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RESEARCH

Qualitative Research

Meal Patterns and Food Choices of Young African-American Men: Understanding Eating within the Context of Daily Life

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ABSTRACT

Although young African-American men are at particularly high risk of developing hypertension at an early age, dietary interventions that have successfully reduced blood pressure among African-American adults have not been translated into programs for this group. Life contexts such as school enrollment, participation in competitive athletics, and employment influence the daily activities and meal patterns of African-American men. This study explored the activities of young African-American men to identify opportunities to increase healthful food choices. A purposive sample was recruited that included five groups of African-American men aged 15 to 22 years (N=106): high school athletes and nonathletes, college athletes and nonathletes, and nonstudents. A structured interview guided participants through a description of their activities, meal patterns, and food choices during the course of a typical weekday. Common elements emerged that provided a contextual view of the participant meal patterns and food choices. These elements were sports team participation, college employment, school as a food source, nonstudent status, and eating dinner at home. These findings suggest opportunities for the design of dietary interventions for young African-American men that take into consideration how school, athletics, and employment may influence opportunities to eat regular meals that include healthful foods.

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It has long been recognized that hypertension prevention programs are needed for young African-American men (1-3). Although dietary approaches to lowering blood pressure have been successful for older African Americans, they have not been translated into programs for young African-American men (4-8), yet dietary change is imperative for those at risk in this population (9-12).

In research with African-American teenagers at risk of developing hypertension, school status, athletic team participation, work schedules, and sleep patterns influenced food selection and meal frequency (13,14). These differing contexts not only affect the daily activities of young men but shape their environments and influence health-related actions (15-20). Further, understanding how daily routines influence eating is essential because when behavioral and environmental determinants are integrated into health promotion, results are more likely to be sustained (21,22). Therefore, as part of an effort to develop relevant hypertension prevention programs for young African-American men, we explored the activities, meal patterns, and food choices with a purposive sample of young African-American men who differed in school, work, and athletics participation to create a picture of how eating took place within the context of their daily routines.

METHODS

Study Design and Participants

Participants were 106 self-identified African-American men aged 15 to 22 years living in a midsized metropolitan area of the southeastern United States. The purposive sampling plan included high school and college students and young men who were not in school (ie, nonstudents) (23,24). Within student groups, both sports team members and those not on teams were recruited. The univer-

sity's institutional review board approved the study, and informed consent was obtained from those aged 18 years and older; parental consent and participant assent were obtained for those younger than age 18 years. Participants received a $25 gift card after completing the interview.

Recruitment used a site-based sampling approach (23); sites were composed of 25 organizations, including school health programs, college organizations, athletic departments, churches, barber shops, recreational programs, job training centers, and health fairs. Researchers established relationships with key contacts within each organization. These leaders had trusting relationships with individuals meeting the study criteria, and they facilitated recruitment by informing the research team of the times when potential participants normally attended programs or activities at their sites. The research team conducted interviews at these times or scheduled participants for another date. Communication with participants was maintained via e-mail, cellular telephone calls, and text messages.

Data Collection

The first author or one of three research assistants (RAs) conducted all interviews. The RAs were trained by the first author, who has had extensive experience in conducting qualitative research among African-American adolescents and adults. The interviewers were women and white or African American; RAs were in their 20s and the first author was middle aged. The interviews took place during the school year in unoccupied offices, conference rooms, and library study rooms at or near recruitment sites. Interviews (70 minutes) included a structured meal pattern timeline interview (20 to 25 minutes) and height, weight, and blood pressure were measured. The interview also included a questionnaire of descriptive information, hypertension knowledge and beliefs, health literacy, work status, typical physical activity, and smoking patterns. This article focuses on the descriptive characteristics, daily activities, and meal patterns portion of the interview.

Meal Pattern Timeline Interview

The meal pattern timeline interview was a structured guide (24) developed by the research team that facilitated dialogue between the participant and interviewer about typical weekday activities and eating patterns. It was based on qualitative interviews in which African Americans aged 17 to 20 years described their typical eating patterns and factors influencing their dietary behaviors (13,14). This prior research found that variations in diet and activities between participants were greater on weekdays than on weekends; thus, this investigation focused on weekdays (13). Four physicians with experience treating and conducting research with African-American adolescents and young adults with or at risk for hypertension reviewed the interview guide. Following these reviews, a question about energy drink use was added to the interview. The guide was then piloted with four individuals representing the study population (data not included); feedback was positive and no additional changes were made.

During the meal pattern timeline interview, the interviewer recorded the participants' responses on a horizontal line labeled with the hours of the day. First, wake and sleep times were marked. Second, locations throughout the day and time spent at each were indicated on the line. Then, times and locations of meals were recorded and if the meal was eaten regularly (3 to 5 days/week) or sometimes (1 to 2 days/week). Participants identified eating occasions as either specific meals (breakfast, lunch, and dinner) or snacks. Finally, foods typically eaten at each meal were listed below each eating occasion and the source of each was noted. Vitamin and energy drink use were also noted. At the end of the interview, participants reviewed the timeline with the interviewer and any necessary changes were made (25,26).

Data Analysis

The first author and RAs met weekly to discuss the meal pattern interviews and the patterns of activity and eating that were emerging. Based on these discussions and a review of the first half of the interviews, a database was established in which meal pattern variables, such as the type and timing of daily activities, meal types, timing, locations, food choices, and sources were recorded by an RA. A second RA reviewed all data entry to ensure accuracy.

Using a variable-based approach to the analysis (27), we constructed matrices with columns for each meal pattern variable and rows corresponding to the five participant groups. For each meal pattern variable, these matrices captured either numbers of participants, such as 18 high school students not on an athletic team ate a banana for breakfast, or an average value, such as nonstudents slept an average of 8 hours each night. Foods that were consumed frequently (defined as when one third or more of participants ate an item at a particular meal) by each group were summarized. From the matrices, the first author developed summary profiles describing the daily activities, meal patterns, and food choices of each participant group. RAs reviewed the summaries to ensure that they captured their impressions of how meal patterns varied within the daily context for each group. From these summaries the research team identified key elements that reflected how the daily activities of participants influenced meal patterns and food choices.

This article includes meal pattern timeline results and descriptive information collected, including age, education, living arrangements, work status, smoking habits, parental education (considered an indicator of socioeconomic status), and structured physical activity (ie, time spent in the gym, at an exercise facility, or at sports practice).

RESULTS

Between November 2008 and December 2009, 106 participants were interviewed, including 13 high school students not on athletic teams (HS), 27 high school students on athletic teams (HA), 26 college students not on athletic teams (CS), 16 college students on athletic teams (CA), and 24 nonstudents (NS). The Table provides descriptive information of participants. Most HS were in the 12th grade, and