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ASSESSING THE PERCEPTIONS OF BLACK AMERICAN WOMEN WITHIN VIRGINIA’S FAITH COMMUNITY REGARDING THEIR HEALTH AND NUTRITION PRACTICES AND CONCERNS.

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**Thesis Abstract**

Black Americans are one of the largest minority groups in the United States and were estimated to be 35 million (13%) by the 2000 U.S. Census. In that same year, the American Cancer Society reported that Black Americans are at higher risk of dying from the nations leading causes of death, such as cardiovascular diseases, cerebrovascular disease, cancer, accidents, and diabetes. Whereas the five leading causes of death among Black American women include cardiovascular diseases, cancer, diabetes, accidents, and kidney-related diseases as reported by the American Heart Association in 2002. Black American women, in general, are less likely to engage in health promoting activities, such as physical activity and proper dietary intake. Black American women consume diets that are high in fat and in 1998, only 15.2% of Black American women reported engaging in regular, moderate exercise. The lack of physical activity and poor nutrition has also been correlated with the occurrence of overweight and obesity among Black American women. The 1999-2000 National Health and Nutrition Examination Survey (NHANES) showed that 49.7% of Black American women are obese. The purpose of this study is to assess the perceptions of Black American women regarding their health and nutrition practices, concerns, and solutions. Qualitative (focus groups and key informant interviews) and quantitative (participatory activities) research data were collected from Black American women within the faith community of the Commonwealth of Virginia. Five focus group sessions were conducted with a total of 25 Black American church women. The participants answered focus group questions and engaged in visual participatory activities to rank top nutrition and health concerns and barriers. Key informant interviews were conducted with health professionals within the faith community. Overweight/obesity, diabetes, heart disease/stroke, high blood pressure were predominate health themes raised in the focus group sessions. Also, the women ranked overweight/obesity, diabetes, heart disease/stroke, and high blood pressure as their top health concerns. The key informant interview also confirmed that overweight/obesity, diabetes, and hypertension (high blood pressure) were the main health concerns among Black American women. The predominate nutrition themes were the reluctance in giving up traditional foods, not eating enough of the right foods, and the time of day when they ate. The top nutrition concerns ranked by the women were not drinking enough water, not eating enough fruit and vegetables, and eating too many sugars. Major barriers raised by the participants were not having enough time, conflicting schedules, and familial commitments prohibited proper nutrition and health activities. The key informants agreed that a major barrier for Black American women was not prioritizing their health and nutrition practices. The preferred learning method by the women was workshops or programs that were sponsored by the community using the church as a venue. Data obtained from this study will be used to develop useful nutrition education strategies to improve the dietary habits and overall status among women in this segment of the population.
Dedication

I dedicate this thesis to all who have helped me along the way. I appreciate every kind word of encouragement that I have received from friends, family, and stranger. God Bless you all. I also would like to dedicate this thesis to my niece Amaya Noel Brave. Though you are only an infant, you have the potential to do anything you dream of as long as you hold on to it, I love you.
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# TABLE OF CONTENTS

Abstract ........................................................................................................................................ ii  
Dedication ................................................................................................................................... iii  
Acknowledgements .................................................................................................................... iv  

Chapter 1: Introduction ................................................................................................................ 1  
  Rationale and Purpose of Study ................................................................................................ 1  
  Purpose of Study ....................................................................................................................... 4  
  Research Questions ................................................................................................................... 4  

Chapter 2: Review of the Literature ............................................................................................. 5  
  Overall Health Status of U.S........................................................................................................ 5  
  Characteristics of the Black American Community ................................................................ 7  
  Overall Health Status of Black Women .................................................................................... 8  
  Health Behaviors of Black Women .......................................................................................... 10  
  Community Interventions ......................................................................................................... 12  
  Research Methodologies ........................................................................................................... 16  
    Focus Groups .......................................................................................................................... 16  
    Participatory Methods .......................................................................................................... 20  
    Key Informant Interviews ...................................................................................................... 21  
    Triangulation Methods .......................................................................................................... 21  

Chapter 3: Research Methodology ............................................................................................. 23  
  Overview of the Research Design ............................................................................................. 23  
  Sample Description and Selection Procedure .......................................................................... 23  
  Key Informant Interview Procedures ....................................................................................... 24  
  Pilot Study Procedures ............................................................................................................. 24  
  Focus Group Procedures ........................................................................................................... 25  
  Data Analysis Procedures ......................................................................................................... 27  

Chapter 4: Results ......................................................................................................................... 28  
  Research Question 1 ................................................................................................................ 32  
  Research Question 2 ................................................................................................................ 36  
  Research Question 3 ................................................................................................................ 39  
  Research Question 4 ................................................................................................................ 42  
  Key Informant Interview Questions and Results ...................................................................... 47  

Chapter 5: Summary and Conclusion ......................................................................................... 52  
  Triangulation of Methodologies ............................................................................................... 52  
  Research Question 1 ................................................................................................................ 55  
  Research Question 2 ................................................................................................................ 56  
  Research Question 3 ................................................................................................................ 58  
  Research Question 4 ................................................................................................................ 59
List of Tables and Diagram

Diagram 1. Illustration of Triangulation Methodology 22

Table 4.1 Research Questions with Correlating Focus Group Question, Key Informant Interview, and Participatory Activities 29

Table 4.2 Summary of Predominant Themes and Sub-theme Emerging from Focus Groups Questioning 30

Table 4.3 Age Ranges of Participants N=25 32

Table 4.4 Top Health Concerns Among Black American Women 36

Table 4.5 Top Nutrition Concerns Among Black American Women 39

Table 4.6 Top Nutrition Concerns to Change or Improve 43

Table 4.7 Top Health Activities to Improve on 44

Table 4.8 Rankings of Learning Preferences 46

Table 4.9 Summary of Predominant Themes and Sub-themes Emerging from Key Informant Questioning 47

Table 5.1 Triangulated Responses 54
CHAPTER I: INTRODUCTION

Rationale

National surveys and statistics on nutrition status reveal that Black American women face many health disparities. Despite the growing numbers of Black American women obtaining higher education and better jobs, the health and nutrition status among this segment of the American population is considerably lower than women of other ethnic groups in America (American Cancer Society [ACS], 2000, American Heart Association [AHA], 2002). Statistically, Black American women have the highest rates of the leading causes of death (total cardiovascular disease, cancer, diabetes, accidents, and cerebrovascular disease) as compared to Hispanic and White women (AHA, 2002).

The leading causes of death among Black American women can be attributed to the poor health and nutrition practices. Black American women generally practice lower levels of positive health promoting behaviors (Sanders-Phillips, 1996). They are more than likely to skip breakfast, engage in low levels to no level at all of physical activity, smoke and drink alcoholic beverages (Sanders-Phillips, 1996). Also, many Black American women do not follow the advised seven to eight hours of sleep (Sanders-Phillips, 1996). Low levels of proper health and nutrition practices, such as physical inactivity, poor nutrition, and poor weight management, have all been categorized as risk factors for many of the leading causes of death among Black American women (ACS, 2000; AHA, 2002; Harris & Bonner, 2001).

Poor nutrition and lack of physical activity are risk factors that can act as precursors for other risk factors, such as overweight and obesity (ACS, 2000). The National Health and Nutrition Examination Survey (NHANES) of 1999-2000 estimated that the prevalence of obesity was 30.5% and overweight was 64.5% within the American population (Flegal, Carroll, Ogden, & Johnson, 2002). Of the Black American women, the prevalence for obesity was a disheartening 49.7%, disproportionately higher than White and Mexican American women. This value was an 11.5% increase from a previous NHANES survey. Black women between the ages of 20-59 are at the highest risk for overweight and obesity (Flegal, et al., 2002). Surprisingly, many Black American women who are overweight have a positive body image perception. It is not unlikely for many Black American women to find body sizes significantly larger more
appealing than what is considered normal size in mainstream society (Anderson, Janes, Ziemer, & Phillips, 1997).

Physical activity has gained much attention over the years as an important tool for health promotion. Physical activity is known to decrease risks of coronary heart disease, hypertension, and non-insulin dependent diabetes (Harris & Bonner, 2001). Physical activity has been associated with improved mental health and may also play a role in reducing cancers of the breast, colon, and lung (Harris & Bonner, 2001). Despite this knowledge, Black American women’s involvement in physical activity remains unimproved. In 1998, the American Cancer Society estimated that only 15.2% Black American women reported they were involved in regular, sustained exercise.

Despite the scientific evidence of positive health outcomes due to good nutrition practices, the dietary practices of many Black American increases their risks of developing a preventable disease. Many Black American women may be at great risk for developing preventable forms of cancer (Sanders-Phillips, 1994). The ACS estimated that in the year 2001, 61,900 new cases of cancer among Black American women would be reported. Of those cases, 30,600 Black American women were estimated to die during that year. The cancers Black American women are most likely to die from are lung, breast, and colorectal cancers. In 1996, death rates due to breast cancer were 29% higher among Black American women than their White counterparts (Center for Disease Control [CDC], 1999). The cause of most of the cancer-related deaths among Black American women can be traced to poor nutrition and health practices. Diets that are high in dietary fat and low in fruit and vegetable intake have been well noted as a risk factor for cancer development (Huncharek & Kupelnick, 2001; World Cancer Research Fund/American Institute for Cancer Research [WCRF/AICR], 1997).

Aside from proper dietary intake and physical activity, education is thought to be another way of preventing chronic diseases such as cancer from developing (Harris & Bonner, 2001; MacDowell, Lin & Short, 2002). It is widely thought that people with higher education would be able to make better nutrition choices, which would prevent them from being at risk for chronic diseases. One issue that poses a problem is the fact that education does not appear to influence dietary choices among Black American women as it is speculated to do. Even with education, many Black American women are still at risk for developing cancer due to poor nutrition and health practices (Harris & Bonner, 2001; MacDowell et al., 2002).
The nutrition status of Black American women signaled government and non-profit organizations to develop interventions that will meet the health needs of this segment of population. Many nutrition education programs have been developed to educate the general American public about the healthy benefits of a good diet. Programs such as 5 A Day for Better Health have implemented many nutrition campaigns to increase fruit and vegetable consumption among Americans (Stables et al, 2002).

Cooperative Extension is an agency administered and funded by the USDA and land grant universities that aims to improve the lives of families by education. This nationwide network provides individuals with research-based information on how to make informed decisions. Virginia Cooperative Extension (VCE) has provided educational services to over one million Virginians for more than 80 years (VCE, 1998).

Nutrition education that takes place at the community level is an effective avenue to influence positive change in dietary habits. The Black church, collectively speaking, is a community and an effective avenue for educational programs. The church has been an integral part of the Black American population throughout their history in this country (Markens, Fox, Tuab, & Gilbert, 1999). Community health agencies have begun to use the church as a tool to reach the Black American community. Cooperative Extension has participated in many community level education programs including church-related interventions. For example, Cooperative Extension was involved in the Black Churches United for Better Health (BCUBH), a 5 A Day project that took place in the rural regions of North Carolina (Demark-Wahnefried et al., 2000)

Research has indicated that Black American women are at greatest risk for developing chronic diseases development due to poor nutrition, lack of exercise, and overweight/obesity. This makes this segment of the population an appropriate candidate for preventive health and nutrition interventions. Virginia Cooperative Extension is interested in understanding the perceived health and nutrition concerns of Black American women. Extension is also interested in developing and implementing education materials and/or programs for Black American women within in the faith community to improve their nutrition and health practices.
Purpose of the Study

The purpose of this study is to assess the perceptions of Black American women regarding their health and nutrition practices, concerns, and solutions. The qualitative and quantitative research data provided by Black American women of the faith community will be used to develop culturally appropriate nutrition education programs to improve their dietary and health habits.

Research Questions
1. What are the main health issues that affect the Black American women?
2. What are their nutrition or eating concerns?
3. What are the barriers to engaging in positive health and nutrition practices for Black American women?
4. What kind of educational strategies would influence the daily food habits and health routines of these women?
CHAPTER II: REVIEW OF LITERATURE

The review of literature will focus on Black American women and their health issues and nutrition status, beginning with (a) an explanation of the overall health of the U.S. population, and (b) a detailed description of the Black American population. The nutrition behaviors that result as risk factors for chronic disease among Black American women are discussed followed by a review of church-based interventions. Finally, a review of literature on focus group methodology and its uses are presented. The review of literature on the focus groups acts as a foundation to this project’s effort in understanding how Black American women attending church prefer to learn about nutrition, which would help in cancer prevention.

Overall Health Status in the U.S.

In spite of the technological advances in America, the population continues to struggle with reaching ideal optimal nutrition health. Although the average life expectancy has reached a new high, 74.1 years for men and 79.5 years for women, health affected by chronic diseases and illnesses continues to be a major public health issue (Evers, 2002). Chronic diseases are responsible for seven out of every ten deaths in the United States and for more than 60% of medical care expenditures (CDC, 2002). These diseases include coronary heart disease, cancer, stroke, hypertension, overweight/obesity, and osteoporosis (U.S. Department and Agriculture/Economic Research Service [USDA/ERS], 1999). Heart disease remains the leading cause of death among all races and both gender despite its decline in death cases (CDC/National Center for Health Statistics [NCHS], 2002). The number of deaths caused by malignant neoplasm (cancers) has risen to 549,838 in 1999 from 416,509 in 1980 (CDC/NCHS, 2002). The American Cancer Society (ACS) in the year of 1997 proposed that over 1 million cancer cases would be diagnosed and 560,000 people would die. Lung and colorectal cancer are the first and second leading causes of cancer death among Americans.

Although overweight and obesity are not an official cause for death, it is another risk factor for heart disease, stroke, type II diabetes, and some forms of cancer (USDA/ERS 1999; Flegal et al. 2002). Overweight and obesity are correlated with improper dietary intake. The CDC defines overweight behavior as increased food intake that exceeds energy expenditure due to physical activity (Morbidity and Mortality Weekly Report, 1997).
Health and Nutrition Examination Survey (NHANES) collected and analyzed weight and height data to determine the trends of overweight and obesity in America. The results showed further increases of overweight/obesity for both men and women. Compared to the previous survey taken, (NHANES III 1988-1994), the percentage of overweight people increased from 55.9% to 64.5% (Flegal, et al., 2002). The percentage of obesity significantly increased from 22.9% to 30.5%. Ironically many of the deaths caused by these chronic diseases were actually preventable.

Diet and lack of physical activity play a critical role in health outcomes. Poor dieting is linked to the development of cardiovascular disease, cancer, diabetes, and obesity (CDC, 2002). The American diet – which include high intakes of fat and saturated fat, and low intakes of whole grains and fruit – accounts for fourteen percent of all deaths in America (USDA/ERS, 1999). Foods from animal sources are major contributors of total fat, saturated fat, and cholesterol in the American diet (Byers et al., 2002). A diet high in saturated fat not only has a diminishing effect on cardiovascular health, but it also enhances thrombogenesis (Mann, 2002). High-fat diets influence the development of some cancers such as colon and rectum, prostate, and endometrial cancers. The association between a high-fat diet and breast cancer has a weaker correlation (Byers et. al., 2002). High-fat dietary intake has a strong influence on the etiology of type 2 diabetes. High intake of saturated fatty acids has been associated with the risk of developing impaired glucose tolerance (IGT) and it’s progression to diabetes (Mann, 2002).

The number of deaths caused by these preventable diseases has alarmed national agencies to focus on developing guidelines and interventions that would decrease the rates of chronic disease morbidity and mortality. Since the 1890’s, published dietary guidelines have provided recommendations of healthy diets for the American population. The first official Dietary Guidelines for Americans was printed in 1980 by the government. These guidelines supported with scientific research encourage the incorporation of a variety of foods into diets to ensure the intake of essential nutrients while balancing intake to protect against chronic diseases (USDA/ERS 1999). The Dietary Guidelines are revised every five years to help American consumers age 2 and older to implement the guidelines in their daily food choices. In 1992, Food Guide Pyramid was developed as a graphical representation of the Dietary Guidelines. In addition to the Food Guide Pyramid, the 1990 Nutrition Labeling and Education Act instated the
Nutrition Fact Label on package food items so that consumers would be able to select foods according to the Food Guide Pyramid.

The 5 A Day for Better Health Program was established in 1991 by the National Cancer Institute (NCI) and Produce for a Better Life. This nutrition education campaign was designed to increase awareness of the need for fruit and vegetable consumption. A survey of the impact of the 5 A Day campaign on the American population was conducted in 1991 and 1997. The results revealed that between the years of 1991 and 1997, total fruit and vegetable consumption increased from 3.75 servings in 1991 to 3.98 servings in 1997 (Stables et al, 2002). Increases in eating the recommended five daily serving were most significant for White, educated, 65 years or older non-smoking women. However, the 5 A Day campaign was not as successful among the minority population (Stables et al., 2002).

Healthy People 2010 (HP 2010), a project established by the U.S. Department of Health and Human Services, created a list of goals and objectives aimed to improve health and quality living for the American population. The overarching goals of HP 2010 are to increase quality and years of healthy life and to eliminate health disparities. These objectives, which are an effort to increase life expectancy and quality of life over the next ten years, include decreasing the prevalence of chronic disease in America (HP 2010). The goal of focus area three is to decrease the number of new cancer cases as well as morbidity and mortality from cancer. Some of its objectives include decreasing the prevalence of the major death causing cancers in America and providing cancer prevention counseling. Educational and community based-programs are another focus area with objectives that include increasing community health promotion programs that are culturally and linguistically appropriate.

Characteristics of the Black American Community

The Black American community was recently estimated at 35 million or nearly thirteen percent of the American population in 1999 (U.S. Census Bureau, 2000). Of the 35 million, Black American females comprised 53% of this population. As reported by the Bureau of the Census, one in three Black Americans were under the age of eighteen and eight percent were reported to be 65 years or older.

In 1999, the U.S. Census Bureau reported that 77% of Black Americans ages 25 years and over completed high school or obtained a higher level of education. The Census estimated
that more than one in seven earned at least a bachelor’s degree. Black American females had a slightly higher percentage (16%) than Black American men (14%) of earning at least a bachelor’s degree.

Though the socio-economic status of the Black American has been consistent since 1997, the poverty rate is still the lowest it has been since Census data collection on poverty rates began in 1959 (U.S. Census Bureau, 2000). Per capita income for Black Americans increased by 3.3% between 1997 and 1998. The median household income was reported $25,351; 48% of all Black American married-couple families had incomes of $50,000 or more in 1998 (U.S. Census Bureau, 2000).

The 2000 U.S. Census included other economic profiles of the Black American community. The following lists the employment status in 1999 of the Black Americans:

- Civilian labor force had a higher percentage of black women (63%) compared to non-Hispanic white women (60%). Sixty-six percent of Black men work in the civil labor force compared to 73% of non-Hispanic White men.
- Twenty-four percent of Black women and 17% of Black men worked in managerial and professional jobs. Percentages were also higher for women than men in service jobs (27% versus 17%), and technical, sales, and administrative jobs (38% versus 20%).
- Fourteen percent of Black men compared to 2% of Black women worked in precision production and craft/repair. Thirty-one percent Black men compared to 9% Black women worked as operators, fabricators, and laborers.

The overall improved economic status of the Black American community has improved their ability to own property in America. Ownership of a house or apartment among the members among the Black community reached 46.3% during the first quarter of 1999, reflecting a 5% increase from 1995 (U.S. Census Bureau, 2000).

**Overall Health Status of Black Women**

As the largest minority group in America, the Black American population exhibits some of the highest, if not the highest percentages of many chronic diseases. In 1997, the five leading causes of death among Black American were heart disease, cancer, cerebrovascular diseases, accidents, and diabetes (American Cancer Society, 2000). Heart disease is the most common
cause of death among both men and women of all race and ethnic origin. However, the rate of death from all cardiovascular diseases were 40% higher among Black adults compared to White adults in 1996 (US Dept. of Health and Human Services, Center for Disease Control, 1999).

Black American women have higher rates of the leading causes of death compared to White and Hispanic women. In 1999, the leading causes of death for Black American women were total cardiovascular disease (total CVD), cancer, diabetes, accidents, and kidney-related diseases. Statistics for total CVD, cancer, and diabetes has caused many researchers and nutritionists to focus on this ethnic group (American Cancer Society, 2000).

The Heart and Stroke Statistical Update by the American Heart Association (AHA) reported in 2002 that the prevalence of total CVD for Black women was 39.6%. Black women have the highest rates (per 1000) of death in CVD as compared to White and Hispanic women in each category; 192.5 death rate for CHD, 78.1 for stroke, and 36.6 for high blood pressure.

In 2001, the American Cancer Society estimated that 61, 900 new cases of cancer and 30,600 cancer-related deaths would be reported among Black American women. The cancers identified most commonly among Black American women were lung cancer (21%), breast cancer (19%), and colon/rectum cancer (12%). Ovarian cancer was listed as the fifth most common cancer (4%) following after pancreatic cancer (6%).

Between the ages of 25-64, 50.4% of Black American women suffer from diabetes mellitus. Non-insulin dependent diabetes mellitus (NIDDM) is listed as the third leading cause of death for Black women in America (AHA, 2002). Overweight is a risk factor for the development of this chronic disease and thus has raised concerns for Black American women. Ironically, Black American women overall have a more healthful body image than White women; Black American women commonly do not recognize that they are overweight (Goldberg, Rudd, & Dietz, 1999). In the study conducted by Anderson, Janes, Ziemer, & Phillips (1997), the researchers studied the perceptions of body image among Black American men and women with diabetes. Using silhouettes to compare body sizes, Black American women favored sizes that were significantly larger than normal-sized women and body sizes that would be suggested by health professionals. When asked about their satisfaction of their weight and desire to alter weight, thirteen percent were pleased with their size.
Health Behaviors of Black American Women

Black American women, especially with lower income, are likely to engage in lower levels of health promoting behaviors, (i.e. eating breakfast, moderate exercise, abstention from alcohol/tobacco use, sleeping for at least 7-8 hours) (Sanders-Phillips, 1996). Lack of physical activity, poor nutrition, and obesity/over weight has been labeled as risk factors for many of the leading causes of death among Black American women (AHA, 2002; ACS, 2000; Harris & Bonner, 2001; Healthy People, 2010). Increasing physical activity among adult females is one of the greatest public health challenges (Maiese, 2002). Black American women do not regularly participate in optimal physical activity despite scientific evidence that physical activity improves health status (Harris & Bonner, 2001). In 1998, only 15.2% of Black American women reported regular, sustained physical activity (ACS, 2000).

Poor nutrition, another risk factor related to many of the leading causes of death, is a serious concern. Black women on average consume the following each day: 71.2g instead of 65g total fat, 23.8g instead of 4.5-6.5g of saturated fat, 245.6mg of the recommended 300mg cholesterol, and only 12.0g of the recommended 25g of dietary fiber (AHA, 2002).

In a study conducted by Kayrooz, Moy, Yanek, & Becker (1998), the researchers surveyed the dietary fat intake and risk factors among Black American female church-goers in the East Baltimore area. Kayrooz et al used a Fat Intake Scale instrument to recall the food consumption of the female participants to estimate dietary fat intake and food trends. A score that was \( \geq 25 \) indicated a high consumption of fat. Eighty-one percent of the female participants had a score over 25. The study concluded that women who were younger (< 45 years of age) reported a higher intake of fat. The researchers suggested that was a result of these women having good employment therefore being able to buy more meat products. The results also showed a strong correlation between BMI and fat intake, which meant that women who were obese and/or overweight were more than likely to have a high dietary fat intake. The researchers suggested that these findings could be generalized to the larger group of Black American women.

It is believed that education and higher economic status have a positive impact on nutrition and health practices. However, higher income and levels of education does not necessarily translate to improved dietary practices among the Black American community (Harris & Bonner, 2001). Despite the fact that more Black American women are obtaining
higher levels of education, nutrition and health practices may not be enhanced (Harris & Bonner, 2001). This finding was confirmed in a health study conducted among college and noncollege-educated women from Ohio. Although college-educated Black females had better health status than their noncollege-educated comparison, their health practices did not promote the same level of health as of college-educated White females (MacDowell et al, 2002). Negating influences such as this helps explain the incidence rates of cancer diseases among Black women.

Poor nutrition and lack of physical activity among Black American women offer some explanation for the rates of obesity and overweight among this population. According to data NHANES data collected during 1999-2000, the prevalence of obesity is 30.5% in the U.S. population (Flegal, Carroll, Ogden, & Johnson, 2002). Approximately 49.7% of the Black women surveyed were obese compared to 30.1% White and 39.7% Mexican women. This was an 11.5% increase from the previous NHANES III conducted during 1988-1994. Black women had a higher prevalence for both overweight and obesity than non-Hispanic White women. Black women between the ages of 20-39 and 40-59 had higher prevalence of overweight and obesity than any other age groups (Flegal, et al., 2002).

Black women are at high risk for developing cancer as a result of their poor health and nutrition practices (Sanders-Phillips, 1994). Physical activity has been suggested to possibly reduce the prevalence of breast and colon cancers (Harris & Bonner, 2001; ACS, 2000; AHA, 2002). Poor nutrition has been associated with increased risk for cancer (Huncharek & Kupelnick, 2001). Nutrition education programs, such as 5 a Day for Better Health, operate with the goal of increasing the incorporation of fruits and vegetables in the American diet. Good dietary intake has been proven to reduce the prevalence of rectal/colon cancer and possibly reduction in cervical, breast, ovarian cancer (WCRF/AICR, 1997). Diets that have a rich source of antioxidants, whole grain/fiber have been shown to reduce the risk of various cancers (Fleischauer, Olson, Mignone, Simonsen, Caputo, & Harlap, 2001; McCann, Moysich, & Mettlin, 2001; Kasum, Nicodemus, Jacobs, & Folsom, 2001).

In a study focusing on breast cancer research, Davis & Cowing (2000) observed the effects of vitamin B6 supplementation on mammary carcinoma cell proliferation. Study results showed that treatments with 100 or 300 mili-Molar of vitamin B6 was associated with a decrease in cell numbers in the absence (26%-85% and 72-98%) and presence (38-42% and 88%-98%) of
vitamin B6. Studies such as these reflect an inverse relationship between good dietary practices and cancer outcome.

The rate of cancer-related deaths associated with poor diet and exercise among Black American women have been targeted by health promotion programs seeking ways to improve community health among this population. One of the 28 objectives Healthy People 2010 focuses on educational and community-based programs. The goal of this objective is to “increase the quality, availability, and effectiveness of educational and community-based programs designed to prevent disease and improve health and quality of life.” Paskett et al. (1999) stated that a community intervention program would most likely succeed if there is a strong relationship with community outreach strategies and clinical-based strategies. One of the community outreach strategies listed was the involvement of churches.

Community Interventions

Religious institutions are considered organized communities; therefore, their participation may be essential in dealing with local health issues and used as an effective channel for health promotion (Simpson & King, 1999). Simpson and King (1999) explored health-related and organizational activities of churches in the Appalachian region to gain a better understanding of how health-religion partnerships could develop. Simpson and King stated religion is positively associated with mental and physical health. They observed that the believers of this community depended heavily on the blessings of God to bring healing to the suffering. Many verses found in the Bible speaks of divine healing, such as the passage found in John 5:14, “Is there any sick among you? Let him call for the elders of the church; and let them pray over him, anointing him with oil in the name of the Lord.”

Using the church, including all denominations, as an avenue to health promotion within the Black American community is an ideal setting. Throughout the history of Black Americans in this country, the church has been a central and integral part of the community (Markens et al., 2002). There are an increasing number of church-based programs that focus on the issue of health promotion within the Black American community (Markens et al., 2002). Although there is a concern and desire among many of the Black churches to participate, there are challenges that a health promotion agency must be aware of in trying to establish a partnership.
In a study conducted by Lewis (2000), the author surveyed Black American churches in two communities to gather information about health behaviors and beliefs in order to design interventions that might improve health status. This study tried to replicate a previous study conducted in the Tuscaloosa County, Alabama to determine homogeneity of beliefs and behaviors.

The study included the participation of churches in Tuscaloosa County, Alabama and Wichita, Kansas. Four hundred and twenty-five surveys from both regions consisted of 33 questions broken down into 6 demographic questions, 12 health behavior questions, and 4 questions related to church. The Wichita sample had one extra question about education level. The study results showed that 33% of the respondents believed that their health was dependent upon fate and destiny. Ninety percent of both groups believed that health talks would improve their health. Approximately 87.3% of respondents from Wichita and 90% of respondents from Tuscaloosa County overwhelmingly said yes to attending health activity sponsored by the church. 81% of the Wichita respondents and 86% of the Tuscaloosa County respondents believed that church is a place for learning more about improving their health. The study concluded that Black Americans are willing to participate in health promotion programs held at their church. Lewis (2000) stated that the church might serve as a focal point for changing the health beliefs and behaviors of Black Americans.

Campbell, Demark-Wahnefried, Symons, Kalsbeek, Dodds, Cowan, et al. (1999) conducted a nutrition intervention funded by the National Cancer Institute with 49 Black churches in North Carolina. Through the Black Churches United for Better Health project under the 5 A Day campaign, the investigators assessed the effects of a church-based nutrition program on the increase of fruit and vegetable consumption. The aim of the study was to increase the consumption of fruit and vegetable by 0.5 daily servings. Fifty predominately Black churches in 10 rural counties located in eastern North Carolina participated in the study. The churches were paired and randomly assigned to either the intervention or delayed intervention program. Prior to the intervention, six focus groups were conducted to identify culturally sensitive ways to make programs and messages appropriate to use in the Black churches. The intervention lasted 20 months using concepts from the stages-of-change transtheoretical model, social cognitive theory, and social support models. These concepts were used in the framework of the activities included in the interventions. Some of the activities included tailored bulletins and printed materials,
cookbooks and recipe tasting, and serving more fruits and vegetables at church functions. At baseline, the intervention group consumed an average 3.84 of the daily servings compared to the average of 3.65 of the daily servings in the delayed intervention group. At the second year follow-up, the intervention group increased their average intake to 4.45. The delayed intervention group average intake decreased to 3.60.

Demark-Wahnefried, et al. (2000) evaluated the success of the Black Church United for Better Health community intervention. The Black Churches United for Better Health (BCUBH) project was designed to deliver and test multi-level interventions to increase fruit and vegetable consumption. It was able to improve fruit and vegetable consumption to 0.85 of the recommended daily servings. Demark-Wahnefried et al. (2000) suggested some considerations when conducting interventions with Black churches. One of the most important considerations to recognize and respect was the power of the pastor. The researchers stated that the support of the pastors was instrumental in gaining compliance from the church congregation. Much of the church participation rate was attributed to the participation of the pastor.

Yanek, Becker, Moy, Gittelsohn, and Matson-Koffman (2001) conducted a church-based intervention entitled “Project Joy.” The name of the program was derived from a Bible verse, “… for the Joy of the Lord is our strength” (Nehemiah 8:10b). Project Joy was designed to reduce the incidence of cardiovascular disease in Black American women of the Baltimore, Maryland area. Based on responses from focus groups, the investigators were able to develop educational materials that would be appropriate for the intervention.

The project included three interventions: (a) a standard nutrition education model, (b) a nutrition education model that was spiritually tailored, and (c) a self-help model that acted as the control. In all, 16 churches were involved in the project with the total recruitment of 529 Black American women. Inclusion criteria required the women to be over the age of forty, not pregnant or not planning to be pregnant, and with no prior cardiovascular complications. The education component of the spiritual and standard interventions lasted 20 weeks, each week covering a nutrition and physical activity topic. The intervention continued after the twenty-week session, lay health workers continued to assist the participating women. The self-help participants were only given materials and self-monitoring documents to track their progress.

Though the standard model was designed differently from the spiritual model, there were differences in effectiveness between the active interventions and control group. The explanation
is because the participants would add spiritual activities such as prayer to open the sessions, or finding scriptures on their own to relate to each topic. Within the active intervention groups, there was a statistically significant change for eleven out of the thirteen cardiovascular risk outcomes. These outcomes included weight loss, change in cholesterol levels, change in energy intake, physical activity, decrease sodium intake, etc. The self-help groups did not experience as favorable changes as the active intervention groups. The researchers demonstrated that active church-based group intervention have the potential to make important modifications in behavioral and biological factors that put many Black American women at disease risk. This study was able to include multiple behaviors and biological in their observations rather than focusing on one topic. The inclusiveness of this study was effective and was able to support the outcomes of other shorter, more focused studies. A study limitation was that in order to ensure recruitment, investigators were not able to randomly assign interventions to the churches.

Markens et al. (2002) assessed the involvement of Black churches in a health promotion program in Los Angeles, California. The Los Angeles Mammography Promotion in Churches Program funded by the National Cancer Institute was designed to evaluate the feasibility of using churches as a resource for community health promotion. It was designed to test the effectiveness of church-based intervention programs in increasing awareness of mammography screening among women from diverse racial/ethnic backgrounds.

The researchers interviewed 16 pastors of churches that were involved in the health promotion program. The pastors shared some concerns that health promoters need to consider when working with church and parishioners. Although the pastors express enthusiasm toward the idea of health promoters wanting to do something for the Black American community, the pastors expressed that the level of commitment from the pastor was overwhelming. One pastor explained that many pastors are over-committed to the congregation; full involvement with another program would take away from their personal time. Another pastor described their job as a “doctor always on call.” These are concerns health providers should be aware of because lack of commitment from the pastor greatly influences the participation of the congregation, as stated by one of the interviewed pastors.
Research Methodologies

Focus Groups

Focus group research is used to develop appropriate interventions for their target population. The purpose of a focus group is to listen and gather information (Krueger & Casey, 2000). The four basic uses of focus group research are problem identification, planning, implementation, and assessment (Green, Partridge, Fouad, Kohler, Crayton, & Alexander, 2000). Focus group interviews are an excellent avenue for achieving insights into a community’s perception and beliefs (Shankar, Selvin, & Alberg, 2002). Gettleman and Winkley (2000) confirmed that the use of focus groups provides an atmosphere in which participants can express personal ideas and opinions.

The use of focus group methodology is a valuable qualitative research approach in data collection for researchers. Focus groups allows people who share common characteristics to voice their opinion, concerns, and/or interest about the topic of the focus group (Krueger & Casey, 2000). Qualitative results from focus groups allow the researcher to gain a deeper understanding of different perceptions from the group participants.

Focus groups are typically comprised of six to eight people who are not familiar with one another (Krueger & Casey, 2000). A set of predetermined open-ended questions, also called interview guides, directs a “focused” discussion among each focus group session. Utilizing open-ended questions draws out essential perceptions and attitudes of the target community, which can be used to develop effective interventions (Shankar et al., 2002). The questions are aimed at seeking individual views without encouraging the adoption of the biases of the researchers (Green et al., 2000). Focus groups are most effective when conducted in series with one another. This allows the researcher to pick up generated themes that are echoed across groups as well as within (Krueger & Casey).

There are many advantages with conducting focus group research. Focus groups are a cost-effective way to obtain the level of information needed from a target population (Gettleman & Winkleby, 2000). The open-ended question approach allows participants to respond without setting any boundaries for potential response categories. The questions also allow the participant ample time to comment, explain, and share experiences. Focus group methodology produces intricate details of a topic that may otherwise have not been ascertained through quantitative
methodology (Strauss & Corbin, 1990). If the researcher is using quantitative data, focus group results can enhance the results of that data (Krueger & Casey, 2000).

Focus group methodology does pose some disadvantages. One limitation to the use of focus groups is that its finding can not be generalized to the population. They are only applicable to audiences that share similarities to the focus groups participants. Some other limitations include participants attempting to give a good impression, trying to please the investigator, or to purposely mislead the investigator (Matthews, Sellergren, Manfredi, & Williams, 2002).

The use of grounded theory technique in qualitative research helps to develop theories of a phenomena that has not been adequately explained by theories developed by previous research (Strauss & Corbin, 1990). The purpose of grounded theory research, also called constant comparative method, is to build a theory that is faithful to the area under investigation (Strauss & Corbin, 1990). In other words, grounded theory methodology builds a theory applicable to research findings instead of proving a pre-set theory. According to Haig (1995), the investigator gathers data from a variety sources on the area of interest. Once all data is collected, researchers will analyze data using coding and theoretical sampling procedures (Haig, 1995). Repeated research updates with the help of interpretive procedures eventually will end with developed theories. Strauss and Corbin (1990) stated that a grounded theory must meet the standards of consistency or fit, generality, understanding, and control. Grounded theory is often used in case studies for the investigation of new concepts and theory (Hueser, 1999). Grounded theory can be used in a variety of disciplines for the purpose of understanding phenomena. Grounded theory in focus group research may aid the researchers in understanding perceptions shared by focus participants that may have been overlooked or poorly addressed by pre-set theories.

Focus groups can be used to understand perceptions about clinical trials and research studies. Green et al (2000) conducted a focus group study to understand what factors may influence participation of Black Americans in cancer clinical trials and research studies. In this study, 103 participants from nine counties in Alabama gathered in focus group sessions. Each focus group averaged 11 participants. The study population was mostly college-educated, employed females. The participants were given a $25 dollar honorarium for participating in the sessions. The information gathered would be used at a conference to share current information
and strategies to increase recruitment and retention of minorities in cancer clinical research projects.

The trends of the study revealed some encouraging insights for conducting clinical research. Among the responses, many of the focus group participants expressed supportive views towards clinical cancer studies. Many were aware of the necessity of research studies and that their participation in such studies would depend on multiple factors such as knowledge about the nature of the study. Other trends revealed factors that deter Black Americans from being involved in clinical cancer research trials such as lack of time, bad experiences with health care and lack of trust. Lack of trust was the most frequent barrier stated as the participants shared the mistrust of the motives behind the research. The participants of the focus groups were able to share some solutions on increasing participation in clinical trials. Some solutions included utilizing the church, Black fraternities and sororities, and clarifying the agenda behind the research. The focus group method permitted a unique examination of opinions regarding clinical cancer trials that otherwise may not have been obtained.

Shankar et al (2002) used focus groups to understand the perceptions of cancer in a Black American community. Three focus groups were conducted, one with local health care providers and two groups consisting of Black American residents of Baltimore, Maryland who were given a $50 honorarium for their participation. Each resident (community) focus group consisted of six men and women. The information gathered would be available to community interventions to consider when developing cancer intervention programs.

The central theme raised in the focus group of the health providers was a perceived sense of stigmatization associated with cancer or cancer fatalism among some members of the community. They also perceived that there was a reluctance to talk about the disease. These perceptions were confirmed by the responses from the two focus groups. The health care providers also agreed that lack of education and low income were barriers to cancer prevention and screening. The health care provider focus group emphasized that cancer education was the most important step to improving cancer prevention. The themes of the community focus groups were quite similar to those of the healthcare provider focus group. Other themes that were expressed in the community focus groups were the inability to prevent cancer, the fear of treatment causing cancer, and misconceptions about the nature of cancer. The study was able to generate information concerning predictors of cancer prevention.
Gettleman and Winkleby (2000) used data collected from focus groups to evaluate strategies and approaches that could be employed in cardiovascular disease prevention programs. The programs would target English-speaking low socio-economic Black American, Hispanic and White women. The study consisted of seven focus groups of seven to eight participants each. As an incentive, the participants were given hygiene items, cardio-vascular disease (CVD) education materials and refreshments. The study resulted with five themes that were expressed by the women of the focus groups.

The issues that would be covered in a CVD intervention was one of the themes raised among the focus groups, most of the women of the focus groups were interested in interventions that would address multiple CVD risk factors. They expressed their desire in knowing how smoking, lack of exercise, and poor diet influenced coronary artery disease. The focus of the CVD intervention was also a theme generated by the focus groups. Most of the participants valued the idea of a CVD intervention that was tailored to their needs. Having a CVD intervention that focused on the needs of women from a low socio-economic background made them feel special. The format of a CVD intervention, which was a theme raised by the focus groups, was listed as an influential factor in participating in a CVD intervention program. Instead of being told what to do, which as seen as a class lecture format, the participants said that they would rather receive the information in a workshop format where they felt they were able to make a choice. They also expressed that education materials should be a visual aid as opposed to a written one; using health videos instead of pamphlets. The women also suggested that the materials should also come with testimonials of women who had to change their behaviors. These factors carry much weight and should be taken in serious consideration when dealing with a population that may have low literacy rates. The focus group discussions provided some barriers that may inhibit participation such as lack of time, transportation, and childcare. The focus groups were also able to provide ideas for incentives such as food vouchers or money. This focus group study was able to derive strategies and ideas that can help with the success of future CVD intervention programs. The authors believed that the women from this study were able to provide information that would be appropriate in content and structure of an intervention targeting women of low socio-economic status.

Goldberg, Rudd, & Dietz (1999), used a triangulated qualitative method in order to collect data from Black American women that would be implemented in the design of a nutrition
campaign. The methods included interviews with ten community nutritionists, 47 Black American females, and observations of community resources. The women were separated into six focus groups with six to nine participants each. Women who were not obese and between the ages of 18 and 35 were included in the study.

Results from the interviews of the community nutritionists were helpful in defining Black women as the target population, provided information about diet and exercise, and acted as a guide for the focus groups. The nutritionists reported that their clientele were more likely to accept higher weight for height as normal. The nutritionist also agreed that some barriers to healthful diets among this population were an aversion to the taste of reduced-fat diets and lack of income to practice a low-fat diet. Lack of access to supermarkets that sell high quality foods was also listed as a barrier.

The women from the focus groups confirmed some of the themes expressed by the community nutritionists. Healthy foods were described as foods that were good and should be eaten for a healthy diet. Many of the women acknowledged that eating large quantities of foods such as potato chips, sodas, pork, and fried foods were unhealthy. However, there were some who did not agree with what was described as healthful eating and justified their reason with examples of family members who lived long lives despite diets consisting of many of the unhealthful items. The women of the focus groups generated themes for barriers to healthful dieting such as time, taste, cost, and lack of information. Those women who disagreed with the benefits of a healthful diet said that more evidence would be needed in order for them to consider a change in their diet. The use of the focus group method provided the researchers with information that would play an important role in the implementation and success of a community nutrition intervention. Researchers and public health workers benefit most from focus group research in being better equipped with knowledge that enhances their ability to serve a targeted population.

Participatory Methodology

Participatory Action Research (PAR) is a methodology used for an alternate system of knowledge generation (Reason, 1994). PAR techniques originated in use for agricultural development. Presently, PAR techniques are widely used in academia and have been shown to produce quick, valid, and reliable results in determining and understanding a groups concerns
and perceptions (Heaver, 1992). PAR is responsible for completing three tasks with the participants: to bring enlightenment, to produce knowledge and empowerment, and to commit the researchers to use and honor the ideas of the participants (Reason, 1994). PAR promotes the engagement of activities such as drawing, rating, ranking, or mapping.

Participatory Action Research allows participants to get involved in the research. Heaver (1992) used various participatory methods, which included group interviews and village mapping, to gain information from a village in India on their perceptions of their health and nutrition status. That information was used to develop effective health programs for that target population. The use of participatory method allow researchers and educators to discover a group’s perceptions of overall life concerns and needs. This supports the development of an appropriate community solution to perceived problems (Cerquiera, 1991).

In this study, participatory methods are used to provide supporting quantitative data to the qualitative data collected from the focus group interviews. The activities allow participants who are not as verbal to elaborate their perception and concerns that may have not been fully expressed during the focus group sessions. The activities can be seen as another way for participants to “voice” their opinions. The use of the PAR method hopefully gives further insight about the nutrition and health concerns, practices, and perceptions of the participants.

**Key Informant Interviews**

Key informant interviews are qualitative, in-depth interviews with people selected for the first-hand knowledge about a topic of interest (United States Agency for International Development [USAID], 1996). Key informant interviews resemble a conversation among acquaintances; it functions in such a way that will provide information that can be influencing to the design of a project (USAID, 1996). Key informant interviews are effective in helping researchers understand the motivation, behavior, and perspectives of the people of interest (USAID, 1996).

**Triangulation Methodology**

Triangulation of both quantitative and qualitative methodologies are used to gather data about the perceptions derived from the groups. Triangulation is a process of using multiple resources to support and confirm the information derived from the data. This is done by
identifying different ways a topic can be approached (Stake, 1994). In triangulation, information from one source or method is used to confirm and extend information gathered through another source or method (Goldberg, Rudd, & Dietz, 1999). Triangulating data permits a more in-depth insight and understanding of issues, provides different perspectives on a topic, and promotes valid conclusions to the matter (Goldberg et al., 1999).

Triangulation methodology is often used in community interventions to confirm observations that will shape the respective program (Goldberg et al.,). Goldberg, Rudd, & Dietz used triangulation methods to determine specific needs and preferences of Black American women in order to design an effective, culturally sensitive, community-based communications campaign to promote healthier nutrition practices.

This study will combine the qualitative data from the focus groups and key informants interviews with the quantitative data from the participatory activities. The responses from the key informants will be compared to those from the focus groups to determine any consistencies or contradictions. The participatory activities will either confirm the responses the women shared or shed light on an area not really mentioned in discussion. Information from each type of methodology are triangulated to compare and contrast results that may be produced. Diagram 1. below demonstrates the relationships each source has with one another

Diagram 1.
CHAPTER III: METHODOLOGY

The purpose of this chapter is to discuss the methodologies used for this research. This chapter includes the following: (a) an overview of the research design, (b) a description of the sample and selection procedures, (c) key informant interview procedures (d) pilot study procedures, (e) procedures for focus group sessions, and (f) data analysis.

Overview of Research Design

Triangulation techniques were used to cross-analyze qualitative and quantitative methodologies that were employed in this study. The triangulation methodology was used to determine the perceptions, practices, and concerns of health and nutrition among Black American women within the faith community. These methods included interviews with extension agents, focus group sessions, and participatory activities for the focus group participants. The focus groups questions, key informant interviews, and participatory activities corresponded to each research question. The first focus group session was a pilot study group. Any modifications made in the research design were made following the pilot focus group.

Sample Description and Selection Process

Virginia Cooperative Extension agents were contacted for their help in soliciting participation with churches, which they have already established partnerships. Virginia Cooperative agents from Northumberland, Prince William, and Roanoke were able to contact three of the four focus groups conducted. The Radford focus group was contacted without using an extension agent. The Extension agents were given flyers with a brief written explanation of the study and what role as an Extension agents they could play. The requirements for participation were the women must be around 35 years or older, have no existing chronic diseases (not including type 2 diabetes), and they must have transportation to the location of the meeting. Childcare was not provided by the research team. Phone calls were made to confirm meeting times and food arrangements. The focus group sessions were scheduled by the liaison of the church ensuring the lease amount of conflicts with any activities happening at the church, i.e. bible studies, choir practice, etc. In the letter we included that a meal, given as an incentive, would be provided at the focus group session.
Key Informant Interview

Key informant interviews were conducted with the participating extension agents or church members who were healthcare providers. The use of the key informants were most beneficial because they were familiar with the community; using someone who is familiar with the community of interest is suggested by Krueger and Casey (2000). The key informants were contacted either before or after the respective focus group session. The key informants were asked the questions that are found in Appendix B. The key informant was only recorded by noted and not taped as proposed. None of the key informants received an incentive for participating in the interview.

All the key informants were interviewed over the phone with the exception of the key informant for the Northumberland group, which was done in person. The key informants were able to answer the questions with no problem. All of the key informants were able to give insightful information pertaining to the study population.

Pilot Study Procedures

Prior to conducting the focus group sessions, a pilot study group was conducted on April 17, 2003. The pilot session was conducted for the following reasons: (a) to familiarize data collection personnel with the methodology, (b) to examine the interactions between the participants, (c) to identify problematic issues with the questions, and (d) to reword focus group questions that need improving (Krueger and Casey, 2000).

Cooperative Extension agent Donna Proctor was able to make contact with the liaison, Ms. Garnetta Walker, from the Hill Street Baptist Church of Roanoke, Virginia. This study was conducted on a Thursday night at the church. We arrived at the church around 7:00pm due to car problems. The church provided child care services for the women who had to bring their children.

Six women participated in the pilot focus group. I acted a the moderator for the focus group while Dr. Stadler and Jaya Velpuri acted as my co and assistant moderators, respectively. The timing for the focus was a good time for all of the women to participate. I began with a brief introduction to the study after the women were seemingly done with their meal. After the introduction, the women were given consent forms to fill in order to continue with the study.
The women had no problem understanding the requirements of the study and were willing to sign the form to participate.

An interview guide (Appendix A) was used to facilitate the pilot study group. This was useful in making sure that the flow of the focus group was smooth. Any problems that were raised during this session would have been addressed to insure congruity for the other focus groups. The pilot study was conducted to help researchers spot confusing questions that did not result in informative discussions. The focus group questions were not difficult to understand for the group and they were able to engage in the participatory activities without any problems. At the end of the session, we thanked them for their participation and gave them small parting gifts. The data collected from this group were used in the final report. The results from the pilot study justified the continual use of the interview guide without making any changes.

Focus Group Procedures

The focus groups were conducted in the format suggested by Krueger and Casey, (2000). Each session were taped for later transcription. I acted as the moderator for each session and facilitated all of the discussions, asking the focus group questions as well as probing to keep conversation flowing. There was at least one assistant moderator present for taking notes during each session and making observations. I operated the tape recorder and the co-moderator handled preparing the participatory activities. Because of my race, I was able to connect with the group members and this encouraged a sense of ease, therefore enhancing the fluidity of the discussions. There were no linguistic or cultural barriers that would have inhibited the flow of the sessions.

There was at least one assistant moderator at each session. They were responsible for making observations, setting up the participatory activities, and taking notes. After each session, a short debriefing, as suggested by Krueger and Casey, was held between the moderator, co-moderator, and assistant moderator to discuss any areas of improvement or additional procedures that should be considered for the next session.

As each participant arrived at the respective churches, they were greeted, handed nametags, and encouraged to partake of the refreshments provided. I began the sessions with a welcome statement when it appeared that most or all the participants have arrived and ate their meals. I introduced myself and the other two assistants to the focus group. The discussion began.
with an introduction and overview of the topic and ground rules as suggested by Krueger and Casey (2000). The participants were informed that the conversation would be recorded and must sign a consent form in order to participate. Once consent forms were signed, I began to tape record the session. During each session, the tape recorder was checked by either myself or the assistant moderator to make sure that it is running properly and that the entire session was being recorded.

The moderator followed the focus group interview guide (Appendix A) and asked open-ended questions to promote discussion. There were activities designated after certain focus group questions that the participants engaged in. These participatory activities were added to the focus group discussion to collect quantitative information regarding the perceptions of health and nutrition practices and the concerns the women may have had. Visual illustrations were developed and used for all the participatory activities. Dr. Stadler and I reviewed all the visuals and any visuals that were suggested by the members of the focus groups were added.

The first participatory activity involved the collection of demographics. The second participatory activity asked the participants to rate their top three health concerns. These two activities served as examples to show how the activities would be conducted. Each following activity asked the participants to rank items pertaining to health and nutrition. For the ranking and prioritizing activities, different colored chips were used to identify the top three preferences of each individual. The first choice received three points, the second choice received two points, and the third choice received one point. Envelopes were attached to the visuals so that the participants could place the appropriate chip with their ranking choice.

The last segment of the discussion asked the participants how they would like to learn about improving their nutrition status. Each group was thanked for their participation and given their incentives. After each focus group session, a small debriefing meeting was held between the moderator and assistant moderator to discuss themes, compare notes, and to point out areas needing improvement.

Data Analysis

Data analysis for this research followed the analysis procedures recommended for grounded theory research (Tesch, 1990; Krueger & Casey, 2000). The audio tapes used to record each session were transcribed to retrieve the data collected from the groups. Written
transcriptions were developed from the tape recordings. Written transcripts have the advantage of sorting and categorizing themes at a much faster pace. Krueger and Casey suggest that the transcripts be read over several times so that the researcher could be familiar with the data. From this repetitive reading, emerging predominate themes and sub-themes were noted.

The key informant interviews followed the same procedures as the focus group data. The written notes were reviewed to determine reoccurring themes provided from the interviews. Emerging themes were noted from each interview and finally grouped into major themes.

The participatory activities were analyzed by examining the frequencies among all the choices presented. The participatory activity that involved rating nutrition and health practices were tabulated by percentages. The activity that involved ranking preferences of learning strategies will be analyzed by determining preference scores. The first choice preferences received three points, second choice received two points, and third choice one point. Points were added up for a total preference score to determine which learning method was most preferred by the women of the churches.

Results from interviews, focus groups, and PAR activities were compared to draw conclusion of the major themes that will be used to develop useful nutrition education materials. In triangulating the data, the researchers will look for commonalties as well as contrasts in the data. Triangulating the data confirmed the data results and ensure the development of appropriate nutrition education materials/programs.
CHAPTER IV: RESULTS

The data collected from the qualitative and quantitative research are discussed in this chapter. The following table outlines the four research questions corresponded with the key informant interviews, focus group questions, and participatory activities.
Table 4.1  
Research Questions with Correlating Focus Group Question, Key Informant Interview, and Participatory Activities

<table>
<thead>
<tr>
<th>RQ1. What are the main health concerns that affect Black American women?</th>
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<tbody>
<tr>
<td>FGQ 1. As Black women, what are your health concerns?</td>
</tr>
<tr>
<td>FGQ 2. What are your concerns related to overweight and obesity?</td>
</tr>
<tr>
<td>PA 1. Demographics</td>
</tr>
<tr>
<td>PA 2. Rank the top three health concerns.</td>
</tr>
<tr>
<td>KIQ 1. What do you think are the major health issues or concerns of Black American women?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RQ2. What are the main eating or nutrition concerns of Black American women?</th>
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<tbody>
<tr>
<td>FGQ 3. What are your concerns about your current eating habits?</td>
</tr>
<tr>
<td>FGQ 4. What would you consider to be a healthy diet?</td>
</tr>
<tr>
<td>PA 3: Rank your top three eating concerns.</td>
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<tr>
<th>RQ3. What are the barriers to engaging in positive health and nutrition practices?</th>
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<tr>
<td>FGQ 5. What stops you from eating healthy?</td>
</tr>
<tr>
<td>FGQ 6. What stops you from engaging in healthy activities?</td>
</tr>
<tr>
<td>KIQ 2. What are some barriers that you feel Black American women experience that may hinder proper health practices?</td>
</tr>
<tr>
<td>KIQ 3. To what extent do you feel Black American women are aware of the connection between diet and chronic diseases, i.e. cancer?</td>
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<tr>
<th>RQ4. What kind of educational strategies would influence the daily food habits and health routines of the women?</th>
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<tr>
<td>FGQ 7. What are some solutions that would help change your current nutrition and health practices?</td>
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<tr>
<td>PA 4: Rank three eating practices would you like to change or improve.</td>
</tr>
<tr>
<td>PA 5: Rank three health practices would you like to change or improve.</td>
</tr>
<tr>
<td>FGQ 8. What would help you learn about positive health and nutrition practices?</td>
</tr>
<tr>
<td>FGQ 9. How can the church environment help you to improve your health and nutrition practices?</td>
</tr>
<tr>
<td>PA 6: Rank the three ways you would prefer to receive information of health and nutrition.</td>
</tr>
<tr>
<td>KIQ 4. What kind of role do you feel the church plays in healthy life styles?</td>
</tr>
<tr>
<td>KIQ 5. What kind of impact, if any, do you feel the church can have in the improvement of nutrition practices among female members of the church?</td>
</tr>
<tr>
<td>KIQ 6. In what ways can outside health agencies assist the church leaders in improving nutrition practices among the female members of the congregation?</td>
</tr>
</tbody>
</table>

**Note:** RQ= Research Question; FGQ= Focus Group Question; PA= Participatory Activity; KIQ= Key Informant Question
Table 4.2
Summary of Predominant Themes and Sub-theme Emerging from Focus Groups Questioning

**Research Question 1: What are the main health concerns that affect Black American women?**

I. FGQ: As Black women, what are your health concerns?
   A. Overweight/obesity
   B. Chronic Disease
      i. Cardiovascular disease
      ii. Cancer
      iii. Diabetes
   C. Lack of knowledge of proper health practices and where to go to obtain knowledge

II. FGQ: What are your concerns related to overweight and obesity?
   A. Health risks associated with overweight and obesity
   B. Lack of knowledge to prevent/reduce weight gain
   C. Preventing children from becoming overweight

**Research Question 2: What are the main eating or nutrition concerns of Black American women?**

III. FGQ: What are your concerns about your current eating habits?
   A. Lack of nutritious foods
   B. Schedule has negative influence on eating habits
   C. Eating the right foods at the right time
   D. Snacking on the wrong food

IV. FGQ: What would you consider to be a healthy diet?
   A. Baked foods
   B. Salads
   C. Steamed/baked foods

**Research Question 3: What are the barriers to engaging in positive health and nutrition practices?**

V. FGQ: What stops you from eating healthy?
   A. Career/Schedule
   B. Influence of family and friends or lack of
   C. Taste
   D. Lack of desire/laziness
   E. Affordability
   F. Eating out
   G. Time/convenience

VI. FGQ: What stops you from engaging in healthy activities?
   A. Time/schedule
   B. Lack of motivation
   C. Family
Research Question 4: What kind of educational strategies would influence the daily food habits and health routines of the women?

VII. FGQ: What are some solutions that would help change your current nutrition and health practices?
   A. Support/a motivator
   B. Having affordable access to exercise facilities
   C. Committing yourself to change and acting on it
   D. Doctor’s order
   E. Having the church encourage healthy eating

VIII. FGQ: What would help you learn about positive health and nutrition practices?
   A. Workshops
   B. Classes offered at chair
   C. Health fair/forum
   D. Newsletter

IX. FGQ: How can the church environment help you to improve your health and nutrition practices?
   A. Have church add nutritious meals to all gatherings
   B. Have a health educated come talk to the church about healthy eating
   C. Nutrition classes at the church
      i. Educate how to cook traditional more healthy and nutritious
   D. Develop a health committee at church
Participatory Activity 1: Demographics

Twenty-five women participated in five focus groups, which were held in different parts of the Commonwealth of Virginia. All of the participants were Black American church women. The first participatory activity was conducted to demonstrate how the process for the following participatory activities. In the first activity the women categorized themselves in one of six age groups. The majority of the women were at least 50 years of age or older (32%), with the second largest age range was between the ages of 31-35 (20%). This information is provided in Table 4.3.

Table 4.3

<table>
<thead>
<tr>
<th>Age ranges (years)</th>
<th>Participants n(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30</td>
<td>2 (8%)</td>
</tr>
<tr>
<td>31-35</td>
<td>5 (20%)</td>
</tr>
<tr>
<td>36-40</td>
<td>4 (16%)</td>
</tr>
<tr>
<td>41-45</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>46-50</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>50&lt;</td>
<td>8 (32%)</td>
</tr>
</tbody>
</table>

Research Question 1: What are the main health concerns that affect Black American women?

One of the main goals of this research project was to gain an understanding of what health issues that concerned Black American women. To gain insight on this topic, two focus groups questions were constructed to stimulate discussion. The focus group questions included a general question about their health concerns followed by a second question on overweight and obesity.

Focus Group Question 1: As Black women, what are your health concerns?

Three major themes emerged from the discussion of the women’s health concerns. These included (a) overweight and obesity, (b) chronic diseases, and (c) lack of knowledge of proper health practices. The first major health concern was overweight and obesity. Research has revealed that Black American women tend to view overweight and obesity more positively than main stream society (Anderson, Janes, Ziemer, & Phillips, 1997). Almost all of the women did not see overweight and obesity as an unattractive characteristic. One of the women captured the essence of how overweight and obesity is viewed by many of the participants by stating “I think
we view it very positively. I think because it is so significant in the black race that we have learned how to adapt and use it to our good. Because we have so many negatives thrown at us anyway, and that’s a part of us and you use what you got and you work and we work it."

Another woman expressed how cultural influence played a role in her perception about being overweight by saying, “I never thought of obesity because I was taught big is beautiful.”

Despite the acceptance of large body sizes, overweight and obesity were raised as a major health concern for the participants. One of the participants articulated best what many of the women felt towards the issue of dealing with overweight and obesity, “[I] eat the same as always, but I continue to gain weight. I am trying to cut back on portion sizes. I never had problems before with weight. I try to work out, but I do not stick with exercise, because I don’t see results.”

The second major theme that emerged was chronic disease. Three main sub-themes accompanied the topic of chronic disease: cardiovascular disease, diabetes, and cancer. Many of the participants shared concerns about the risk of acquiring cardiovascular diseases. The main cardiovascular diseases that were discussed were myocardial infarction (heart attack), stroke, and hypertension (high blood pressure). Many of the participants were concerned with acquiring these diseases due to their current weight or having family members dying as a cause of these diseases. One of the women best articulated this concern by stating, “For me there some diseases that tend to run in my family. So far I don’t have any symptoms, even with my weight, it’s a blessing. Strokes tend to run in my family.” Two of the women were in agreement about their concerns being overweight when they stated, “I know that overweight can lead to many of these diseases and that is why I am concerned because I am overweight.”

Diabetes was a concern for many of the women. The women were aware of the links between poor nutrition, weight, and diabetes. One of the women stressed her fear of overweight/obesity and diabetes risk, “I am concerned that you may die because of being overweight/obesity. I am aware that obesity causes diabetes…,”

Cancer was another concern raised by the some of participants. Some of the participants were concerned about their risks of developing cancers that are more prevalent among women. A comment shared by one of the, “Cancer is a big concern to me because I lost two of the closest women in my family to this disease.”
The third major theme that emerged was the lack of knowledge or awareness of where to find knowledge to help improve current health status. One of the women discussed her lack of knowledge, “I don’t know how to eat right, I don’t know how to eat properly. If I don’t know how to do it, [I won’t do it].”

One other woman expressed her concern about the lack of awareness of how to get information about health and nutrition among Black American women. “There should be more education out there to let us know exactly what is out there for the good of our health, help [us] to be aware of where to go or what women of color should be checked for.”

Focus Group Question 2: What are your concerns about overweight and obesity?

As mentioned earlier, overweight and obesity was listed as the number one health concern among the women. Though research confirm that Black culture views overweight and obesity much more positively than mainstream American society, the women were aware that there were health risks from being overweight or obese. Three major themes emerged from this discussion: (a) fear of health risks involved with overweight and obesity, (b) lack of education to prevent/reduce weight gain, and (c) prevention of children becoming overweight/obese.

Most of the women were aware of the link between disease and death due to extra weight, though for most of the women, they did not view being overweight as a personal problem. Three of the participants expressed their experiences of being overweight,

“[Overweight and obesity] never really bothered me growing up, I have always been comfortable with myself, now I am aware of the risks that are involved.”

“I know it puts me at high risk for certain diseases: diabetes, heart disease, stroke, cancer. It’s risky and I do see it consumes your energy levels but I just love food!”

“I am concerned that you may die because of being overweight/obesity. I am aware that obesity causes diabetes and high blood pressure.”

Lack of education was the second theme that emerged. Many of the participants said that for some time they were unaware of the health risks due to overweight and obesity or that they
suffered from the lacked of knowledge in how to prevent or reduce weight gain. The following comments shared by two of the participants showed their concern for lack of knowledge, “My biggest concern is how to get rid of [fat] and education.”

“I didn’t know about the risks as a younger person, and I think education about it when you are younger is important.”

The third theme was the prevention of overweight or obesity in children. Some of the women shared this concern and were aware of the influence that adults, particularly parents, had on children’s weight. Three of the women captured the feelings felt by many of the women, “I guess my biggest concern is with the young people...when I started in the school system as a school nurse four years ago, I was just appalled at the size of these kids.”

“My health concerns [about obesity and overweight] are with my daughter, I wouldn’t want her to do with overweight and obesity.”

“If you force [children] to eat something they don’t want to eat, you train them, and then when someone places a whole chicken in front of them, they will eat it because they think they have to finish their meal. (Parents forcing their children to finish their food even if the portion size is too big, then that child grows up with the wrong ideas about correct portion size).”

**Participatory Activity 2: Rank your top three health concerns.**

A participatory activity was used to rank the health concerns among the women. The women indicated their first, second, and third choices by placing a colored, marked chip into an envelope beneath a corresponding image that illustrated their health concern. The women ranked overweight and obesity as their first top health concern (18%). (Table 4.4) Getting exercise (12.6%) and diabetes (12%) came in as second and third respectively. Heart disease/stroke and high blood pressure tied for fourth highest ranking
Table 4.4

Top Health Concerns Among Black American Women.

<table>
<thead>
<tr>
<th>Health Concerns</th>
<th>Total Points n (%)</th>
<th>Rank N=25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overweight/Obesity</td>
<td>27 (18.0%)</td>
<td>1</td>
</tr>
<tr>
<td>Getting Exercise</td>
<td>19 (12.6%)</td>
<td>2</td>
</tr>
<tr>
<td>Diabetes</td>
<td>18 (12.0%)</td>
<td>3</td>
</tr>
<tr>
<td>Heart disease/Stroke</td>
<td>16 (10.6%)</td>
<td>4</td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>16 (10.6%)</td>
<td>4</td>
</tr>
<tr>
<td>Cancer</td>
<td>13 (8.6%)</td>
<td>5</td>
</tr>
<tr>
<td>Stress</td>
<td>13 (8.6%)</td>
<td>5</td>
</tr>
<tr>
<td>Arthritis</td>
<td>9 (6.0%)</td>
<td>6</td>
</tr>
<tr>
<td>STD/AIDS</td>
<td>7 (4.6%)</td>
<td>7</td>
</tr>
<tr>
<td>Anemia</td>
<td>5 (3.0%)</td>
<td>8</td>
</tr>
<tr>
<td>Osteoporosis</td>
<td>4 (2.6%)</td>
<td>9</td>
</tr>
<tr>
<td>Varicose veins</td>
<td>3 (2.0%)</td>
<td>10</td>
</tr>
</tbody>
</table>

Research Question 2: What are the main eating or nutrition concerns of Black American women?

This question explored the concerns of Black American women pertaining to nutrition. Two additional focus group questions addressed what Black American women saw as specific concerns about their nutrition and what did they consider the meaning of a healthy diet.

Focus Group Question 3: What are your concerns about your current eating habits?

Four major themes emerged from the impact of this focus group question: (a) lack of nutritious foods, (b) work/family schedule has negative affect on eating habits, (c) eating the right foods at the right time, and (d) snacking on the wrong foods. Many participants recognized that they lacked nutritious foods within their current diets. The following statements show that the participants were aware of the fact that they were not including the right foods within their diet,

“I don’t eat enough of the right foods, I try to eat more vegetables and fruits.”

“[I am] not getting enough vitamins and [other] nutrients.”

“[I am] not getting enough fruit, vegetables, and water.”
The second theme concerned the impact of the women’s work and family schedules on nutrition choices, which had a negative affect on their eating habits. Many of the working mothers who participated stressed how their busy schedules influenced their diet choices. One of the women put it plainly, “[My concerns are] preparation time. Quite often I come home late, and I just want something quick, and a lot of those quick prepared stuff are high in sodium and everything else.”

Two other women supported the statement made by the first woman by stating, “My concern is that I don’t have time to eat, I walked out today and I didn’t have breakfast, the first time I ate was three o’clock. When I came home I prepare a full meal and we eat late, then on top of that I go to sleep. My concern is eating habits and what I am eating.”

“[My concern is] adjusting my schedule so I can get something to eat.”

Eating the right foods at the right time was the third theme that emerged. Many of the women were concerned about the food choices they made and the time of the day they ate, “I eat a lot of canned foods, I don’t cook.”

Said another, “I find myself eating late at night.”

The fourth theme that arose was snacking on the wrong foods. Not eating the right snack foods was a concern for many of the women. Again, many of the women emphasized their lack of time in their schedules caused them to eat snack foods that were not healthy, especially foods out of vending machines. Some of the responses were as follows:

“I love to eat, and it is a bad habit. I eat all the time, I snack a lot.”

“[I have a problem] snacking on junk food.”

“I eat too much potato chips, chocolate, sodas and fried foods.”
Focus Groups Question 4: What would you consider to be a healthy diet?

Three major themes arose pertaining to perceptions of a healthy diet for the participants: (a) baked foods, (b) salads, and (c) steamed/boiled foods. The participants were aware of the basic components of a healthy diet, as shown by these comments.

“Steam vegetables, rice, boiled chicken fresh grains.”

“Salad, some type of protein, a beverage (water w/lemon).”

“Salad, meat added to eat. For family I would like them to have some rice, a vegetable, little starch.”

Although they showed an apparent knowledge, many were still apprehensive of giving up their traditional foods. One of the women eloquently explained what was the difficulty, “Some black folks eat “generationally”. Sometimes with generational cooking, you pick up the same problems (overweight) apart from the fact of it being genetic. I think sometimes it is hard to change. … As black folks, we are not going to turn down barbecue. Sometimes we are on medication, and we still won’t turn down a barbecue because it is a social thing. It’s a cultural thing and we are not going to turn it down. Our eating habits are culturally driven.” Another woman confirmed the previous statement by simply saying, “It’s difficult to change habits because the food tastes good.”

Participatory Activity 3: Rank top three eating concerns.

A third participatory activity involved the women rating their top three eating concerns using the same activity as in the previous one. The top eating concerns among the participants were lack of water intake (20%), not eating enough fruits and vegetables (17.2%) and eating too many sugars (11.9%) (Table 4.5).
Table 4.5

Top Nutrition Concerns Among Black American Women.

<table>
<thead>
<tr>
<th>Nutrition Concerns</th>
<th>Total Points n(%)</th>
<th>Rank N=25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>30 (20.0%)</td>
<td>1</td>
</tr>
<tr>
<td>Not eating enough fruits and vegetables</td>
<td>26 (17.6%)</td>
<td>2</td>
</tr>
<tr>
<td>Sugars</td>
<td>18 (11.9%)</td>
<td>3</td>
</tr>
<tr>
<td>Not eating a variety of foods</td>
<td>13 (8.6%)</td>
<td>5</td>
</tr>
<tr>
<td>Fried Foods</td>
<td>15 (9.9%)</td>
<td>4</td>
</tr>
<tr>
<td>Eating too much carbs</td>
<td>13 (8.6%)</td>
<td>5</td>
</tr>
<tr>
<td>Eating too much</td>
<td>9 (5.9%)</td>
<td>6</td>
</tr>
<tr>
<td>Lacking calcium</td>
<td>7 (8.6%)</td>
<td>7</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>7 (8.6%)</td>
<td>7</td>
</tr>
<tr>
<td>Salty foods</td>
<td>6 (3.9%)</td>
<td>8</td>
</tr>
<tr>
<td>Eating to little</td>
<td>5 (3.3%)</td>
<td>9</td>
</tr>
<tr>
<td>Protein</td>
<td>2 (1.3%)</td>
<td>10</td>
</tr>
</tbody>
</table>

Research Question 3: What are the barriers to engaging in positive health and nutrition practices?

This research explored what Black American women perceived as barriers to engaging in positive health and nutrition. Instead of drawing conclusions from previous research, the researchers asked participants to share their own. Two focus group questions were constructed for this portion of discussion. The questions were developed to determine what prohibited the women from eating nutritiously and engaging in healthy activities.

Focus Group Question 5: What stops you from eating healthy?

Six major themes emerged from this question: (a) career/schedule, (b) culturally-based influence of family and friends or lack thereof, (c) taste, (d) lack of desire/laziness, (e) affordability, and (f) eating out. Time and convenience emerged under career/schedule as a sub-theme. Most of the women shared that their careers or schedules prohibited them from practicing a healthy diet. Two of the women gave synopses of their days to illustrate their lack of time to eat a healthy diet,
“My career and my daughter, there is not enough time to get her fed and me fed, so I feed her and get her ready. Then I do my shopping on my lunch break, so therefore I don’t get a lunch and in the evenings, after I pick her up, I prepare a meal and we eat late.”

“My problem it’s between 5 and 6 when I get home by the time I prepare something it is 7 o’clock and that’s why we switch to fast foods because we can stick it in the microwave.”

The second major theme was the influence of friends and family. According to almost all women their eating habits were affected by their friends and family due to cultural influence. The women all agreed that Black American culture promotes eating meals of large portion sizes. One participants explained how her husband’s high rank in the church influenced her eating habits. “People bring food to the house of the pastor and his wife. Often times they (church members) will bring food that will last three days.” Another woman added to her statement, “That is actually tradition to bring food to the pastor’s house. You had to make sure that the pastor is eating.” Other statements further explained how family and friends influence eating habits,

“Black culture influences overweight and obesity via cooking methods, (using lard).”

“Preparing unhealthy foods, a lot of Black families eat like that [fatty foods], [because] it gets passed down.”

A lack of family members was also a factor that influenced eating habits. One woman said, “Living alone, having to cook for one person is difficult when you are used to cooking for a lot of people.”

A third theme that emerged from this discussion was taste. Most of the women agreed that taste was one other reason they did not practice healthier eating habits. Many of the women knew that their diets were not healthy, but the taste of foods lower in fat stops them from choosing a healthier diet. Almost all of the women agreed that is why they continue to eat traditional foods rather than eating healthy foods.
A lack of desire to cook or laziness emerged as a major theme in this portion of discussion. Many of the women emphasized that the stress from their work day created a lack of desire to prepare a meal that is nutritious. Some of the women also stated that many times they were simply too lazy to prepare a nutritious meal. One of participants said, “I am lazy, by the time I get home it is easy for me to eat a hot dog.”

Being able to afford nutritious foods was the fourth theme that emerged. The cost of purchasing healthy foods was perceived as too high to buy on a frequent basis for many of the women. One of the women said, “It just seems easier and cheaper to buy a bag of potato chips.”

Finally, eating out emerged as a theme in this round of questioning. One of the women stated that she and her husband typically ate out and rarely cooked a meal at home. She was aware of the lack of nutrition eating out promoted when she stated: Eating out causes unhealthy eating because restaurant foods are fattening.

**Focus Group Question 6: What stops you from engaging in healthy activities?**

From this question, three major themes emerged. The women shared what prohibited them from engaging in healthy activities: (a) time/schedule conflicts, (b) lack of motivation, and (c) family. Many of the women agreed that their schedules and/or familial responsibilities keeps them from engaging in healthy activities. One of the women said that her job was the major reason that she did not exercise. She commented, “I used to work out, but I stopped when my schedule changed, and I am not getting up earlier to work out…”

Lack of motivation was the second major theme that limited or stopped the women from engaging in healthy activities. Many of the women pointed out that they would avoid exercising because they were not motivated. According to one of the women, “My problem is I’ll say ‘I don’t need it.’ I know I am supposed to do it but, I don’t want to do it.”

Another participant also stated that she needed help to exercise, “I need to find somebody to do it with. If I had someone to say, ‘Come on girl..’ I would do it.”

The third theme arising from this discussion was the influence family had in prohibiting them from engaging in healthy activities. One of the women said that her daughters activities infringed on any time she would have to exercise.
Research Question 4: What kind of educational strategies would influence the daily food habits and health routines of the women?

The purpose of this research question was to determine how can health and nutrition agencies, such as Virginia Cooperative Extension, develop programs to positively affect the eating choices of Black American women. Virginia Cooperative Extension seeks to aid the Virginia population by educating its constituents about proper eating and health practices. This research question explores the learning style of Black American church women in order to help develop educational materials conducive to their learning preferences. The focus group questions asked were: (a) what are some solutions that may help improve current status, (b) what would help them learn better, and (c) how can the church help influence positive health and nutrition practices.

Focus Group Question 7: What are some solutions that would help change your current nutrition and health practice

The four major themes emerging from this focus group question were: (a) support system/motivator, (b) access to health/fitness facilities, (c) committing yourself to change and acting on it, and (d) having the church encourage healthy eating. One of the major responses the majority of the women shared was that they needed a support system, a motivator to encourage them to engage in physical activity. Two of the women said,

“I need a personal trainer, I need to be trained.”

“I have even considered hypnosis to see if it would change my lifestyle, I need a motivator…”

The second theme that emerged from the discussion was having access to the gym facilities. Many of the women stressed that gym membership fees were too high for them to join. One of the women who worked outside the home complained that many of the facilities did not accommodate her work schedule. For example, she said that the gym did not provide a certain fitness class outside the hours she worked.

The third theme, committing to change and acting upon it, had one sub-theme. This sub-theme concerned a doctor recommending a diet and work out regimen. Many of the women said that change would not happen unless they made it a priority. One woman summed it up by saying, “[You] got to see it as a priority, see it as important as a doctor’s appointment.”
sub-theme, having a doctor prescribing a diet and exercise plan, was shared by some of the women. One participant stress that her decision to change would take going to a doctor and get medical orders to change her diet.

The fourth theme, having the church encourage healthy eating, was supported by most of the participants. The women stressed that many church gatherings promote unhealthy eating. Many functions are catered with fattening foods instead of serving foods that are more nutritious. Two of the responses of the women were,

“The church needs to replace the fried chicken with baked chicken.”

“[Women should] have ready availability to nutritious types of foods…”

Participatory Activity 4: Rank top three eating concerns you want to change or improve.

This participatory activity allowed the women to rank eating habits that they wanted to change or improve. Each of the women selected three eating habits that they were interested in changing. The women’s choice receiving the highest percentage of points was drinking water (17.9%), followed by choosing more fruits and vegetables (17.2%) and eating too much (13.9%). (Table 4.6)

Table 4.6

<table>
<thead>
<tr>
<th>Nutrition Concerns</th>
<th>Total Points n(%)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking Water (improve)</td>
<td>27 (17.9%)</td>
<td>1</td>
</tr>
<tr>
<td>Choosing more fruits and vegetables (improve)</td>
<td>26 (17.2%)</td>
<td>2</td>
</tr>
<tr>
<td>Eating too much (change)</td>
<td>21 (13.9%)</td>
<td>3</td>
</tr>
<tr>
<td>Eating too many fatty foods (change)</td>
<td>16 (10.6%)</td>
<td>4</td>
</tr>
<tr>
<td>Improve calcium intake</td>
<td>14 (9.3%)</td>
<td>5</td>
</tr>
<tr>
<td>Carbohydrates (change)</td>
<td>14 (9.3%)</td>
<td>5</td>
</tr>
<tr>
<td>Protein</td>
<td>8 (5.3%)</td>
<td>6</td>
</tr>
<tr>
<td>Eating less cholesterol</td>
<td>8 (5.3%)</td>
<td>6</td>
</tr>
<tr>
<td>Eat a variety of foods</td>
<td>5 (3.3%)</td>
<td>7</td>
</tr>
<tr>
<td>Eating less salt</td>
<td>2 (1.3%)</td>
<td>8</td>
</tr>
</tbody>
</table>
**Participatory Activity 5: Top health practices to improve on.**

The purpose of this activity was to understand the health practices the women would most like to improve on. Table 4.7 shows how the participants ranked their top three choices; walking (23.8%), getting more rest and doing aerobic exercise (19.9%), and weight lifting (12.5%).

**Table 4.7**

<table>
<thead>
<tr>
<th>Health activity</th>
<th>Total Points n(%)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking</td>
<td>36 (23.8%)</td>
<td>1</td>
</tr>
<tr>
<td>Resting</td>
<td>30 (19.9%)</td>
<td>2</td>
</tr>
<tr>
<td>Aerobic Exercise</td>
<td>30 (19.9%)</td>
<td>2</td>
</tr>
<tr>
<td>Weight lifting</td>
<td>19 (12.5%)</td>
<td>3</td>
</tr>
<tr>
<td>Stretching</td>
<td>16 (10.6%)</td>
<td>4</td>
</tr>
<tr>
<td>Swimming</td>
<td>12 (7.9%)</td>
<td>5</td>
</tr>
<tr>
<td>Jogging</td>
<td>8 (5.3%)</td>
<td>6</td>
</tr>
</tbody>
</table>

**Focus Group Question 8: What would help you learn about positive health and nutrition practices?**

Four major themes emerged from this portion of discussion. The women shared what would help them learn about positive health and nutrition practices. Four major themes arose: (a) workshops at churches, (b) classes offered at church, (c) health fair/forum, and (d) newsletters. Of the major themes, nutrition classes offered at the church was the most requested option. Some of the responses were as follows.

“[They should have] education programs for healthy eating at the church.”

“[They should have] classes offered at the church on nutrition, … church to send out flyers on healthy flyers on healthy eating.”
“People within the church should hook up with one another, have a weigh in at the beginning and compete as groups to see who looses the most weight.”

Focus Group Question 9: How can the church environment help you to improve your health and nutrition practices?

The purpose of this question was to understand how Black American women within the faith community would like churches to involve themselves in improving health and nutrition practices among their female members. The four major themes that emerged were: (a) have church add nutritious meals to gatherings, (b) have a health educator come to the church to talk about healthy eating, (c) conduct nutrition classes at the church, and (d) develop a health committee at the church.

Having the church add nutritious meals to catered church events was the first major theme to emerge from discussion. One of the women commented, “When they have dinners, they don’t have to serve fried chicken, they can serve something else… change the menu.” As a response to this focus group question, quite a few women plainly stated that, “The church needs to stop cooking, we don’t need food at every event!”

The second theme to emerge was for the church to invite a health educator to teach about nutrition. One of the women suggested, “The church should get somebody in, a professional, to talk to the parishioners…”

The third theme addressed the need for education offered at the church. The women were highly in favor of having some form of class or forum that would educate them about nutrition. Having nutrition classes at the church also had a sub-theme, having cooking classes to teach the women how to prepare traditional foods more healthfully. Said one of the women, “[We should] have some experts come in and show us how to prepare the food we love healthy.”

The fourth theme was to establish a health committee set in the church. Some of the women agreed that having the presence of a health committee in the church would promote healthy practices. One of the women suggested to, “Have the church educate the people. Educate the staff personnel, such as missionary nurses, to help the rest of the congregation.”

Participatory Activity 6: Top choices of preferred learning methods

The purpose of this activity was to gain an understanding of how the women would like to learn how to improve their nutrition and health practices. Table 4.8 shows the women’s top
three preferences: community programs (25%), general nutrition information in the church bulletin and women’s day program sponsored by the church (19.6%), and learn at home newsletters (7.9%).

Table 4.8

<table>
<thead>
<tr>
<th>Learning Preferences</th>
<th>Total Points n(%)</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community workshops/programs</td>
<td>34 (25.0%)</td>
<td>1</td>
</tr>
<tr>
<td>General nutrition info in church bulletin</td>
<td>27 (19.6%)</td>
<td>2</td>
</tr>
<tr>
<td>Women’s program sponsored by church</td>
<td>27 (19.6%)</td>
<td>2</td>
</tr>
<tr>
<td>Newsletter sent home</td>
<td>12 (7.9%)</td>
<td>3</td>
</tr>
<tr>
<td>Computer</td>
<td>11 (7.4%)</td>
<td>4</td>
</tr>
<tr>
<td>Brochures</td>
<td>10 (7.3%)</td>
<td>5</td>
</tr>
<tr>
<td>Church Sermon on nutrition</td>
<td>8 (5.8%)</td>
<td>6</td>
</tr>
<tr>
<td>Videos</td>
<td>7 (5.1%)</td>
<td>7</td>
</tr>
</tbody>
</table>
**Key Informant Interview Results**

Table 4.9

Summary of Predominant Themes and Sub-themes Emerging from Key Informant Questioning

**Research Question 1: What are the main health concerns that affect Black American women?**

I. KIQ: What do you think are the major health and nutrition issues or concerns of Black American women?
   A. Overweight/obesity
   B. Cancer
   C. Diabetes
   D. Heart Disease
   E. High Blood Pressure

**Research Question 3: What are the barriers to engaging in positive health and nutrition practices?**

II. KIQ: What are some barriers that you feel Black American women experience that may hinder proper health practices?
   A. Lack of knowledge
   B. Stress from lack of resources
      i. Health insurance
      ii. Money
      iii. Single parent homes
      iv. Support from family

III. KIQ: To what extent do you feel Black American women are aware of the connection between diet and chronic diseases, i.e. cancer?
   A. Low to fair knowledge

**Research Question 4: What kind of educational strategies would influence the daily food habits and health routines of the women?**

IV. KIQ: What kind of role do you feel the church plays in healthy life styles?
   A. Church can play a positive role

V KIQ: What kind of impact, if any, do you feel the church can have in the improvement of nutrition practices among female members of the church?
A. The church can have a positive impact

VI. KIQ: In what ways can outside health agencies assist the church leaders in improving nutrition practices among the female members of the congregation?

A. Workshops/programs
B. Tailored messages
C. Educate church leaders

Key informant interviews

The key informant interview (Appendix B) was administered to four participants. The interviews were completed to provide further information about the study population from experts or people who worked in the health and/or nutrition field and who were very familiar with the specific women who participated. One of the key informants was an Extension Agent and the other three were nurses. A moderator conducted the interviews either before or after each focus group with a respective key informative. One of the key informants acted as the “expert” for two of the focus groups. The key informants were asked to answer a series of questions.

The key informant questions corresponded with the research question in a fashion similar to the focus group questions and participatory activities. The interviews were simulated to follow a conversational dialogue.

Key Informant Question 1: What do you think are the major health issues or concerns of Black American women?

This key informant question was intended to allow the key informants to share what they believed were the major health concerns of Black American women. From this key informant question, five major themes emerged: (a) overweight/obesity, (b) cancer, (c) diabetes, (d) heart disease, (e) high blood pressure, and one sub-theme which was stress. Almost all of the key informants agreed that overweight and obesity was a major health issue among Black American women. One of the key informants expressed her concern about obesity when she stated, “Obesity is an issue that does not get enough attention.” Cancer, especially those cancers that
are more prevalent among women, was also mentioned as a major health concern among Black American women.

Some of the key informant agreed that diabetes and hypertension was a serious health issue among Black American women. One of the key informant shared her concern about diabetes and high blood pressure. “Diabetes is one of the major health problems, high blood pressure (hypertension) is another problem. Two main things Black people are at high risk of. I feel as though it has something to do with DNA/genetics.”

Key informant question 2: What are some barriers that you feel Black American women experience that may hinder proper health practices?

The purpose of this question to understand what the key informants thought were the barriers to improving the health of Black American women. Two major themes that emerged from this question were (a) lack of knowledge and (b) stress from lack of resources, which had four sub-themes: i. health insurance, ii. lack of money, iii. single parent homes, iv. support from family. Many of the key informants shared the concern that Black American women lack knowledge about how to help them practice healthy practices. One of the key informant said, “I do not think that they realize the extent…of a good diet and a person’s health.”

The second major theme concerned stress from a lack of resources. One of the key informants commented in reference to the sub-theme of lack of support family, “Black women are always trying to excel, [it] puts stress on [the] women… stress from daily toils hinders proper health practices.” One of the sub-themes raised from the key informant interviews did conflict with the women of the focus groups. Many of the key informants pointed out that single parent households was one of the main influence to unhealthy eating. Most, if not all, of the women of the focus groups who shared that their family responsibilities hindered proper nutrition and health practices were married and living with their spouses.

Key informant question 3: To what extent do you feel Black American women are aware of the connection between diet and chronic diseases, i.e. cancer?

The purpose of this question was to explore whether or not the key informants thought Black American women understood the links between diet and chronic disease. All of the key
informants said that there is a low to fair knowledge about the links among Black American women. Some of the comments from the key informants were as follows,

“I do not think that they realize the extent…of a good diet and a person’s health.”

“The masses do not have a good understanding of the connection between diet and disease.”

“They are fairly knowledgeable about the links, not as knowledgeable in reading food labels.”

“Very limited, it’s not like we don’t like to read, it is just we are more reluctant to find information [about health].”

Key informant interview 4: What kind of role do you feel the church plays in healthy life styles?

The purpose of this question was to understand how the key informants felt the church could be used to improve health. All emphasized that the church could be instrumental in helping its female members improve their health and nutrition practices. One key informant captured the thoughts of the key informants when sharing, “It should play an important role, because we should pay attention to the physical and not only the spiritual.”

Key informant interview 5: What kind of impact, if any, do you feel the church can have in the improvement of nutrition practices among female members of the church?

The intent of this question was to understand how the key informants felt the church would affect nutrition practice of the female members. Many agreed that the church would have a positive impact. Some of the informants stressed that the church can provide people access to knowledge about proper health and nutrition. One of the key informants stated, “I think [the church] could have a very positive impact because the church should have role in that area.”
Key informant question 6: In what ways can outside health agencies assist the church leaders in improving nutrition practices among female members of the congregation?

The purpose of this question was to explore ways that health agencies can help Black American women improve health and nutrition classes. Three major themes emerged: (a) workshops/programs, (b) tailored messages, and (c) educate church leaders. The key informants thought that workshops or programs would be helpful in educating the congregation as well as the community to improve health and nutrition practices. According to one of the key informants, “Workshops at the church on different issues (diabetes, high blood pressure) collaborated with food out reach programs.”

Tailored messages, the second theme, was another idea emerging from the key informant interviews. Tailoring nutrition and health messages would allow the information to reach people at different levels. One of the key informants emphasized, “They need to tailor it [nutrition and health messages] to the education background of the people. You have to approach it at different levels according to the audience.”

Finally, most of the key informants felt that one way the outside agencies could assist the church was to bring in people to train the church leaders. This would allow leaders to get more involved with the wellness of their female members.

The results of the focus group sessions, participatory activities, and key informant interviews provided a great source of information. The researchers were able to gain unique viewpoints from the participants using these methodologies. The perceptions shared by the women of the focus groups and the key informants did reflect many similarities when compared to one another.
CHAPTER V: SUMMARY AND CONCLUSIONS

The purpose of this study was to assess the perceptions of Black American women within Virginia’s faith community regarding their health and nutrition practices, concerns, and solutions to improve or change their current practices. Triangulation of focus group discussions, key informant interviews, and participatory activities were utilized to collect and interpret research data. This chapter summarizes the results and presents the conclusions of this study related to the triangulation methodologies, the four research questions, the study’s limitations, and future limitations.

Triangulation methodologies

Qualitative and quantitative methodologies were used to gather data about the perceptions of health and nutrition among Black American women within Virginia’s faith community. Triangulating these methodologies strengthened the validity of the research by providing a rich pool of data that confirmed the information that was obtained.

This study used focus group methodology as opposed to any other data collecting method. The discussions held within the focus groups allowed the participants to verbalize their opinions. The women were able to express opinions and ideas they felt were important. Each focus group questions stimulated the participants to share concerns that many experts or previous research may have overlooked or discredited. Conducting research using focus group methodology produces intricate details of a topic that may otherwise have not been ascertained through quantitative methodology (Strauss & Corbin, 1990).

In large group discussions, there is a tendency for some to talk more than others, as it was evident in all of the focus groups that were conducted in this study. Those women who were more reluctant to speak were still given a chance to share how they felt through participating. Incorporating the visual participatory activity allowed all the participants to “voice” their concerns. The visual participatory activities also acted as a literacy aid in case a participant was not able to read (Tolley and Bentley, 1992). These activities were well accepted by all the participants. During the course of data collection, visual activities that were added by the participants to ensure that all major health concerns were represented. The women were given an opportunity to rank their most personal health concerns in private, which promoted a comfortable and non-intimidating atmosphere.
The key informant interviews were used in comparison to the themes that were generated from focus group discussions. The responses of the key informants were valuable to the study because it provided a different viewpoint in understanding what were the main health and nutrition concerns. The responses the key informants shared were compared to those of the focus group responses to observe any similarity or contrasts. Although they were considered the “experts”, they were able to share not only from knowledge, but from the experiences they shared with their affiliation to the study population.

Triangulating the different research methodologies with this population was an effective way to gather data. Not only did this research use two methods (focus group questions and participatory activities) to understand the perceptions of Black American women, but it also allowed the key informants to give their expert opinions. The results from the participatory activities were compared to the responses of the focus groups sessions to observe consistencies between the activities and the discussions. Also, the key informant responses were compared to the focus group responses to observe consistencies between the focus group participants and key informants. The information collected from this small exploratory study cannot be generalized to the entire population. Table 5.1 illustrates the results of the triangulated data obtained from the study.
### Table 5.1

#### Triangulated Responses

<table>
<thead>
<tr>
<th>Focus Group Themes By Participants</th>
<th>Participatory Activity Ranking By Participants</th>
<th>Key Informant Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Health Concerns</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Overweight/obesity</td>
<td>1. Overweight/obesity</td>
<td>1. Overweight/obesity</td>
</tr>
<tr>
<td>2. Chronic disease</td>
<td>2. Exercise</td>
<td>2. Heart disease</td>
</tr>
<tr>
<td><strong>Main Eating Concerns</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Lack of nutritious foods</td>
<td>2. Not eating enough fruits and vegetables</td>
<td>conflicts</td>
</tr>
<tr>
<td>3. Eating right foods</td>
<td>3. Too much sugar</td>
<td>2. Snacking</td>
</tr>
<tr>
<td>4. Snacking</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Barriers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Schedule/time conflicts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Lack of desire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Affordability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Reluctance to give up traditional foods</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preferred Learning methods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Community workshops/program</td>
<td>1. Community workshops/programs</td>
<td></td>
</tr>
<tr>
<td>2. Health forums</td>
<td>2. Church bulletin inserts</td>
<td></td>
</tr>
<tr>
<td>3. Newsletters</td>
<td>3. Woman’s programs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Newsletters</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Workshops</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Tailored messages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Educate church leaders</td>
</tr>
</tbody>
</table>
Research Question 1: What are the main health concerns that affect Black American women?

One of the main focuses of this research was to determine what Black American women perceived as their main health concern. Two focus group questions, one participatory activity, and one key informant question were used to obtain information regarding this research question. Three themes emerged from the first focus group question were overweight and obesity, chronic diseases, and lack of knowledge of proper health practices. Overweight and obesity were the major health concerns of the focus groups. The second focus group question generated three themes: fear of health risks involved with overweight/obesity, lack of education to prevent/reduce weight gain, prevention of children becoming overweight/obese. Health risks associated with overweight and obesity was given the highest concern.

The health concern that received the greatest attention was overweight and obesity. This concern was ranked first on the participatory activity that correlated with this focus group question. Though many of the women’s self esteem was not negatively affected by overweight and obesity, they were aware of the rising attention towards the health risks due to overweight and obesity. Many of the women knew that there were health consequences with overweight and obesity and expressed their need for more information on ways of preventing illness. Many of the women attributed their weight concern to their refusal to give up the traditional foods. One of the key informants agreed that overweight and obesity was a major that needed to be addressed because of the lack of attention overweight and obesity gets among this segment of the population.

Chronic diseases were another major theme that emerged from the conversations and discussions with the focus groups. Many of the women had family members who died from these diseases: (a) cardiovascular disease, (b) cancer, and (c) diabetes. Diabetes was ranked as a third major health concern in the participatory activity. Heart disease/stroke and high blood pressure tied for fourth ranking and cancer was ranked fifth. Due to the hereditary threat of disease, many of the women expressed that they wanted more information on how to prevent these diseases from claiming their lives.

The lack of knowledge or awareness of where to find knowledge to prevent the development of these health consequences was the third theme to emerge from discussion. Many of the women agreed that there was a lack of awareness amongst themselves. The
participants expressed that health information needs to be distributed to younger people so that they would not grow up making the same mistakes they made.

The remaining themes were directly concerning overweight and obesity. The participants all shared concerns that affected or lead to the prevalence overweight and obesity. Many of the health concerns were related to overweight and obesity. Although the women realized the health risks, they were reluctant to give up or adopt certain practices that would improve their health status, mainly their traditional foods. A recommendation the groups suggested was to develop and circulate healthy recipes of their traditional foods that promoted positive eating without giving up the taste.

Research Question 2: What are the main eating or nutrition concerns of Black American women?

This study was interested in learning what were the eating or nutrition concerns that were held by the participants. Two focus group questions and a participatory activity were used to stimulate discussion for this topic. The first focus group question, which asked the women to share their eating concerns, generated four themes: (a) lack of nutritious foods, (b) schedule has negative affect on eating habits, (c) eating the right foods at the right time, and (d) snacking on the wrong foods.

The lack of nutritious foods was a major theme raised by the participants of the focus groups. Many of the women confessed to not having or including nutritious foods to their diets. The women expressed that either they desired to eat healthier or that they at least knew they were missing nutritious foods from their diets. Most of the participants expressed that what they lacked most were vegetables and fruits from their diet, which was ranked as the second major eating concern in the participatory activities. The lack of water as a missing component to their diets was not discussed in great detail, however it ranked in the participatory activity as the primary eating concern among the women. It may be beneficial for future research to use probing questions about water, which may reveal it to be potential indicator to high consumption of sugary fluids such as soda.

Many of the women that participated in the study were very busy with careers and/or families. Their schedules and/or dictated what and when they could eat. Many of the women expressed how often times they would eat late and go directly to bed. This posed a concern for
many of the women. Some of the key informants did share that the reason Black American women do not practice positive eating and health activities is because they overexert themselves with too many responsibilities to pay attention to themselves. It was concisely stated by one of the participants that Black American women needed to make their health and nutrition practices a priority.

The time of day that foods were eaten was another concern raised by many of the women. The participants expressed that because of their work schedules that they would eat at unpractical times. Along with timing, the foods that the women were eating were also a concern. Many of the women shared that often times they do not pick the right foods to eat. They expressed how the foods that were convenient were also unhealthy.

Another concern that was raised was the snack foods the women choose to snack on. Many of the women expressed that the foods they tended to snack were high in sodium and low in nutrients. Many of the women knew that the snack choices they were making were not the best choices and expressed how they wanted that behavior to change. One of the key informants confirmed this behavior pattern as she shared that many Black American women have snacking problems.

The second focus group question allowed the women to share their idea of a healthy diet. Each of the women were given an opportunity to develop a healthy menu for a certain meal or throughout the day. The responses revealed that many of the women knew the components of a healthy diet as diagramed in the Food Guide Pyramid. This supports previous research findings of confounding correlations between level of education and nutrition and health practices (Harris & Bonner, 2001; MacDowell et al, 2002). The participants expressed factors such as taste, time, and money prohibited them from sustaining a healthy diet like they described. Because of the high level of demand put on these women, a recommendation for the women was to schedule in eating times throughout the day, since many of the women expressed that they would only eat once a day. Another recommendation was to purchase small healthy snacks such as baby carrot sticks or animal crackers take them to work. Then they would have something more healthy to eat as opposed to snacks they would by from vending machines. Since priority and time management seems to be a limiting factor to eating healthy meals, the women could also plan what meals to eat for the week and prepare them in advance so that all they have to do is heat them. That would reduce preparation and cooking time so that they would not have to
resort to unhealthy convenience foods. Many of the key informants agreed that Black American women put the importance of the tasks they took on themselves more important than themselves, this practice negatively affected their eating habits.

Research Question 3: What are the barriers to engaging in positive health and nutrition practices?

The researchers wanted to gain a better understanding as to what Black American women considered barriers to practicing positive health and nutrition. Two focus group and key informant questions were used to solicit information pertaining to this research question.

The focus group questions asked the women to share the barriers that stopped them from eating healthy and participating in healthy activities. From the discussion, many of the themes were shared between these two questions. Many of the women agreed that their schedules and familial responsibilities stopped them from eating healthier. Other barriers to healthy eating were laziness, taste, and eating out in restaurants. Affordability was also raised as a barrier for many of the women. Many of the women expressed that the healthy foods tend to be pricier than convenience foods.

Time/schedules, lack of motivation (desire), and family influence were also barriers to engaging in healthy activities. Schedule conflicts appeared to play a large role in the involvement of physical activity among the women. Many expressed that their job schedules interfered with the times they would prefer to engage in physical activity. There were also some women who plainly expressed that they lacked motivation to engage in healthy activities. Some expressed that they needed additional help from friends or family to encourage them to work out. Many of the women who were mothers shared that their responsibilities for their families left them with no time to exercise.

The first key informant question asked what the “experts” saw were barriers to the women from engaging in healthy eating and activities. The key informants expressed that the lack of knowledge and stress from the lack of resources were the main barriers to engaging in healthy activities. There were four sub-themes that emerge from the lack of resources theme: health insurance, money, single parent homes, and support from family. As with the focus group participants, the key informants agreed that the issue of money or affordability is raised as a barrier to healthy eating. Single parent homes did not appear to have much more of a negative
influence on eating habits than households run by two parents as some of the key informants insisted.

The second key informant question asked the key informant to share how informed they felt Black American women were about the links to poor nutrition and disease. The beliefs of the key informants ranged from no knowledge to fair knowledge about the link. They did agree with the focus group participants that the lack of knowledge was a barrier. Knowing the situation of the participants of the study, the key informants shared that the information about diet and disease is not getting to these women.

Time schedules and familial responsibilities seem to heavily influence both eating and physical activity practices of these women. A recommendation to help reduce the influence of the barriers toward eating healthy is to once again consider meal plan schedules for each week. The women can also ask her family to aid in the preparation of the foods so the responsibilities will not be totally on her shoulders. The women can also use a schedule to plan times where they can fit is some physical activities. The women should realize that any form of physical activity is better than none. Even if it entails intermittent times of 5-10 minutes walks, they are engaging in healthy activity.

Research Question 4: What kind of educational strategies would influence the daily food habits and health routines of the women?

The purpose of this research question was to understand what educational materials or programs would best inform this population group. The focus group questions, key informant questions and participatory activities were all tailored to allow the women to give responses that would give researchers an idea of what would best reach Black American women and influence them to change their eating habits and physical activity involvement. One of the focus questions directly asked the participants what strategies would effectively inform them about healthy eating and lifestyle practices. Four suggestions the women raised were workshops, classes offered at church, health fairs/forums, and newsletters. The number one learning preference ranked by the women was community workshops or programs sponsored by the church. Many of the women as well as the key informants felt that workshops that involved the community would be most help to improve the health and nutrition status of the women. The participants and key informants all agreed that the utilization of the church for workshops would be very
effective. The women also expressed that nutrition information inserted into church bulletins and women’s day program sponsored by the church would be helpful as well. With this in mind, a recommendation is to educate the women about improving their health and nutrition practices using the resources that could be provided from the church. Churches can contact health agencies to send educators to either educate the members or train church leaders to educate their members. Also churches can promote healthy eating at functions where food is served by reducing fatty, fried foods and substituting in foods that are healthier.

Overall Conclusions

Black American women in Virginia are aware that their current health and nutrition practices do not promote the highest level of health. Many of the women were aware that much of their current practices would lead them to negative health consequences. Health and nutrition issues were a low priority among the women, which was a barrier to improving their health and nutrition status. The women expressed that they wished they had known in their younger years about the consequences they would face because of the bad eating and health choices they made. This concern needs attention from all health and nutrition agencies, especially with the information from recent statistics reflecting a high percentage of Black American women at risk for or already suffering with diabetes (AHA, 2002).

The women of this study expressed a desire to change their current practices. Educational materials and/or programs should be sensitive to the specific needs of these women. These materials or program must be tailored in such a way that would be conducive to schedules of these women. It should healthy foods choices or ingredient substitutes need to be emphasized. There is a reluctance to change, particularly to eating, because of the taste of the traditional foods the women are used to. Also, the women should realize that any amount of physical activity would help greatly. Knowing that busy scheduling and time limitations prohibited the participants from engaging in any formal physical activity, the women need to realize that attending an aerobics class or going to the gym is not the only way to obtain physical activity.

Recommendations for Future Educational Programs

Black American women need culturally sensitive and time efficient nutrition and health programs to effectively improve their current level of health and nutrition. The programs should
first focus on how to prepare traditional Black American foods more healthy. Because taste is a concern and barrier to many of the women, educators should encourage the women to consider different cooking techniques. The educators should emphasize substitution. Instead telling the women what they need to give up, health and nutrition educators need to find information on foods and ingredients these women can use to substitute with so they can still eat many of their traditional foods. The educators can also educate the women on portion size and using the Food Guide Pyramid.

The Virginia Cooperative Extension provides nutrition and health programs for families. Extension has the ability to develop a variety of educational programs that will target Black American women within the faith community. The involvement of Extension in the church would aid in developing effective workshops, classes, and newsletters that would reach this segment of the population. Suggestions of programs are as follows:

- Community workshops at the church that aims on educating mothers on how to prove the eating and health habits of her family. These community workshops could involvement the participation of the church leaders, especially the pastor. The pastors’ involvement with the community workshop would involve developing a scriptural theme of the program that is focused on reaching the community. The workshops could also focus on improving health practices of all family members, such as children and men.

- Developing newsletters that can be sent home to interested church members that has a scripture based theme for healthy eating and exercise.

- Because Cooperative Extension is located in most cities and counties, Extension Agents develop and conduct educational classes on healthy eating. Extension Agents can collaborate with church leaders to develop education programs, such as cooking demonstrations; while lay church leaders can emphasis spiritual references to encourage women to be mindful of what they put in their bodies. The educators could use scripture from the bible as a reminder of the purpose of the class, such as I Corinthians 6:19-20 which states, “Do you not know that your body is a temple of the Holy Spirit, who is in you, whom you have received from God? You are not your own; you were bought with a price. Therefore honor God with your body.”
• Churches that have radio or television access can include healthy nutrition tips and facts during their airtime. The church can also be used as a motivator to encourage the women to improve health and nutrition practices as well as the entire family.
• Appointing a member of the church who is a nurse to act as a health promoter for the church.
• Developing mentoring programs for those women who are interested in changing or improving their health lifestyles. The mentor program would include a buddy program where women are paired with accountability partners to encourage one another towards reaching their goal.

In this, Extension agents and church leaders can establish relationships and work together to improve the health and nutrition status of the women of the church. This partnership would ultimately help reduce the risks of chronic disease and death among these women.

Research Limitations

Several limitations occurred while conducting this research. The most restraining limitation was the difficulty to obtain participants for the study. Other limitations included holidays/events celebrated in the churches, inclement weather, factors affecting focus group dynamics, and factors affecting analysis of focus group sessions.

Obtaining Participants

The most challenging experience of this project was obtaining participants. This population was a very hard population to initially gain approval and participation. In order to gain participation, it was necessary to have the respective Extension agent or someone who was well known and respected. This also posed as a problem because some of the Extension Agents were in the process of retiring or moving to another district. Many of the participants were recruited by the church liaison that knew the Extension Agent. The participants from Radford was recruited by one of the church members who happened to be a nurse and was interested in getting her church more informed about health and nutrition. Once the participants were obtained, the sessions were conducted smoothly.
Holiday/Events Celebrated at the Church

There were many events and holidays celebrated at the churches that delayed the progression of the research. The requests for participants started in February, which was a very busy month for all of the churches due to Black history events. March and April was busy as well due to women’s month programs and Easter. The first focus group was conducted right before Easter and all others were done after Easter and Mother’s Day.

Inclement Weather

Inclement weather was also a limitation. Many times the snow precipitation was very heavy and caused the closing of many buildings, including church. The agents were not able to get to the churches to speak in person to gain approval of study participation with church leaders. This added in the delay of the study.

Factors Affecting Focus Group Dynamics

One factor that was most problematic was people dropping out at the last moment. There were two focus groups were women who were supposed to participate cancelled at the last minute. Those two groups each had three women participating. This diminished the dynamics in those two groups and reduced the variety of potential responses. These small numbers limited the themes that could have emerged form discussion and affected the potential outcomes of the ranking activities.

Another factor that affected group dynamics was the requirements that the women had to pass in order to participate. The requirements were set because of the sensitivity of the responses from the women. Only women who fit the requirements were allowed to participate so that influenced answers would not interfere with the genuine responses of the participants.

The first focus group was held in Roanoke, Virginia. Although this group was the pilot group, it was the best focus group. All of the women who participated shared their concerns and had no problems with any of the participatory activities.

The second group was held in Prince William County, Virginia. Most of the women who participated in this group were over 50. Their health concerns were more related to Medicaid and affordable medicines. It was difficult to get the women to stay on topic and answer with responses pertaining to the question asked.
The third group was held in Northumberland, Virginia. This group suffered people dropping out or not showing up. Therefore only three women participated in the focus group. The information from the session was quite limited and the participatory activities lacked in numbers.

The fourth group consisted of women who attended church in Radford, Virginia. This group had a wonderful turnout and the discussion went very smoothly. There was little problem in understanding how to engage in the participatory activity. Two of the participants were shy and did respond as much as the other women. However, all were willing to participate in the visual participatory activities.

The final group took place in Chesapeake, Virginia. This group experienced the same plight that group two experienced. Only three women participated, one of them having lupus. Although one the requirement was to not have any predisposed conditions accept for type two diabetes, she was still allowed to participate.

Factors Influencing Data Analysis

One of two moderators conducted most of the focus group sessions. One of the moderators was present at all five groups. The moderator also did all of the transcriptions for the focus group sessions.

There were two tape recorders recording each session. The tape recorders work fine, only in the first session did one of the recorder stop recording. As soon as it stopped the moderator flipped the tape and continued with the discussions.

Recommendations for Future Research

One recommendation for future research is to do research with these churches during a time when there are the least amount activities. The best times would be during the summer months and between September and October. These are times when there are little to no holidays that would cause conflicts. This would possibly decrease the reluctance of the churches and therefore promote more participants. Because the sample size was small, 25 participants, the information can only be generalized to churchwomen with in the Commonwealth of Virginia. Therefore it is recommended to conduct further research with a larger sample size. Due to the subject matter of this exploratory research study, more research with this population would
enable a larger pool of information which would allow conclusions to be generalized to the
greater Black American women population. Also, research can be expanded to include men and
children. It would be interesting to observe the perceptions of health and nutrition among these
study groups and understand what influences would help to change negative health and nutrition
practices. This would generate more information that would possibly improve the health and
nutrition status of the whole Black American population.

It would also be beneficial to the researchers to contact governing bodies of the
different denomination to solicit participants. Instead of contacting individual churches,
establishing contact with the governing body of a denomination would open the opportunity of
reaching more churches with a specific faith to participate. Church Leaders could encourage
participation by spreading notification of research project to many churches. Also, church leaders
could be a research audience similar to what was done in this study to gain their perspective and
insight on health and nutrition for families.

The study only involved women who attended protestant churches. It would be
interesting if future research would include predominately Black Catholic churches. Increasing
the variety of denominations would promote group dynamics and increase in data. Another
recommendation for further research is to conduct studies with Black American women of
different religious faiths. This study only researched women within the Christian faith
community. It would be interesting to see whether or not Black American women of other
religious faiths have the same concerns that women in the Christian faith have. It would be
enlightening to see whether or not the different doctrinal faiths have similar or different health
concerns. This study was able to further demonstrate how the faith community could be used as
an avenue to promote health and nutrition education in order to improve the health status and
nutrition practices among the Black American population.

Further research should also consider investigating how cultural and generational
influences nutrition and health practices and how these influences could be altered. This study
attempted to start the development of a grounded theory that would explain the low levels of
nutrition and health among Black American women within Virginia’s faith community. This
research was able to begin the development of the theory of generational cooking. Further
research is needed in order to investigate this grounded theory and to develop others.
Literature Cited


Center for Disease Control. *Chronic Disease and their risk factors: The nation’s leading causes of death*. Atlanta, Ga.: Center for Disease Control; 1999


eating habits: Changes and consequences. (pp. 5-32) AIB-750 Washington, DC. U.S. Department of Agriculture, Economic Research Service, Food and Rural Economics Division


Lewis, R. K., & Green, B. L. (2000) Assessing the health attitudes, beliefs, and behaviors


American Community: A focus group report. *Ethn Dis, 12,* 276-283.


U.S. 2000 Census Bureau, U.S. Department of Commerce News


APPENDIX A

Interview Guide for Focus Group Questions and Participatory Activities

Hello everyone, I would like to welcome you all to our session. I first would like to thank you all for taking time out to participate in our discussion about concerns and perceptions about your health and nutrition practices. My name is Cyndy Mondelus and I will serve as the moderator for this session. This is Dr. Kathleen Stadler, she will act as the assistant moderator and she will also be in charge of the participatory activities we will be doing during this session.

There is a need to understand the concerns of health and nutrition practices among Black American women. Also, we need to understand preferences that you might have about obtaining health and nutrition information. You all have been invited to participate in this meeting because we felt that you could help us gain valuable insight into how we might accomplish this goal.

We believe that everyone of you has opinions and beliefs that are important for us as educators to understand. Therefore, we encourage each one of you to feel free to express yourself. There are no right or wrong answers to any of the questions we will be discussing. Today, we just need to know about your concerns about health and nutrition practices. Your feelings and beliefs may differ from other participants around you. Please remember that no one is either right or wrong. Everyone’s ideas and perceptions are very important to us. We are just as interested in hearing negative comments as we are about hearing positive ones.

During this session, we will be on first name basis. In any of our later written reports, you can be assured that your name will not be attached to your comments. Anything you say in this session is confidential. We will only be using the tape recording and notes to prepare the summary of all the sessions that will be conducted.

My role here is to ask you questions and listen. I won’t be participating in the discussion, but I want you to feel free to talk to one another. In these discussions, there is a tendency for some people to talk a lot and others not to say much. However, it is very important that we hear from all of you because everyone has different ideas, beliefs, and experiences. If one of you is sharing a lot, I may ask you on a certain issue.

If at anytime you have any questions, or need a break, please feel free to tell any one of us. Are there any questions? Does everyone agree to participate in this session?

Let’s begin by going around the group and saying each of our names, so we can get to know each other. Also, let us know how long you’ve been attending this church.

Today, we will be talking about you health and nutrition practices. We encourage everyone to honestly share their concerns and opinions with us. There are no right or wrong answers, everyone has something important to contribute. As apart of our discussion, you will be taking part in participatory activities. These activities will be incorporated into the discussion. The first
two activities that we will be doing will involve you answering some questions about your self and then ranking your top three health concerns. Let’s get started.

As we explained, our discussion today will focus on concerns of health and nutrition practices that you have. Let’s start by talking about your health.

**FGQ 1. As a Black women, what are your health concerns?**

Probes:
- Is there a family history?

**FGQ 2. What are your concerns related to overweight and obesity?**

Probes:
- What ways do you think it affects health?
- In what ways do you think the Black culture influences it?
- How do you feel Black women handle overweight and obesity?

PA #1

How old are you?
1= under 30
2= 31-35
3=36-40
4=41-45
5=46-50
6=50 and older

PA# 2 Rank three health concerns that are important to you.
Participants will place colored cards into the envelope under a picture that depicts their top concerns. Different colors indicate top, second, and third choice. This activity will be done in private.

- Anemia
- Exercise
- Cancer
- Osteoporosis (weak bones)
- Diabetes
- High blood pressure
- STDs
- Heart Disease
- Obesity/Overweight
- Stroke
- Other (Please list)

Let’s move on to talking about nutrition.
FGQ 3. What are your concerns about your current eating habits?
Probe:
What do you feel you are getting too much of?
What do you feel you are not getting enough of?

FGQ 4. What would you consider to be a healthy diet?
Probe:
How difficult do you think having a diet like you described would be to sustain?

This next activity will involve you ranking your top three eating concerns.

PA 3: Rank your top three eating concerns.
Participants will place colored cards into the envelope under a picture that depicts their top concerns. Different colors indicate top, second, and third choice.

- Overeating
- Undereating
- Eating enough fruits and vegetables
- Eating sugar
- Eating carbohydrates (pasta, potatoes, rice)
- Eating protein
- Drinking water
- Eating Calcium rich foods
- Fried foods
- Eating a variety of foods
- Eating Cholesterol
- Other

Now let us focus on what keeps you from practicing a much healthier lifestyle.

FGQ 5. What stops you from eating healthy?
Probes:
How hard is it to eat a healthy diet?
What situations cause you to eat unhealthy?

FGQ 6. What stops you from engaging in healthy activities?
Probes:
What ways have you tried to get some exercise?

Now that we have talk about your nutrition and health concerns, let’s talk about some solutions that you may have to improve your health and nutrition concerns.
FGQ 7. What are some solutions that would help change your current nutrition and health practices?
Probes:
  How important to you are making these changes?
  What would you have give up to make these changes?

With these next two activities, we are going to rank eating and health practices you would like to change or improve. Pick three choices for each activity that you would like to either change or improve.

PA#4 Rank three eating practices would you like to change or improve.
  • Eating too much
  • Eating fat
  • Eating vegetables
  • Eating carbohydrates
  • Eating proteins
  • Getting enough vitamins and minerals
  • Drinking water
  • Eating fried foods
  • Other

PA#5 Rank three health practices would you like to change or improve.
  • Walking
  • Jogging
  • Aerobic exercise
  • Resting
  • Stretching
  • Swimming
  • Weight Lifting
  • Other

One of our goals for this project is to learn about the ways you prefer to learn about nutrition and health.

FGQ 8. What would help you learn about positive health and nutrition practices?
Probe:
  Who do you talk to about these concerns?

FGQ 9. How can the church environment help you to improve your health and nutrition practices?

PA #6 Rank the three ways you would prefer to receive information of health and nutrition.
We are interested in knowing how you prefer to receive educational information about health and nutrition. Please choose the top three methods you would prefer and rank your preferences as either #1, #2, #3 with #1 being your most preferred method.

- Brochure
- Church sermons on health and nutrition
- Education program with entire community
- Educational videos to view at home
- Women’s program sponsored by church
- Newsletter in church bulletin.
- Newsletter sent to home
- Cooking Classes

We greatly appreciate everyone participation in our discussion. Your feedback and opinions are very important. They will help us develop programs for you. Thank you for your help.
APPENDIX B
Interview Questions for Community Leaders

1. What do you think are the major health issues or concerns of Black American women?

2. What are some barriers that you feel Black American women experience that may hinder proper health practices?

3. To what extent do you feel Black American women are aware of the connection between diet and chronic diseases, i.e. cancer?

4. What kind of role do you feel the church plays in healthy lifestyles?

5. What kind of impact, if any, do you feel the church can have in the improvement of nutrition practices among female members of the church?

6. In what ways can outside health agencies assist the church leaders in improving nutrition practices among the female members of the congregation?
Vita

Cyndy V. Mondelus, daughter of Flonie and Louis-Jack Mondelus, was born on August 1, 1979. Cyndy received her Bachelor of Science degree in Human Nutrition, Foods, and Exercise with a concentration in the Science of Food, Nutrition, and Exercise and minors in Chemistry and Biology in May 2001.

As an undergraduate, Cyndy participated in many university sponsored programs such as Multi-Cultural Student weekend, YMCA Craft fair, and America Reads reading program. Cyndy was a member of various student organizations, most of which she held leadership positions. One of Cyndy’s greatest academic achievements was to be selected as a Ronald E. McNair scholarship. Through this program, she was exposed to the idea of continuing in graduate studies after graduation.

As a graduate student, Cyndy was the first recipient of the newly established Ronald E. McNair Graduate Assistantship. She also was the recipient of a departmental Graduate Research Assistantship. Cyndy continued her involvement in community outreach ministries and was a member of the Judicial Review Board. Her future plans are to use her nutrition background as a foundation as she pursues a career in medicine.