going by myself. So for me, when I do it, I just have to make up in my mind. I'm going by myself. Not with my home girls, who are going to fall by the wayside. And just do it. Because everybody's busy. Everybody has a different schedule. Even some people say they're going to start on Monday. Monday comes, they find everything else to do. They never show up.

When I started with a group, your fitness levels don't match. I find myself working out with someone. I'm just talking. And they're working out. I'm not really doing anything. It's not intense for me. I left my one friend on our walking journey. I had my iPod on. I looked back, poor girl had to be a mile or so back, and I didn't realize it because I got in my zone. It ends up being girl talk, and you're having fun, but you don't end up burning any calories, or at least not enough to call it a workout. So that's the problem that I have with partners. I love being with my friends, hanging out. But it's not exercise.

**Family influences as a barrier to physical activity for Black women.** Many of the women stated that family influences could serve as a barrier to physical activity

engagement. One woman noted that you did not see your relatives engage in physical activity; therefore, physical activity is not seen as a priority. Others explained that families often equate physical activity with losing weight and, therefore, discourage you from participating in physical activity. One participant's mother told the participant that the participant did not need to work out to lose weight. The participants' comments follow:

It's seen as a chore, as something like taking a shower. We see it kind of like that. And, to me, it falls on our behavior. You don't see your mother working out or your other relatives working out. We saw them clean, do all of that. But if we didn't see them working out, then it's not a priority.

And they say to their friends and their family: Oh yeah, I'm thinking about working out. Why? You don't need to work out. You don't need to lose any weight. So I think it's not the thought process of, I need to, my heart rate. I need just to make sure that I'm getting that daily activity. What are you doing? You don't need to do anything.

My mom would tell me to eat more. Going to the gym--what are you going to the gym for? You're already skinny. That's the things my family would say. Why are you still going to the gym? You don't need to go to the gym.

**Historical aspects surrounding healthy eating and physical activity.** Women in the group expressed that culturally, Blacks have not typically engaged in healthy eating practices and physical activity practices, which negatively influenced present health practices. Two participants explained the cultural aspects of poor eating while another discussed the lack of support for education that has been passed down. Another participant described a personal experience in the lack of physical activity influences that individual experienced while growing up. Four of the comments from the participants follow:

That lack of education or just lack of history--it's not something we grow up doing or that's within our family so that, over time, we know the importance of education or how essential it is to being able to keep healthy. So you get rid of that first if you don't have time in your schedule.

I think a lot of that is cultural. We cook poorly and that's a learned behavior, also. So culturally, we have always eaten poorly.

I think also we have to take into consideration our culture. I grew up on ribs and macaroni and cheese and collard greens and ham hocks and corn bread. Like breakfast for me wasn't cereal. I started eating cereal as an adult. I had country ham and grits. We have to take that into consideration, too. For the most part, I know we as Black people sometimes we'll sit down and say, this doesn't have enough seasoning. Or she didn't use enough pork. We make these choices. And sometimes they're subconscious because of the way we grew up. My momma cooked with bacon. So we have to take that into consideration as well and not go into this blindly. We need to think that maybe they are on to something because of our food choices--just be honest.

I think that within our culture that's something we truly do lack [education]. Because in the past, we could only get those things that were fatty and more wholesome, so they could sustain us throughout the day.

I didn't grow up like that. If it wasn't for taking dance 4 hours a day or being part of this company or that company, I wouldn't do any physical activity. In fact, the knowledge then was, I had asthma, so you need to go sit down. You don't need to play, you don't need to do this. But it wasn't taught to me. I think you made that point. I wasn't raised to keep moving. It's more trying now to get my parents to exercise.

On the other hand, many of the women also noted that there have been some positive shifts that are changing the current health practices of Blacks in a positive manner. One participant noted the change in the practice on engaging in physical activity. However, some women also felt that there are some negative aspects that have influenced the health practices of Blacks and some positive shifts that have occurred. One participant spoke of more Black women participating in cosmetic surgery procedures. And another noted society's influence on physical activity. Some comments of participants follow:

To me, I think, African Americans are trying maybe not to lose it but to stay in shape, just for their health. Just for health reasons. But I think what I'm seeing now and, certainly for me, it's a paradigm shift that's happening. People are beginning to understand that there's movement that's needed. As a people, as a culture, and whether it be that we're Black, we need movement because our sedentary lifestyle is going to cost us.

I think it's changing, but in a very negative way. I see a lot of Black women doing

plastic surgery. Being encouraged to take off their hips through liposuction, do breast lifts. I was told, it would be so nice if you would lift your breasts or do augmentation. I don't want to do stuff like that. So I think it's changing a lot in a negative way. Because you don't have to do stuff like that to make yourself beautiful.

I think society tells most people to exercise. You see it on TV, you see magazines--everybody's small. People are like--I want to look like that. And the only way I'm going to do it is to exercise and not eat. I have a very good friend and she's very weight conscious. Looking at her, she looks healthy, and she's not overweight or anything, but for her personally, she thinks I have to look like what everybody else looks like in these magazines, so I have to work out.

**Competing responsibilities as a barrier to physical activity.** Competing

responsibilities also serves as a barrier for the women's lack of engagement in physical activity. Many of the women expressed that their daily schedules were too full to allow for planned physical activity. They expressed that their own need to engage in physical activity was not a priority due to the other duties that they were required to perform.

Another woman explained the guilt that that participant felt when taking any personal time. Another woman noted that societal pressures regarding time are an influence as well. Participant comments follow:

You get home after 8 hours. You pick up the kids. You make dinner. Where do you factor in exercise in all of that? So that's another challenge that we face. Don't know that it's particular to colored women or it's just in general.

We go to work, go to school, homework with the kids, and, the next time, I turn around it's 8 or 9 o'clock. Who wants to eat at that time of night? So you want to try to get as fast as I can, get everybody fed by 6 o'clock, one section, done deal versus cooking. Because everybody can't do that. Everybody can't cook every day or cook a meal for the week.

Schedule an hour, sometime during the week. Give me an hour for me time where I can just sit, prop my legs, and polish my nails. I feel guilty. Like you said, the guilt, the remorse. I should be washing clothes. I should be ironing.

In today's society, everybody is like, how much can you get done in your 24 hours? I can do more in my 24 hours than you can. And so you're trying to get so much done. Kids, housework, career. Some of us are students and mothers and full-time employees. It takes time. We're not rich already. We can't all do meals

in 30 minutes. Thirty-minute meals by Rachel Ray that she doesn't even eat. You can't really prepare a meal in the time that you have to eat. It's difficult to eat healthy.

**Appearance as a barrier to physical activity.** Some women expressed that personal appearance issues also serve as a barrier to physical activity engagement. One woman explained personal experiences on the issue. Another woman described that the personal need to wear certain attire to engage in physical activity. Some of their comments follow:

Hair. I think for Black women, especially, it comes down to hair. I think that has to be the largest barrier. Although we can go to the gym and we can sweat and we can have a great time, it's not as easy for us to just go home and wash and dry. So I think that, oftentimes, at least for me, I would have gone to the extremes of cutting my hair off completely just so I can get into it. Or bring my hair back, all the time. So it's very hard to work with the texture of our hair and stay physically fit. It's like you have to give up one to have the other. Or wear a weave or a wig.

I'm natural [hair that is not processed with chemicals] and I'm already fighting this humidity with my hair. And it's selfish 'cause I use my hair as an excuse [to not participate in physical activity].

I think something else that's really superficial, you might kill me for saying this, but I like cute exercising clothes. I'm serious. When I go put on some old riding pants with a stain on it, I do not want to go out and walk. I remember in the past, when I was getting ready to start a fitness routine, I want new shoes. And I want something that's really going to support me. And I want to match when I put it on. And if it's not, I'm less likely to get up in the morning and put it on.

That's true though. I think African American women need different things. I need a longer shirt. I do not want to be walking on the treadmill and my shirt is creeping up and this thing is hanging up. Because what you wind up doing is spending more time pulling down this thing and you're less likely to finish this program that you set. You're so consumed with what people are seeing. And even more so, the shorts are a big problem. I don't want to have to [open my back] and pull them out every couple of seconds. I need shorts that fit me. So if we can focus off of image and more so, I'm so serious, these are things that happen. You get so sidetracked. Okay, now, I've got to, but I can't move my arm, because the tank top is rolling up like this. It's ridiculous.

**Cost as a barrier to healthy eating.** Women also expressed that costs serve as a barrier to healthy eating. One woman described that unhealthy eating is the cheaper way

to go. Participants' comments follow.

It's more expensive. When you make the change and you're trying to change your diet, when you're buying all these fruits and all of these vegetables, it's very expensive.

It's expensive to eat healthy. It seems like the junk is what's affordable, so that's what people go for.

It's cheaper to not eat healthy. You can go to the dollar menu and get full, but when I think about a meal that's eating properly, it's expensive. It really is.

It really is. They have the Whole Foods Supermarket. How many people can afford to go to the Whole Foods Supermarket? Eating healthy starts right there in the supermarket aisle, and you decide what you pick up and put in your cart. And some of those best things are the more expensive things in the supermarket.

**Taste as a barrier to healthy eating.** Many of the participants expressed that the taste of healthier foods were not necessarily appealing and, thus, it could serve as a barrier to healthy eating. One participant also agreed that it did not matter how healthy a particular food is--if it did not have an appealing taste, that participant would not be eating it

And the taste. Maybe if more things that were healthy had a little more taste to it. That's an appealing taste, that more people would want it.

I think about what she said about the taste, I don't really eat a lot of healthy foods because of the way they taste.

So that's one of my major barriers, along with all the other ones we talked about. But for me, the taste. It has to taste good or I'm not going to want to eat it. I don't care how healthy it is.

**Sources of information for Black women on healthy eating and physical activity.** Sources of information on healthy eating and physical activity varied for the women in the group. Some women sought healthy eating and physical activity information from their health care providers. One woman stated that the family doctor is a source of information. Others felt more comfortable with health care providers that

were easy to relate to; one woman had a Black health care provider who was a good source with an ability to relate culturally. One woman noted a physician who is holistic is a good source for information. Some of the women in the group discussed trusting their instincts as a source of information on making choices about healthy eating and physical activity. Another woman described the necessity of having the ability to understand what is right and what is wrong from the information available. Some participants' comments follow:

I was comfortable with talking to my family doctor.

Having a doctor that you can relate to. My primary care physician is actually from the islands. The good thing about my doctor, being from the islands is that she doesn't always resort to medicine. She tries a lot of home remedies and natural things.

It's really important to go based on what the doctor says, and it helps to have a doctor that is African American. They can relate.

Part of it is knowing your body and, like she said, what will work for you. Because what may work for someone else might not work for you.

So I think we've always heard different things. It's just what's best for us. Because what's good for her may not be good, because my body and my metabolism is totally different than hers.

Back to the original question, I trust instincts. I listen to the radio. I listen to the TV. I read print media. But then I relate that to what I know, right or wrong.

Some women also expressed that they were unclear of whom to go to for the best source of information regarding healthy eating and physical activity. Although, the media also serves as a source of information for Black women, women in the group expressed that there were not many images of Blacks in the media in general and there is the lack of media influence on healthy eating and physical activity targeted towards Blacks. Some comments of participants follow:

But I don't know who I would go to for solid information that could really

educate. I don't know who to go for that purpose. Because I think that accountability is a huge thing. And I think that sometimes when we go to people, they want to just throw back at us, do this and do this and do this and don't explain.

And I really didn't pay much attention to it until I had my daughter. And you start to search for role models, and search for who she'll be able to see herself in on the television, and really it's hard to find someone else on television that really is in the same image that we are. It creates this, disconnect. It's hard to find who you are and be able to feel good about yourself, because you don't see many people who have that. So you get into that role of trying to lose weight and lose that butt and lose these hips and those types of things in order to be in the same image as what we see on television.

Because there's something that I noticed, when I'm sitting and watching television, especially shows that are targeted towards us, I don't see many PSAs [public service announcements] or commercials that are targeted towards us that are healthy. We're getting the unhealthy commercials or the PSAs that are focused on HIV and AIDS. Which, yes, that's something in our community, but I don't see many PSAs about, you should eat this many times a day, and there's someone who looks like me on the screen. Until that changes, we definitely should share more with one another. Until my kid, or if I'm watching television, see someone who's looking like me saying, you should eat this each day, you should do this type of activity each day.

Others in the focus groups felt that Black women in the media are larger in size when compared to other women portrayed in the media. On the other hand, some women felt that the media is trying to appeal to a broader audience and they see more media portrayals of fuller figure women of all ethnicities and races. Ultimately, the media served as source of information regarding healthy eating, physical activity, and setting the standard for acceptable physical appearance for many women in the group. Another participant described a personal experience with the media and how it influences that individual's physical activity engagement. Participant comments follow:

Even in movies where women of color are portrayed, it's typically a fuller figured person. Even the movie *Precious*. I mean Precious is a real voluptuous lady, woman. And when our kids look at that, that's what they see for colored folks.

And you, on the other hand, maybe lighter skinned or Caucasians, Hispanic, they're slimmer people. So it's what they see on there. But I know what we are

seeing on the television is that the people who get key roles. They're usually fuller figured people.

On television, I would say that the Dove campaign is working to try to bring up different sizes of women. When I open a magazine now, I'll see a fuller figure woman in a bra and underwear doing a Hanes commercial, or something to that effect. So I think there's certain companies that are working on changing the image of what's acceptable or what's beautiful. It may not be everyone, because the money is still what drives it. But there are companies out there that are trying to say, a fuller figure woman is just as beautiful as a toothpick.

A lot of people also depend on--it's funny--like TV shows, *The Biggest Loser*, and stuff like that. I guess being that it's visual, and they can actually see it happening over a certain amount of time. It kind of makes them want to do it as well. I guess that's why the whole marketing thing, selling videotapes, or whatever the thing may be. I think if people can see it done and get a routine or a plan, and they can actually see it, and it's easy for them to find. Cause it's on TV, which is probably something they're sitting in front of anyway.

I like the clothes I see in magazines. I like the way the models look. I like that. And I want to look like that. So I always watched what I eat for the most part . . . Looking at magazines, they got me. Yeah, I know those girls are air brushed. I know it. But I still want to look like that. I'm guilty of that. That's one of the reasons why I exercise.

### **Quantitative Analysis**

The health status, healthy days, health-related quality of life, health care access, exercise, diabetes, hypertension awareness, cholesterol awareness, cardiovascular disease prevalence, asthma, tobacco use, demographics, fruit and vegetable intake, physical activity, emotional support and life satisfaction and women's health were analyzed for participants.

**Age, race, and ancestry ethnicity, marital status, and number of children in household.** In Table 1, the results of the responses to the participants' age, ancestry and ethnicity, marital status, and number of children are displayed. All (100%) of the participants answered that Black or African American was the race that they identified with. When asked if the participants were Hispanic or Latino, 93% answered "No." When asked where each participant was born, 78% answered that they were born in the United

States, while 22% answered that they were foreign born.

Table 1

*Responses to Questionnaire of Participants' Age, Ancestry and Ethnicity, Marital Status, and Number of Children*

Category	Count	Percentage
<b>Age</b>		
18-24 years	2	5.0
25-34 years	23	57.5
35-45 years	15	37.5
<b>Ancestry and ethnicity</b>		
Central or South American	2	6.0
Sub-Saharan African	6	17.0
West Indian	19	54.0
Other	8	23.0
<b>Marital status</b>		
Unmarried couple	1	2.5
Never married	20	50.0
Separated	1	2.5
Divorced	5	12.5
Married	13	32.5
<b>Children in the household</b>		
0	23	57.5
1	3	7.5
2	8	20.0
3	4	10.0
4	2	5.0

**Education, employment status, household income, health status.** In Table 2, a summary of the participants' responses to education, employment status, household income, and health status are provided. When asked about how they view their general health, 26% selected "very good," 51% selected "good," while only about 15% chose "fair."

Table 2

*Responses to Questionnaire of Participants' Education, Employment Status, Household Income, and General Health Status*

Category	Count	Percentage
Education--highest grade completed		
High school	2	5.0
Some college	13	32.5
College graduate	25	62.5
Employment status		
Unable to work	1	2.5
Student	1	2.5
Homemaker	1	2.5
Out of work for more than 1 year	1	2.5
Self-employed	1	2.5
Employed for wages	35	87.5
Household income		
Less than \$25,000	6	16.22
Less than \$30,000	2	5.41
Less than \$50,000	12	32.43
Less than \$75,000	9	24.32
\$75,000 or more	8	21.62
Health status--general		
Excellent	2	5.0
Very good	10	26.0
Good	20	51.0
Fair	6	15.0
Poor	1	3.0

When asked how many days during the past 30 days was your physical health not good, 34% answered “none,” 56% answered “between 1 and 9 days,” and 11% answered “more than 9 days.” When asked how many days during the past 30 days was your mental health not good, 43% answered “none,” 46% answered “between 1 and 5 days,” and 12% answered “between 10 and 30 days.” When asked how many days during the past 30 days did your physical or mental health keep you from doing normal activities,

62% answered “none,” 24% answered “between 1 and 3 days,” and 15% answered “4 or more days.”

**Health care access.** The majority (90%) of the participants have health care coverage. Moreover, 50% of the participants have more than one health care provider, while 42% have at least one health care provider. When asked, in the past 12 months, was there a time when you needed to see a doctor but could not because of cost, 82% selected *no* and 18% answered *yes*. When asked how long has it been since your last routine checkup, 68% responded that they have had a routine checkup “within a year,” 30% have had a routine checkup “within 2 to 5 years,” and only one person reported never had a routine checkup.

**BMI.** The BMI calculations were done on 38 women who provided both their weight and height. BMI ranged from 21.0 to 58.0 with a mean BMI of 29.6, which is considered overweight. Furthermore, current weight versus a change in weight a year ago was assessed; the mean weight gain for the women was 6.8 lbs. The majority (66%) answered, “No,” when asked if the change in weight intentional?

**Exercise and physical activity.** The majority (73%) of the participants answered that they did participate in physical activity during the past month. When asked, “When you are at work, which of the following best describes what you do?,” 88% spend most of their time mostly sitting or standing. When asked, “Do you in a usual week participate in moderate activity for more than 10 minutes at a time?,” 80% of the participants answered, “Yes.” The mean days per week of moderate activity for participants was 3.3 days per week. The median time spent participating in moderate physical activity for the participants was 35 minutes. When asked, “Do you in a usual week participate in vigorous activity for more than 10 minutes at a time?,” 62% of the participants answered,

“Yes.” The mean for days per week of vigorous activity for participants was 2.5 days per week. The median time spent of participating in vigorous physical activity for the participants was 30 minutes.

**Diabetes.** The majority (79%) of the participants answered that they have not been told by a doctor that they have diabetes. A total of 8% answered that they have been told by a doctor that they are diabetic. Thirteen percent answered that they had diabetes during pregnancy, have been told by a doctor that they are prediabetic, or have borderline diabetes.

**Hypertension awareness.** Seventy-eight (78%) answered that that they have not been told by a doctor that they have hypertension, 15% answered that they have been told by a doctor that they have hypertension, while 7% answered they have been told by a doctor that they were hypertensive during pregnancy or that they are borderline high or prehypertensive. When asked if they are currently taking medicine for high blood pressure, the majority 82% answered, “No,” while 18% answered, “Yes.”

**Cholesterol awareness.** Eighty-six (86%) of participants have had their blood cholesterol checked while 14% have not had their blood cholesterol level checked. When asked, “How long has it been since you had your blood cholesterol checked?,” 59% had their cholesterol checked with the past year, 23% have had their cholesterol checked between 2 to 5 years or more, and 18% did not know or had never had their cholesterol checked. When asked, “Have they ever been told by a health professional that their blood cholesterol was high?,” 79% answered, “No,” while 21% answered that they have been told by a health care professional that their blood cholesterol is high.

**Cardiovascular disease prevalence.** When asked, “Has a health care professional ever told you if you had a heart attack?,” 100% answered, “No.” A total of

98% of the participants answered, “No,” when asked have they ever been told if they had angina or coronary heart disease the majority. Further, 100% of the participants answered, “No,” when asked if they have ever been told they had a stroke.

**Asthma.** Participants were asked, “Has a health professional ever told you of that you have asthma?” Participants included that 75% answered, “No.”

**Tobacco use.** When asked, “Have you have smoked at least 100 cigarettes in your lifetime?,” 93% answered, “No,” while 7% answered, “Yes” or “Don’t Know.” When asked, “Do you smoke cigarettes everyday, some days or not at all?,” 100% of the participants answered, “Not at all.” When asked, “How long has it been since you last smoked cigarettes regularly?,” 83% answered, “Never,” and 15% answered, “Never smoked regularly.” When asked, “Do you currently smoke chewing tobacco, snuff or snus?,” 100% answered, “Not at all.”

**Emotional support and life satisfaction.** When asked, “How often do you get the social and emotional support you need?,” 38% of participants answered, “Always,” and 50% answered, “Usually” or “Sometimes,” and 12% answered, “No.” When asked, “How often in the past 30 days did you feel nervous?,” 23% responded, “All of the time,” 19% answered, “Some of the time,” 53% answered, “A little of the time,” and 24% answered, “None of the time.” When participants were asked how often in the past 30 days they had felt hopeless, 31% answered, “a little of the time” and “some of the time,” and 69% answered, “None of the time.” When the participants were asked if they had felt restless or fidgety during the past 30 days, 7% answered, “Most of the time,” 25% answered, “Some of the time,” 35% answered, “A little of the time,” and 33% answered, “None of the time.” Participants were asked how often they felt depressed?: Two percent answered, “Most of the time,” 12% answered, “Some of the time,” 18% answered, “A

little of the time,” and 68% answered, “None of the time.”

When asked, “How often in the past 30 days do you feel that everything was an effort?,” 5% answered “All of the time,” 28% of the answered, “Some of the time,” 35% answered, “A little of the time,” and 30% answered, “none of the time.” When asked “How often in the past 30 days do you feel worthless?,” 13% answered “a little of the time” or “some of the time” while 87% of participants answered “none of the time.”

**Women’s health.** When asked, “Have you ever had a mammogram?,” the majority (62%) of participants answered, “No,” while 38% answered, “Yes.” When asked, “How long has it been since your last mammogram?,” the majority 63% have “Never” been, 18% have been “within 1 year,” and 12% have been “within the past 2 years.” When asked, “Have you have ever had a pap test?,” 98% of the women answered, “Yes.” When asked how long has it been since you had a pap test, 73% replied, “Within the past year.”

Facilitators of healthy eating for participants were the knowledge of the benefits of healthy eating, the ability to preplan, family influences, and serving a role. Barriers of healthy eating were the cultural practices of food preparation, the poor taste, the cost of healthy foods, and a lack of credible information of healthy eating that specifically targets the women. Facilitators of physical activity were knowledgeable of the benefits of physical activity, motivation and commitment, and serving as a role model. Barriers to physical activity were family influences, competing priorities, and lack of physical activity information that the women could relate to. Overall, the study participants were from a highly educated, middle-class sample of Black women. However, the women in the group did not meet the recommended guidelines on fruit and vegetable intake (see Table 3) or regular physical activity. Thus, the information generated from this study can

provide the basis for generating strategies to increase healthy eating and physical activity for Black women in Broward County, Florida.

Table 3

*Fruit and Vegetable Intake of Participants*

Intake type	Mean intake per day	SD	Sample size
Fruit juices	1.1	1.2	32
Fruit	2.0	1.4	32
Green salad	1.7	1.9	28
Potatoes	0.8	0.9	23
Carrots	0.6	0.8	23
Vegetables	1.9	1.5	30

## **Discussion**

This chapter discusses nutritional and physical activity practices, attitudes, and practices of Black women related to healthy eating and physical activity, and challenges of preventive health measures among women who participated in the research study. Study strengths and limitations are also discussed. Lastly, aspects of healthy eating and physical activity attitudes, practices, and challenges that participants shared have significant implications in the development of effective interventions tailored for Black women.

### **Nutritional Practices**

Understanding the nutritional practices of participants is relevant because there is evidence that poor diets are a contributing factor in obesity (USDHHS and U.S. Department of Agriculture, 2005). The mean intake of fruits was 2 per day and the mean intake of vegetables was 1.9 per day for women who participated in the research study. Thus, the majority of group participants were not consuming five or more fruits and vegetables per day. Studies have shown a strong association between fruit and vegetable intake and a lower risk for chronic diseases (USDHHS and U.S. Department of Agriculture, 2005). According to the Dietary Guidelines for Americans (USDHHS and U.S. Department of Agriculture, 2005), consumption of at least 5 servings of fruits and vegetables per day should occur.

Meal preparation was also discussed among the women. For some, preplanning was the key to their ability to engage in healthy eating. Preplanning served as a way to ensure that participants remained on track by engaging in healthy eating but it also served as a way to save money and time. Specifically, poor eating habits are a major contributing factor in the onset of obesity and other chronic diseases (James, 2004).

### **Attitudes and Practices Related to Healthy Eating**

Nutritional attitudes and practices play an important role in determining food behavior (Jordan et al., 2008). Specifically, during the focus groups, many of the women were cognizant of what poor eating entailed and many shared that they were actively working on making healthier choices. For some women in the group, healthy eating practices served as way to model to their families on the importance of eating healthy. Family roles were also influential in women's attitudes toward engaging in healthy eating. Some of the women provided examples of how their family members personally served as role models on ways to engage in healthy eating. Others in the group discussed how the results of their families' poor eating habits now serve as a facilitator to the women's personal engagement in healthy eating to avoid similar health consequences.

### **Physical Activity Practices**

Regular physical activity, fitness, and exercise are vital for the health of all people (USDHHS, 2008a). Studies have illustrated that people benefit from regular physical activity and it has been proven to reduce morbidity and mortality from many chronic diseases (USDHHS, 2008a). For substantial health benefits, the USDHHS (2008a) recommended that adults should exercise for minimally (a) 150 minutes a week at moderate intensity aerobic physical activity, (b) 75 minutes a week of vigorous-intensity aerobic physical activity, or (c) an equivalent combination of moderate- and vigorous-intensity aerobic activity. The median time spent of participating in moderate physical activity for the participants was 35 minutes. The median time spent of participating in vigorous physical activity for the participants was 30 minutes. Therefore, the average focus group participant was not spending the recommended amount of time on moderate or vigorous physical activity.

### **Attitudes and Practices Related to Physical Activity**

During the discussion, personal attitudes of the health benefits of physical activity served as a facilitator for many of the women who were trying to maintain their weight and trying to maintain health. Many of the women were clear that the purpose of physical activity for them was for the health benefits and not for the purpose of losing weight. For most of the women, motivation and commitment was a vital component in the engagement of physical activity. In a study exploring African American women's experiences and attitudes toward physical activity between the ages of 35 and 50 years both knowledge of the benefits of physical activity and commitment also served as a facilitator for the women who engaged in physical activity (Nies, Vollman, & Cook, 1999). Serving as a role model for their families was also expressed as a facilitator for the engagement in physical activity by the women; women described how their children will benefit from knowing the importance of physical activity as well as their children's participation in physical activity. Thus, the findings of this research study are consistent with the literature.

### **Perception of Weight and Body Image**

Preventive health measures, such as healthy eating and physical activity, can be of great benefit to avoid the onset of many chronic diseases. Due to the increased prevalence of obesity among Black women, it is important that one has a clear understanding of the challenges that prevent women from engaging in preventive measures, such as healthy eating and physical activity. BMI is a measure used to indicate weight and is calculated by using both weight and height.

Obesity is defined as having a BMI that is greater than or equal to 30.0 (Florida Department of Health, 2007). The term *overweight* is defined as having a BMI ranging

from 25.0 to 29.9 and is calculated based on height and weight (Florida Department of Health, 2007). The mean BMI for the women who participated in the research study was 29.6, which is considered overweight. During the discussion, some of the women were knowledgeable about the BMI measure but also expressed that they were convinced that BMI was not an accurate tool for Black women. Many of the women expressed that the BMI just provided a number but was not an indicator of how healthy a person is. Furthermore, many of the women expressed that they knew what their BMI was and indicated that they were considered either overweight or obese by the measure. However, while the women expressed that they were considered overweight or obese, they did not seem to identify themselves as either overweight or obese when comparing themselves to others. This may hold true because there is stigma associated with the terms *overweight* and *obese*. Furthermore, many women in the group clearly articulated that they did not have a desire to be “thin” or “small” and expressed that being “full-figured” was attractive in the Black culture. Thus, although women in the group may be overweight or obese, they are less likely to perceive themselves as overweight. This finding is consistent with Hawkins, Tuff, and Dudley’s (2006) findings that in spite of psychological characteristics, dieting practices, and fitness goals, 90% of the women were satisfied with their current appearance.

In addition, in a study by Yates (2000), the current standards of beauty and health for Black American women have roots in West African traditions and continue to impact Black women’s body perceptions and weight. For example, among West African culture, overweight women have historically held high self-esteem, where being overweight was an indication that the family had more resources and, thus, was a sign of wealth (Yates, 2000). According to Yates, overweight women were perceived as attractive and thin

women were perceived as unattractive. Also, in a review of the literature, Meshreki and Hansen (2004) found that Black men have a preference for women of larger body size compared to White men.

In another study, Kumanyika, Wilson, and Guilford-Davenport (1993) explored weight-related perceptions of Black women who attended health department clinics or were employed by a health and human services agency using survey methodology. In the study, awareness of obesity-related health risks was high. Lastly, approximately 40% of moderately and severely overweight women considered their figures to be attractive or very attractive, which served as an indication of a relatively positive body image (Kumanyika, Wilson, and Guilford-Davenport, 1993).

On the other hand, when posed with the question, “How do feel about your weight?,” the majority of the women expressed that they were “not happy” with their weight. Equally, important is that those who expressed that they were “not happy” with their weight also noted that they were actively working on making a change.

### **Challenges of Preventive Health Measures**

The factors found to be a challenge for practicing to preventive health measures were related to healthy eating were the cultural practices of food preparation, the poor taste and cost of healthy foods and a lack of credible information of healthy eating that specifically targets the women. Many expressed that there is a lack of education that exists among Black women that has been passed down from previous generations. Moreover, the women in the group expressed that poor eating habits are a result of the cultural aspects of food preparation. The women expressed that the cultural aspects of Black’s eating patterns directly influences behavior. Traditional Black food preparation practices, such as frying and adding fat to vegetables have been cited as a major concern

in the dietary health of Blacks (Yates, 2000). One of the challenges of changing food preparation techniques and patterns among Blacks is that these practices are often linked to culture (Airhihenbuwa & Kumanyika, 1996). James (2004) explained that nutrition-related attitudes and behaviors are usually established early in life and are largely determined by cultural, psychosocial and socioeconomic influences.

Other barriers to the engagement of healthy eating included the taste and cost of healthier foods. Some of the women expressed that taste overrides the nutritional value of foods that they consume and many expressed that healthy eating is more costly than unhealthy eating. In a study by James (2004), the poor taste of healthy foods and the expense of healthy foods were also identified as a barrier that influenced the food choices and dietary intake among African Americans.

The factors found to be a challenge for practicing to preventive health measures were related to physical activity were family influences, competing priorities, and lack of physical activity information that the women could relate to. Women expressed that physical activity was not something that was modeled in their homes while growing up and, therefore, the act of engaging in physical activity was seen as a something new for them to engage in.

Many of the women expressed receiving messages from family that physical activity is for those that are trying to lose weight and, therefore, questioned the participants' engagement in physical activity. In a study by Baturka, Hornsby, and Schorling (2000), which explored body image in rural Black women, many participants spoke of the encouragement that they received from family members to not lose weight and, in some cases, felt pressure to gain weight.

Competing priorities were also identified as a challenge to engaging in preventive

behaviors. Many women in the group expressed that responsibilities, such as work, school duties, and household duties, outweighed their own needs and some even expressed guilt when taking time for themselves. As a result, physical activity is not a priority. Nies et al. (1999) also found that competing priorities was a barrier to engaging in physical activity for the women in their study. Additional barriers that influenced physical activity engagement included issues with how to maintain hair after exercise as well as wear specific clothing when attending the gym that allows the women to appear acceptable while working out and ensure that the participant was exercise without feeling self-conscious.

Another challenge that was presented was a lack of confidence in how to obtain credible and reliable information on healthy eating and physical activity, applicable to the women's specific needs. The women discussed that, while they do receive information on preventive health measures via health care providers, the Internet, television, magazines, and radio, they felt that messages are not specifically tailored towards them. Moreover, messages women received were not focused on healthy eating and physical activity. The participants expressed that they wanted to receive information from people who they could relate to. Some examples of people that the women could relate to in messages of preventive health measures included health care providers, who were Black and people who are not celebrities. In fact, women in the group adamantly expressed that, even though they do have access to some sources of information, they still primarily utilize their instincts and intuition to process information that they receive. In essence, women felt that everyone is different and that they, ultimately, know what works best for them.

The findings have several implications for behavioral interventions that can be developed to promote the engagement of healthy eating and physical activity for Black

women. The results suggested that health promotion efforts should not solely focus on healthy eating and physical activity knowledge because the majority of the women are aware of what is recommended. Rather, efforts should focus on assisting women with overcoming the challenges that affect personal engagement in healthy eating and physical activity. Environmental changes include increasing work site health promotion, increasing access to affordable healthy food options, and creating reliable and valid educational resources that are tailored specifically towards women, and using messages and messengers that the women can relate to. Messages must include practical examples for improvement that can assist Black women in making positive, lifelong health changes. In addition, interventions must be adaptable to address and fully accommodate for the many roles as wife, mother, sister, friend, employee, student and civil member. What is obvious is that Black women are aware of what a healthy lifestyle entails, such as eating healthier and participating in more physical activity. As a result, implementing practices that are effective and sustainable for improving the health status and outcomes of Black women is required.

### **Limitations**

One limitation of the study, as with all studies, was the use of self-reported information. Black women provided information regarding their eating practices, exercise levels, and readiness to change. Given the methodology, these self-reports were not independently or objectively verified.

Another limitation of the study was the potential that the focus group setting contributed to participants engaging in socially desirable responding. Although the researcher explained that the specific purpose of this study was to understand attitudes, beliefs, and experiences, participants more than likely perceived the overall purpose of

the study, which was to positively impact preventive health measures. Although the moderator worked hard to create a neutral atmosphere that respected all views, it was unclear to what extent respondents felt pressured to make positive statements surrounding healthy eating and physical activity.

Additionally, this study was limited to a sample of Black women in Broward County, Florida. The intent of this study was not to generalize findings to Black women in other locales. However, these findings contribute to the knowledge of the attitudes, beliefs, and experiences of a particular group of individuals with the goal of developing intervention messages that positively influences the health of Black women in Broward County, Florida.

One strength was that this study participants were highly educated, middle-class sample of Black women, a group traditionally understudied. The fact that the results were from Black women, who have high levels of education and income, makes the findings less likely due to the traditional reported barrier of socioeconomic status.

## References

- Adler, N. E., & Stewart, J. (2009). Reducing obesity: Motivating action while not blaming the victim. *Milbank Quarterly*, *87*, 49-70. doi:10.1111/j.1468-0009.2009.00547.x
- Airhihenbuwa, C. D., & Kumanyika, S. (1996). Cultural aspects of African American eating patterns. *Ethnicity & Health*, *1*, 245-261.
- Ard, J. K., Rosati, R., & Oddone, E. Z. (2000). Culturally-sensitive weight loss program produces significant reduction in weight, blood pressure, and cholesterol in 8 weeks. *Journal of the National Medical Association*, *92*, 515-523.
- Ashaye, M. O., & Giles, W. H. (2003). Hypertension in Blacks: A literature review. *Ethnicity & Disease*, *13*, 456-462.
- Baturka, N., Hornsby, P. P., & Schorling, J. B. (2000). Clinical implications of body image among rural African American women. *Journal of General Internal Medicine*, *15*, 235-241. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1495436/bin/> doi:10.1111/j.1525-1497.2000.06479.x
- Bernard, M., Lampley-Dallas, V., & Smith, L. (1997). Common health problems among minority elders. *Journal of the American Dietetic Association*, *97*, 771-776. doi: 10.1016/S0002-8223(97)00190-9
- Bish, C. L., Blanck, H. M., Serdula, M. K., Kohl, H. W., & Khan, L. K. (2005). Diet and physical activity behaviors among Americans trying to lose weight: 2000 behavioral risk factor surveillance system. *Obesity Research*, *13*, 596-607. doi:10.1038/oby.2005.64
- Bronner, Y., & Boyington, J. E. (2002). Developing weight lost interventions for Black women: Elements of successful models. *Journal of National Medical Association*, *94*, 224-235.
- Brownson, R. C., Boehmer, T. K., & Luke, D. A. (2005). Declining rates of physical activity in the United States: What are the contributing factors? *Annual Review of Public Health*, *26*, 421-443. doi:10.1146/annurev.publhealth.26.021304.144437
- Calderon, J. L., Baker, R. S., & Wolf, K. E. (2000). Focus groups: A qualitative method complementing quantitative research for studying culturally diverse groups. *Education for Health: Change in Learning and Practice*, *13*, 91-95. Retrieved from [http://www.educationforhealth.net/EfHArticleArchive/1357-6283\\_v13n1s12\\_713664873.pdf](http://www.educationforhealth.net/EfHArticleArchive/1357-6283_v13n1s12_713664873.pdf)
- Cassetta, J. A., Boden-Albala, B., Sciacca, R. R., & Giardina, E. G. V. (2007). Association of education and race/ethnicity with physical activity in insured, urban women. *Journal of Women's Health*, *16*, 902-908. doi:10.1089/jwh.2006

.0141 <http://dx.doi.org/10.1089/jwh.2006.0141>

- Centers for Disease Control and Prevention. (1995, February 17). Prevalence of Recommended Levels of Physical Activity Among Women--Behavioral Risk Factor Surveillance System, 1992. *MMWR*, 44, 105-107, 113. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/00036931.htm>
- Centers for Disease Control and Prevention. (2000, February 11). *Age-specific excess deaths associated with stroke among racial/ethnic minority populations--United States, 1997*. *MMWR*, 49, 94-97. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4905a2.htm>
- Centers for Disease Control and Prevention. (2007, April 6). *Prevalence of fruit and vegetable consumption and physical activity by race/ethnicity--United States, 2005*. *MMWR*, 56, 301-304. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5613a2.htm>
- Centers for Disease Control and Prevention. (2008, July 18). *State-specific prevalence of obesity among adults--United States, 2007*. *MMWR*, 57, 765-768. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5728a1.htm>
- Centers for Disease Control and Prevention. (2009, July 17). *Differences in prevalence of obesity among Black, White, and Hispanic Adults--United States, 2006-2008*. *MMWR*, 58, 740-744. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5827a2.htm>
- Clarke, K. K., Freeland-Graves, J., Khloe-Lehman, D. M., & Bohman, T. M. (2007). Predictors of weight loss in low-income mothers of young children. *Journal of the American Dietetic Association*, 107, 1146-1154. doi:10.1016/j.jada.2007.04.016
- Clarke, K. K., Freeland-Graves, J., Khloe-Lehman, D. M., Milani, T. J., Nuss, H. J., & Laffrey, S. (2007). Promotion of physical activity in low-income mothers using pedometers. *Journal of the American Dietetic Association*, 107, 962-967. doi:10.1016/j.jada.2007.03.010
- Department of Urban Planning and Redevelopment: Broward County, Florida. (2004). *Broward's Black/African American population*. Retrieved from <http://www.broward.org/planningservices/bbtn28.pdf>
- Duncan, G. E., Anton, S. D., Newton, R. L., & Perri, M. G. (2003). Comparison of perceived health to physiological measures of health in Black and White women. *Preventive Medicine*, 36, 624-628. doi:10.1016/S0091-7435(03)00017-3
- Dunn, M. Z. (2008). Psychosocial mediators of a walking intervention among African American women. *Journal of Transcultural Nursing*, 19, 40-46. doi:10.1177/1043659607309138

- Evenson, K. R., & McGinn, A. P. (2005). Test-retest reliability of adult surveillance measures for physical activity and inactivity. *American Journal of Preventive Medicine*, 28, 470-478. doi:10.1016/j.amepre.2005.02.005
- Flegal, K. M., Carroll, M. D., Ogden, C. L., & Johnson, C. L. (2002). Prevalence and trends in obesity among U.S adults, 1999-2000. *Journal of the American Medical Association*, 288, 1723-1726.
- Florida Department of Health. (2007). *2007 Florida Behavioral Risk Factor Surveillance System (BRFSS) data report*. Retrieved from [http://www.doh.state.fl.us/disease\\_ctrl/epi/BRFSS\\_Reports/2007BRFSS/Broward.pdf](http://www.doh.state.fl.us/disease_ctrl/epi/BRFSS_Reports/2007BRFSS/Broward.pdf)
- Gans, K. M., Kumanyika, S., K., Lovell, H. J., Risica, P. M., Goldman, R., Odoms-Young, A., et al. (2003). The development of SisterTalk: A cable TV-delivered weight control program for Black women. *Preventive Medicine*, 37, 654-667. doi: 10.1016/j.ypmed.2003.09.014
- Glanz, K., Croyle, R. T., Chollette, V., & Pinn, V. W. (2003). Cancer-related health disparities in women. *American Journal of Public Health*, 93, 292-298. PMID: PMC1447733
- Hawkins, B., Tuff, R.A., & Dudley, G. (2006). African American women, body composition, and physical activity. *Journal of African American Studies*, 10(1), 44-56. Retrieved from <http://www.springerlink.com/content/8jxh2k2mq0tjb98/fulltext.pdf> doi:10.1007/s12111-006-1012-5
- James, D. C. S. (2004). Factors influencing food choices, dietary intake, and nutrition-related attitudes among African Americans: Application of a culturally sensitive model. *Ethnicity & Health*, 9, 349-367. doi:10.1080/01355785042000285375
- Jordan, K. C., Freeland-Graves, J. H., Klohe-Lehman, D. M., Cai, G., Voruganti, V. S., Proffitt, J. M., et al. (2008). A nutrition and physical activity intervention promotes weight loss and enhances diet attitudes in low-income mothers of young children. *Nutrition Research*, 28, 13-20. doi:10.1016/j.nutres.2007.11.005
- Kanders, B. S., Ullman-Joy, P., Foreyt, J. P., Heymsfield, S. B., Heber, D., Elashoff, R. M., et al. (1994). The Black American lifestyle intervention (BALI): The design of a weight loss program for working-class Black women. *Journal of the American Dietetic Association*, 94, 310-312. doi:10.1016/0002-8223(94)90374-3
- Karanja, N., Stevens, V. J., Hollis, J. F., & Kumanyika, S. K. (2002). Steps to soulful living (STEPS): A weight loss program for Black women. *Ethnicity & Disease*, 12, 363-371. PMID: 12148707
- Kayrooz, K, Moy, T. F., Yanck, L. R., & Becker, D. M. (1998). Dietary fat patterns in urban African American women. *Journal of Community Health*, 23, 453-469. PMID: 9824794

- Klohe-Lehman, D. M., Freeland-Graves, J., Anderson, E. R., McDowell, T., Clarke, K. K., Hauss-Nuss, H., et al. (2006). Nutrition knowledge is associated with greater weight loss in obese and overweight low-income mothers. *Journal of the American Dietetic Association, 106*, 65-75. doi:10.1016/j.jada.2005.09.047
- Krauss, R. M., Deckelbaum, R. J., Ernst, N., Fisher, E., Howard, B. V., Knopp, R. H, et al. (1996). Dietary guidelines for healthy American adults: A statement for health professionals from the Nutrition Committee, American Heart Association. *Circulation, 94*, 1795-1800. Retrieved from <http://circ.ahajournals.org/cgi/content/full/94/7/1795>
- Kumanyika, S. K., Hebert, P. R., Cutler, J. A., Lasser, V. I., Sugard, C. P., Steffen-Batey, L., et al. (1993). Feasibility and efficacy of sodium reduction in the trials of hypertension prevention, phase I. *Hypertension, 22*, 502-512. Retrieved from <http://hyper.ahajournals.org/cgi/content/short/22/4/502>
- Kumanyika, S. K., Obarzanek, E., Stevens, V. J., Hebert, P. R., & Whelton, P. K. (1991). Weight-loss experience of Black and White participants in NHLBI-sponsored clinical trials. *American Journal of Clinical Nutrition, 53*, S1631-S1638. Retrieved from <http://www.ajcn.org/cgi/reprint/53/6/1631S>
- Kumanyika, S. K., Whitt-Glover, M. C., Gary, T. L., Prewitt, T. E., Odoms-Young, A. M., & Banks-Wallace, J., et al. (2007). Expanding the obesity research paradigm to reach African American communities. *Preventing Chronic Disease: Public Health Research, Practice and Policy, 4*(4), 1-22. PMID: PMC2099277
- Kumanyika, S., Wilson, J. F., & Guilford-Davenport, M. (1993). Weight-related attitudes and behaviors of Black women. *Journal of American Dietetic Association, 93*, 416-422. doi:10.1016/0002-8223(93)92287-8
- Maynard, L. M., Serdula, M. K., Galuska, D. A., Gillespie, C., & Mokdad, A. H. (2006). Secular trends in desired weight of adults. *International Journal of Obesity, 30*, 1375-1381. doi:10.1038/sj.ijo.0803297
- Meshreki, L. M., & Hansen, C. E. (2004). African American men's female body size preferences based on racial identity and environment. *Journal of Black Psychology, 30*, 451-476. Retrieved from <http://jbp.sagepub.com/cgi/reprint/30/4/451.pdf> doi:10.1177/0095798403260722
- Mokdad, A. H., Ford, E. F., Bowman, B. A., Dietz, W. H., Vinicor, F., Bales, V. S., et al. (2003). Prevalence of obesity, Diabetes and obesity-related health risk factors, 2001. *Journal of the American Medical Association, 289*, 76-79.
- National Research Council. (1989). *Diet and health: Implications for reducing chronic disease risk*. Washington, DC: National Academy Press.
- Nelson, D. E., Holtzman, D., Bolen, J., Stanwyck, C. A., & Mack K. A. (2001).

Reliability and validity of measures from the Behavioral Risk Factor Surveillance System (BRFSS). *Social and Preventive Medicine*, 46, S03-S42. PMID: 11851091

- Nies, M., Vollman, M., & Cook, T. (1999). African American women's experiences with physical activity in their lives. *Public Health Nursing*, 16, 23-29. doi:10.1046/j.1525-1446.1999.00023.x
- Nuss, H., Clarke, K., Klohe-Lehman, D., & Freeland-Graves, J. (2006). Influence of nutrition attitudes and motivators for eating on postpartum weight status in low-income new mothers. *Journal of the American Dietetic Association*, 106, 1774-1782. doi:10.1016/j.jada.2006.08.016
- Office of Minority Health. (2008). *A strategic framework for improving racial/ethnic minority health and eliminating racial/ethnic health disparities* [Preface]. Retrieved from <http://www.omhrc.gov/npa/images/78/PrintFramework.html>
- Park, S. Y., Murphy, S. P., Wilkens, L. R., Yamamoto, J. F., Sharma, S., Hankin, J. H., et al. (2005). Dietary patterns using the food guide pyramid groups are associated with sociodemographic and lifestyle factors: The multiethnic cohort study. *Journal of Nutrition*, 135, 843-849. Retrieved from <http://jn.nutrition.org/cgi/reprint/135/4/843>
- Patton M. Q. (2001). *Qualitative evaluation and research methods* (3rd ed.). Beverly Hills, CA: Sage.
- Ransdell, L. B., & Wells, C. L. (1998). Physical activity in urban White, African American, and Mexican American women. *Medicine & Science in Sports & Exercise*, 30, 1608-1615.
- Resnicow, K., Jackson, A., Braithwaite, R., Dilorio, C., Blisset, D., Rahotep, S., et al. (2002). Healthy body/healthy spirit: A church-based nutrition and physical activity intervention. *Health Education Research*, 17, 562-573. Retrieved from <http://her.oxfordjournals.org/cgi/reprint/17/5/562>
- Sanchez-Johnsen, L. A. P., Fitzgibbon, M. L., Martinovich, Z., Stolley, M. R., Dyer, A. R., & Van Horn, L. (2004). Ethnic differences on correlates of obesity between Latin-American and Black women. *Obesity Research*, 12, 652-660. doi:10.1038/oby.2004.75
- Sanderson, B. K., Foushee, H. R., Bittner, V., Cornell, C. E., Stalker, V., Shelton, S., et al. (2003). Personal, social and physical environmental correlates of physical activity in rural African American women in Alabama. *American Journal of Preventative Medicine*, 25, 30-37. doi:10.1016/S0749-3797(03)00162-4
- Stein, C. J., & Colditz, G. A. (2004). The epidemic of obesity. *Journal of Clinical Endocrinology & Metabolism*, 89, 2522-2525. Retrieved from <http://jcem>

.endojournals.org/cgi/reprint/89/6/2522

- U.S. Census Bureau. (2000). *Race: 2000 census of population, Public Law 94-171 redistricting data file*. Retrieved from [http://quickfacts.census.gov/qfd/meta/long\\_68176.htm](http://quickfacts.census.gov/qfd/meta/long_68176.htm)
- U.S. Department of Health and Human Services and U.S. Department of Agriculture. (2005.). *Dietary guidelines for Americans* (6th ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services. (2000). *Healthy people 2010: With understanding and improving health and objectives for improving health* (2nd ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services. (2008a). *Physical activity guidelines for Americans*. Retrieved from <http://www.health.gov/paguidelines/guidelines/default.aspx>
- U.S. Department of Health and Human Services. (2008b). *US physical activity statistics (2007)*. Retrieved from <http://apps.nccd.cdc.gov/PASurveillance/StateSumResultV.asp>
- U.S. Department of Health and Human Services. (2008c). *US physical activity statistics: Recommended physical activity by gender*. Retrieved from <http://apps.nccd.cdc.gov/PASurveillance/DemoCompareResultV.asp#result>
- U.S. Department of Health and Human Services. (2008d). *US physical activity statistics: Recommended physical activity by race (2007)*. Retrieved from <http://apps.nccd.cdc.gov/PASurveillance/DemoCompareResultV.asp#result>
- Walcott-McQuigg, J. A., Chen, S. P., Davis, K., Stevenson, E., Choi, A., Wangsrikhun, S., et al. (2002). Weight loss and weight loss maintenance in Black women. *Journal of the National Medical Association, 94*, 686-94.
- Yancey, A. K., Kumanyika, S. K., Ponce, N. A., McCarthy, W. J., Fielding, J. E, Leslie, J. P., et al. (2004). Population-based interventions engaging communities of color in healthy eating and active living. *Preventing Chronic Disease: Public Health Research, Practice and Policy, 1*(1), 1-18. Retrieved from [http://www.cdc.gov/pcd/issues/2004/jan/03\\_0012.htm](http://www.cdc.gov/pcd/issues/2004/jan/03_0012.htm)
- Yancey, A. K., Miles, O. L, McCarthy, W. J., Sandoval, G., Hill, J., Leslie, J. J., et al. (2001). Differential response to targeted recruitment strategies to fitness promotion research by Black women of varying body mass index. *Ethnicity & Disease, 11*, 115-123.
- Yates, B. (2000). *Heart health for Black women: A natural approach to healing and preventing heart disease*. New York, NY: Marlowe & Company.

- Yore, M. M., Ham, S. A., Ainsworth, B. E., Kruger, J., Reis, J. P., Kohl, H. W., et al. (2007). Reliability and validity of the instrument used in BRFSS to assess physical activity. *Medicine & Science in Sports & Exercise*, 39, 1267-1274. doi: 10.1249/mss.0b013e3180618bbe
- Young, D. R., & Voorhees, C. C. (2003). Personal, social, and environmental correlates of physical activity in urban African American women. *American Journal of Preventative Medicine*, 25, 38-44. doi:10.1016/S0749-3797(03)00163-6

Appendix A

Focus Group Discussion Guide

## Discussion Guide for Focus Groups

**As you know, the purpose of this study is to learn more about your views and experiences with physical activity and healthy eating. But before we get to those issues, I wonder if you could tell me what you think the major issues are surrounding physical activity and healthy eating.**

### 1. Opening Question

- a. What are the major barriers to physical activity? What are the major barriers to healthy eating?
- b. Why do you think people who engage in physical activity and health eating do it?
- c. Why do you think we're even talking about physical activity?
- d. Why do you think we're even talking about healthy eating?

### 2. Views regarding Nutrition/Exercising

- a. What do you think about the statement that, "the majority of Blacks are obese"?
  - o Do you agree with this statement?
  - o Disagree with this statement?
  - o Why?
- b. Tell me about your personal thoughts on physical activity and healthy eating.
  - o What is your opinion on physical activity and healthy eating?
  - o How did you develop that belief?
  - o How does this belief fit with your current life style?
  - o How much have you discussed your view on physical activity and healthy eating with your family, friends?

### 3. Knowledge of Physical & Healthy Eating

Now I'd like to go around the room and have each person tell me what you know about y physical activity and healthy eating. I'm not looking for more than a few sentences here.

- a. What's the purpose of physical activity?
- b. What's the purpose of healthy eating?
- c. Who benefits from physical activity?
- d. Who benefits from healthy eating?
- e. Where would you go to get more information on physical activity and healthy eating?
- f. Who would you go to for more information on physical activity and healthy eating?

### 4. Personal Thoughts/Experiences Surrounding Physical Activity and Healthy Eating

- a. What are your thoughts about your weight?
  - o Is this something you think about?
  - o If so, how often?

- b. What are your thoughts about healthy eating?
  - Is this something you think about?
  - If so, how often?
  - What does healthy eating mean to you?
  - What is your favorite food?
  
- c. What are your thoughts about physical activity?
  - Is this something you think about?
  - If so, how often?
  - What does physical activity mean to you?
  - What type of physical activities do you enjoy most?

### **5. Solutions for Improvement**

- a. What would you want to see in a lifestyle program designed to meet Black women's needs, challenges and strengths for healthier living? For example,
  - What should be included about better eating habits?
  - What should be included about physical activity?
  - What type of eating activities would you want to take part in?
  - What type of physical activities would you want to take part in?
  - What are some incentives to make you definitely take part?
  - How often would you want to meet with the group?
  - Would you take part in a buddy or partnering system?
  
- b. Is there anything else that you would like to share with the group about your thoughts on physical activity and healthy eating?
  
- c. Do you have any questions for me?

Appendix B  
Participant Questionnaire



Health Care Access

5. Do you have any kind of health coverage, including health insurance, prepaid plans such as HMOs, or governmental plans such as Medicare?

Yes  No  Don't Know/Not Sure

6. Do you have one person you think of as your personal doctor or health care provider?

Yes, Only One  More Than One  No  Don't Know/Not Sure

Health Care Access

7. Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?

Yes  No  Don't Know/Not Sure

8. About how long has it been since you last visited a doctor for a routine checkup? A routine check up is a general physical exam, not an exam for a specific injury, illness or condition.

- Within past year (anytime less than 12 months ago)
- Within past 2 years (1 year but less than 2 years ago)
- Within past 5 year (2 years but less than 5 years ago)
- Don't Know/Not sure
- Never

Exercise

9. During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?

Yes  No  Don't Know/Not Sure

Diabetes

10. Have you ever been told by a doctor that you have diabetes?

- Yes
- No
- Yes, but told only during pregnancy
- No, pre-diabetes or borderline diabetes
- Don't Know/Not Sure

Hypertension Awareness

11. Have you EVER been told by a doctor, nurse, or other health professional that you have high blood pressure?

- Yes
- No
- Yes, but told only during pregnancy
- Told borderline high or pre-hypertensive
- Don't Know/Not Sure

12. Are you currently taking medicine for your high blood pressure?

Yes  No  Don't Know/Not Sure

Cholesterol Awareness

13. Blood cholesterol is a fatty substance found in the blood. Have you EVER had your blood cholesterol checked?

Yes  No  Don't Know/Not Sure

Cholesterol Awareness

14. About how long has it been since you last had your blood cholesterol checked?

- Within past year (anytime less than 12 months ago)
- Within past 2 years (1 year but less than 2 years ago)
- Within past 5 year (2 years but less than 5 years ago)
- 5 or more years ago
- Don't Know/Not sure
- Never

15. Have you EVER been told by a doctor, nurse, or other health professional that your blood cholesterol is high?

Yes  No  Don't Know/Not Sure

Cardiovascular Disease Prevalence

16. Has a doctor, nurse, or other health professional EVER told you that you had any of the following?

A. (Ever told) you had a heart attack, also called myocardial infarction?

Yes  No  Don't Know/Not Sure

B. (Ever told) you had an angina or coronary heart disease?

Yes  No  Don't Know/Not Sure

C. (Ever told) you had a stroke?

Yes  No  Don't Know/Not Sure

Asthma

17. Have you been told by a doctor, nurse, or other health professional that you had asthma?

Yes  No  Don't Know/Not Sure

18. Do you still have asthma?

Yes  No  Don't Know/Not Sure

Tobacco Use

19. Have you smoked at least 100 cigarettes in your entire life? (5 packs = 100 cigarettes)

Yes  No  Don't Know/Not Sure

20. Do you smoke cigarettes every day, some days, or not at all?

3 Every day 2 Some days 1 Not at all 0 Don't know/Not sure

21. During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?

Yes  No  Don't Know/Not Sure

Tobacco Use

22. How long has it been since you last smoked cigarettes regularly?

Within past month (less than 1 month ago)

Within past 3 months (1 month but less than 3 months ago)

Within past 6 months (3 months but less than 6 months ago)

Within the past 5 years (1 year but less than 5 years ago)

Within the past 10 years (5 years but less than 10 years ago)

10 years or more

Never smoked regularly

Don't Know/Not Sure

Never

23. Do you currently use chewing tobacco, snuff, or snus every day, some days, or not at all? (Snus, Swedish for snuff, is a moist smokeless tobacco, usually sold in small pouches that are placed under the lip against the gum)

Every Day     Some Days     Not at All     Don't Know/Not Sure

Demographics

24. What is your age?

- 18-24  
 25-34  
 35-45

Demographics

25. Are you Hispanic or Latino?

Yes     No     Don't Know/Not Sure

26. Which one or more of the following would you say is your race?

- Black or African American  
 Other \_\_\_\_\_

27. Which one or more of the following would you say is your ancestry/ethnicity?

- Central/South American Hispanic (Includes persons with origin in Spanish-speaking Central/South American, Spain and Dominican Republic)  
 Cuban  
 Puerto Rican  
 Sub-Saharan African  
 West Indian (Bahamian, Barbadian, Belizean, Bermudan, British West Indian, Dutch West Indian, Haitian, Jamaican, Trinidadian and Tobagonian, U.S. Virgin Islander etc.) excludes Spanish groups  
 Other \_\_\_\_\_

Demographics

28. Which one of the following would you say describes where you were born?

- United States  
 Foreign Born

29. Are you ... ?

- Married  
 Divorced  
 Widowed  
 Separated  
 Never married  
 Member of unmarried couple

30. How many children less than 18 years of age live in your household?

- |                          |   |  |
|--------------------------|---|--|
|                          | <input type="checkbox"/> Number of Children | <input type="checkbox"/> No Children Living in the Household |
| <input type="checkbox"/> | <input type="checkbox"/>                    |  |
| <input type="checkbox"/> | <input type="checkbox"/>                    |  |
|                          | <input type="checkbox"/>                    |  |

31. What is the highest grade or year of school you completed?

- Never attended school or only attended Kindergarten  
 Grades 1-8 (Elementary)  
 Grades 9-11 (some high school)  
 Grade 12 or GED (High School graduate)  
 College 1 year to 3 years (Some college or technical school)  
 College 4 years or more (College graduate)

32. Are you currently.....?

- Employed for wages  
 Self-employed  
 Out of work for more than 1 year  
 Out of work for less than 1 year  
 Homemaker  
 Student  
 Retired  
 Unable to work

Demographics

33. Is your annual household income for all sources...

- Less than \$25,000
- Less than \$20,000
- Less than \$15,000
- Less than \$10,000
- Less than \$30,000
- Less than \$50,000
- Less than \$75,000
- \$75,000 or more
- Don't Know/Not Sure

34. About how much do you weight without shoes in lbs?

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                          | <input type="checkbox"/> | <input type="checkbox"/> |
|                          | <input type="checkbox"/> | <input type="checkbox"/> |
|                          | <input type="checkbox"/> | <input type="checkbox"/> |

35. About how tall are you in ft/in?

ft      in      in

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                          | <input type="checkbox"/> | <input type="checkbox"/> |

Don't Know/Not Sure

- 

36. How much did you weight a year ago in lbs? (If you were pregnant a year ago, how much did you weigh before your pregnancy?)

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



Fruits and Vegetables

41. Not counting juice how often do you eat fruit?

Per Day		Per Week		Per Month		Per Year		Don't Know/Not Sure
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								

42. How often do you eat green salad?

Per Day		Per Week		Per Month		Per Year		Don't Know/Not Sure
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								

43. How often do you eat potatoes not including French fries fried potatoes or potato chips?

Per Day		Per Week		Per Month		Per Year		Don't Know/Not Sure
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								

<input type="checkbox"/>							
<input type="checkbox"/>							

Fruits and Vegetables

44. How often do you eat carrots?

Per Day		Per Week		Per Month		Per Year		Don't Know/Not Sure
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								

45. Not counting carrots potatoes or salad how many servings of vegetables do you usually eat?  
(Example: A serving of vegetable at both lunch and dinner would be two servings)

Per Day		Per Week		Per Month		Per Year		Don't Know/Not Sure
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								
<input type="checkbox"/>								





52. On the days when you do vigorous activities for at least 10 minutes at a time how much total time per day do you spend doing these activities?

Hours		Minutes		Don't Know/Not Sure
<input type="checkbox"/>				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### Emotional Support and Life Satisfaction

53. How often do you get the social and emotional support you need?  
 Always  Usually  Sometimes  Rarely  Never  Don't Know/Not Sure

54. In general, how satisfied are you with your life?  
 Very satisfied  Satisfied  Dissatisfied  Very dissatisfied

### Mental Health

55. About how often during the past 30 days did you feel nervous?

- All of the time
- Most of the time
- Some of the time
- A little of the time
- None of the time
- Don't Know/Not sure

### Mental Health

56. During the past 30 days about how often did you feel hopeless?

- All of the time
- Most of the time
- Some of the time
- A little of the time
- None of the time
- Don't Know/Not sure

57. During the past 30 days about how often did you feel restless or fidgety?

- All of the time
- Most of the time
- Some of the time
- A little of the time
- None of the time
- Don't Know/Not sure

58. During the past 30 days about how often did you feel so depressed that nothing could cheer you up?

- All of the time
- Most of the time
- Some of the time
- A little of the time
- None of the time
- Don't Know/Not sure

59. During the past 30 days, about how often did you feel that everything was an effort?

- All of the time
- Most of the time
- Some of the time
- A little of the time
- None of the time
- Don't Know/Not sure

60. During the past 30 days about how often did you feel worthless?

- All of the time
- Most of the time
- Some of the time
- A little of the time
- None of the time
- Don't Know/Not sure

### Women's Health

61. Have you ever had a mammogram?

- Yes  No  Don't Know/Not Sure

62. How long has it been since you had your last mammogram?

- Within past year (anytime less than 12 months ago)
- Within past 2 years (1 year but less than 2 years ago)
- Within past 3 years (2 years but less than 3 years ago)
- Within past 5 year (2 years but less than 5 years ago)
- 5 or more years ago
- Don't Know/Not sure
- Never

63. Have you ever had a Pap test?

- Yes  No  Don't Know/Not Sure

64. How long has it been since you had your last Pap test?

- Within past year (anytime less than 12 months ago)
- Within past 2 years (1 year but less than 2 years ago)
- Within past 3 years (2 years but less than 3 years ago)
- Within past 5 year (2 years but less than 5 years ago)
- 5 or more years ago
- Don't Know/Not sure
- Never

65. Have you had a hysterectomy?

- Yes  No  Don't Know/Not Sure