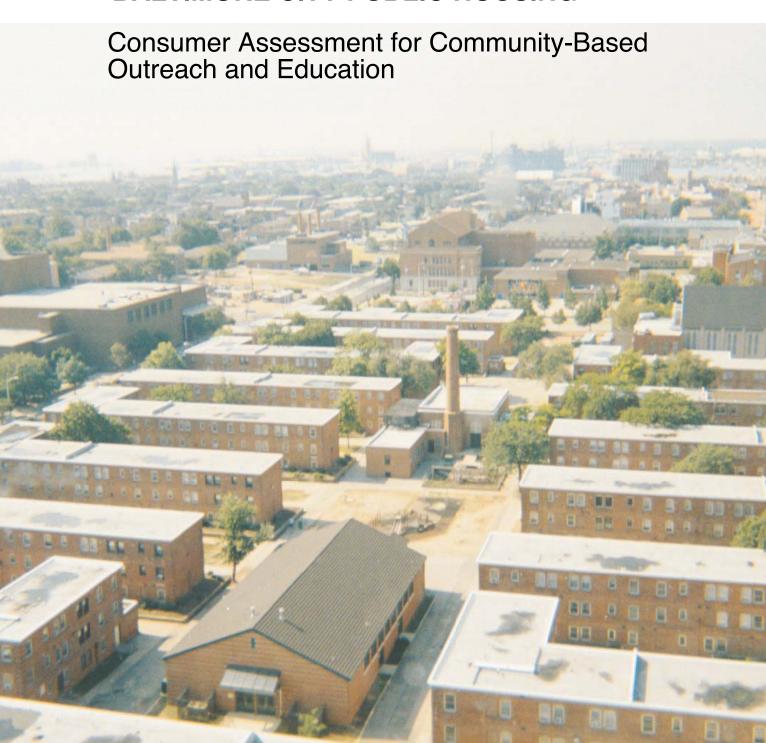
CARDIOVASCULAR HEALTH SMALL GROUP DISCUSSION IN BALTIMORE CITY PUBLIC HOUSING





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I. EXECUTIVE SUMMARY

Background

Nationwide, as well as within the city of Baltimore, a number of agencies are now partnering with housing authorities to address the multiplicity of health risks that may characterize the residents of public housing communities. National data reveal that approximately one-quarter of all public housing residents live in low-income areas, and more than 40 percent of housing authority residents live in majority African American neighborhoods. The average income for the 50,000 residents in Baltimore City public housing is \$7,000 per year. Currently, the National Heart, Lung, and Blood Institute (NHLBI) is collaborating with the Housing Authority of Baltimore City (HABC) in an effort to decrease cardiovascular disease (CVD)-related illness and death in these exceptionally impoverished public housing communities.

Purpose

Before designing and implementing a public housing public health program, consumer assessments are necessary to create effective heart health programs by promoting knowledge, attitudes, and behaviors among public housing residents. NHLBI and HABC conducted a consumer assessment in July and August 2002 to assess the current levels of cardiovascular health (CVH) awareness, knowledge, and behaviors among public housing residents in Baltimore City. This consumer assessment project was an outcome of the formation and planning activities of the Baltimore City Cardiovascular Health Partnership (BCCHP), a collaborative partnership to address CVH in Baltimore City. The partnership is comprised of a core group of health and housing institutions in Baltimore City including: (1) HABC; (2) Morgan State University Public Health Program; (3) Baltimore Field Office of the U.S. Department of Housing and Urban Development; and (4) the Baltimore City Department of Recreation and Parks.

Methods

NHLBI and HABC used a small group discussion assessment approach. Each session consisted of nine or fewer participants, a lead facilitator, resident cofacilitators, graduate student notetakers, an NHLBI observer, and occasionally additional resident and resident leader observers. The topic areas of inquiry were:

- What are the current levels of CVH knowledge among public housing residents?
- To what degree are the current levels of knowledge reflected in the health practices and behaviors of public housing residents?
- Are CVH knowledge levels, practices, and behaviors affected by public housing as a community and social context for CVH?
- What types of educational products and behavioral skills and techniques can be used to effect CVH-related behavioral changes amongst public housing residents?

² ibid.

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¹ HUD User. The Location and Racial Composition of Public Housing in the United States (December 1994, 91 p.).

In order to gain insights regarding the areas listed above from public housing demographic subgroups, males and females ages 15 older were recruited and assigned to age and gender-specific sessions.

Findings

Overview

Public housing residents had a preexisting knowledge and awareness of heart healthy lifestyles and CVD risk factors. The comments made during the small group discussions suggest that programs targeting heart healthy lifestyles for the public housing community population must address the various stages of readiness to adopt heart healthy behavior. These stages are diverse and are a function of an individual's readiness and needs, as opposed to the demographic population segment to which one belongs. However, some common themes do exist that are functions of the age and gender groups that mitigate the ability to practice and maintain heart health-promoting lifestyles once a person has made this decision. One cardiovascular risk behavior, cigarette smoking, is pervasive among the demographic groups probed (excluding teen females) and accordingly smoking cessation is a critical element of any community outreach strategy that would be developed. Stress, from environmental and personal stimuli, is also cited by participants as a major barrier to improving health, including young adults ages 15–18. In fact, many participants cite stress as a primary risk factor for heart disease and a barrier to heart disease prevention.

Diet and Physical Activity

Heart healthy dietary behaviors are not as consistent across age and gender groups nor within a homogenous group (e.g., females ages 19–34). Many discussants expressed readiness to adopt and maintain heart healthy diets, as shown by some participants' requests for nutrition education classes. However, there were as many discussants with an opposing practice or attitude regarding heart healthy diets who were resistant to change or to consistently adopting heart healthy dietary recommendations.

Participants' current physical activity behaviors and behavior change readiness was dependent upon demographic group(s). Although the majority of participants, irrespective of age and gender status, cited walking as their main means of exercise, males ages 15–34 cited sports, exercise programs, and the requirements of their occupation as additional sources of physical activity. Females ages 19 and older cited child care and housework.

Based on these findings, there are some content emphasis areas, such as smoking and stress in particular. With regard to other heart health topics, including managing CVD clinical risk factors and dietary and physical activity behaviors, heart health educational products should meet the individual's needs and be specific to his or her readiness level.

Heart Health Education Products

Participants recommended that products should be presented "straight" and "to-the-point" with hard facts to substantiate claims and recommendations. Print products should clearly and plainly identify the health topic or behavior, as this was the first point of interest among participants in selecting sample materials. The second point of interest is the artistry. A majority of participants preferred photos of people compared to line art, artist illustrations, or cartoons. Participants ages 15–18 however, preferred mixed medium graphics, including cartoons, photos of youth, 3-D art, and real-life

anatomical representations of the body and heart. These participants also preferred products that were specifically geared to the youth audience.

Participants in adult sessions (ages 19 and above) preferred intergenerational representation in materials. The majority of all participants identified that effective daily reminders were in a format that can be placed on refrigerators, walls, mirrors, and locations in the home that can be hung at eye level. They recommended a daily heart health reminder and messages in calendar format, allowing one to chart progress daily. Participants were also interested in products that demonstrate what they should do to be heart healthy. They preferred products with comprehensive content such as a single booklet versus a series. However, because participants are interested in products that meet their health needs, print products should allow for easy navigation of sections/topics.

Themes that motivate participants included the importance of family and children, the loss of a loved one due to heart disease, and for some, their own personal desire to improve their health and life. Females ages 19 and above mentioned their belief in God, prayer, and gospel music as sources of inspiration to get through hard days. Because some participants demonstrated a low literacy level, products should meet the various literacy and education levels in public housing.

Indepth findings and recommendations are made in the full report that follows.

II. INTRODUCTION

The National Heart, Lung, and Blood Institutes' (NHLBI) cardiovascular community health outreach and education efforts focus on tailored strategies to improve cardiovascular health in diverse communities. This specific effort focuses on the African American population, a group at high risk for cardiovascular disease (CVD). The activities are driven by the national health agenda's, Healthy People 2010, overarching goals of eliminating health disparities and increasing the quality and years of healthy life of all Americans, and in particular the objectives of heart disease and stroke. In 2000, NHLBI expanded activities to develop local activities in African American communities. Baltimore City was selected as a demonstration site. The target audience was made more specific and local to reach African American residents of the public housing community.

CVD in Baltimore City

African Americans in the Baltimore metropolitan area suffer disproportionately from coronary heart disease (CHD), stroke mortality, and associated risk factors. Based on 1996–1998 data, the age-adjusted death rate for CHD was 43 percent higher for African Americans living in Baltimore City than the national rate; the rate of stroke death was 37 percent higher than the national rate. This translates into more than 3,000 Baltimore City African Americans who died of CHD and stroke during this period. Furthermore, CHD and stroke death rates for Baltimore African American males were 81 percent and 53 percent higher than the national rates, respectively.

For cardiovascular health (CVH) messages to not only reach but also impact African Americans, the delivery mechanisms and messages must be contextually appropriate and meet specific needs of the targeted population. In collaboration with the Baltimore City Cardiovascular Health Partnership (BCCHP), the African American public housing community in Baltimore City was identified as a site for heart health activities. In addition to the CVD data in Baltimore for African Americans described above, public housing residents in Baltimore City, in particular, are a unique community.

Public Housing Communities in Baltimore City

The Housing Authority of Baltimore City (HABC), with more than 40 public housing developments is among the largest in the nation based on size. Not only are public housing communities in Baltimore City many in number, they also, as a collective, comprise a variegated community with a population that exceeds 50,000 persons.³ Geographically, the developments are spread throughout Baltimore City and can constitute the size of many of America's very small towns. Approximately 92 percent of the over 50,000 public housing residents in Baltimore City are African American. As is true nationwide, 14 percent are persons under the age of 18.4 Another 14 percent of the residents are seniors. Contrary to the public's image of public housing developments as primarily tenanted by single women and children, 57 percent of households in Baltimore City's public housing developments are married couples with children.⁵ Nevertheless.

⁵ ibid.

 $^{^{\}rm 3}$ Administrative data provided by the Housing Authority of Baltimore City. $^{\rm 4}$ ibid.

these communities are some of the poorest in the city—the mean annual average household income is \$7,000 relative to the \$17,000 Federally-defined poverty threshold for a family of four. While approximately 16 percent of the housing units include an employed adult, 65 percent of the residents are dependent upon publicly provided support as a protection against absolute need and deprivation. There is a waiting list of approximately 23,000 families for Baltimore public housing. Such data suggest that public housing residents may be at even greater risk of CVD than other residents of Baltimore City.

Baltimore City Cardiovascular Health Partnership (BCCHP)

NHLBI uses a community-based approach of collaborative action and partnering with existing institutions in local communities. To develop local activities targeted to African Americans, NHLBI worked with a group of partners that formed BCCHP. The institutions represented in the partnership collectively (1) serve the African American community, in particular public housing residents; (2) have influence in the community and existing relationships with other key formal and informal support networks; (3) are committed to improving the CVH of African Americans; and 4) have infrastructual capacity to execute public health programs. The core partner institutions are the Morgan State University Public Health Program, the Baltimore Field Office of the U.S. Department of Housing and Urban Development, the Housing Authority of Baltimore City (HABC), and the Baltimore City Department of Recreation and Parks.

Building a Baltimore CVH Network: A Strategy Development Workshop

To increase BCCHP's network of partners to support an initiative for CVH in Baltimore City, as well as to glean possible strategies that would be effective in public housing developments, NHLBI cosponsored with the partnership in Baltimore City a workshop on September 24, 2001. Over 70 representatives from health and social services organizations, clergy, and public housing residents and resident leaders attended the full-day workshop. Participants were divided into five work group sessions to provide their knowledge, experience, and ideas on public education and media, the public housing community, training community health workers, involving public health students in CVH outreach activities, and sustaining collaborative partnerships for CVH. The result was a programming roadmap for activities in public housing, and at its core educational programming, activities, and outreach that can serve the diverse demographic and family compositions which exist in public housing.

CVH Discussions in Public Housing

Purpose

The public housing setting provides solid opportunities for impacting the cardiovascular health lifestyles of residents by reaching them where they live—making heart health education relevant, accessible, and convenient. To support activities recommended at the Baltimore strategy development workshop for CVH outreach and education in public housing, public education materials and tools are needed. To ensure that these proposed user-friendly and practical materials address CVH knowledge, perceptions, and behaviors of this audience, NHLBI initiated an information gathering activity to aid in the development of demographically (age, gender, race, etc.), culturally, and contextually appropriate CVH public education and outreach materials for use by African American audiences, especially those residing in public housing developments. This

report summarizes the methods used to collect this information, provides an analysis of residents' responses to the areas of inquiry, and makes recommendations based on the analysis for CVH outreach and education, including products and tools targeted to African American public housing residents. The specific areas of inquiry are listed in Figure 1.

Figure 1. Areas of Inquiry

- CVH knowledge and practices among public housing residents
- Defined barriers and motivators to the adoption of heart healthy behaviors and practices
- The social and environmental context of a public housing community that can impact CVH promoting activities
- Recommendations utilizing the findings from the discussions to develop concepts for designing products and processes that can be used to effect measurable changes in heart healthy behaviors and practices among public housing residents

Collaborators

NHLBI collaborated with HABC to implement this activity. Health Care Dynamics, International (HCDI), a Maryland-based consulting firm that specializes in community health issues of underserved populations, facilitated discussion sessions, oversaw recruitment and retention of resident participants, analyzed collected data, and developed original findings manuscripts.

In addition to HABC staff and consultants, the HABC-elected public housing resident leaders were instrumental in the implementation of the effort. They assisted in identifying a team of resident recruiters who screened a nonprobability sample of residents to participate in the indepth discussions, as well as recruitment strategies (see Recruitment Process page 9).

III. METHODOLOGY

A qualitative consumer assessment strategy was used to direct the CVH content and product preference considerations for educational products targeting African American public housing residents (Figure 2 Qualitative Consumer Assessment Topics). The consumer assessment utilized a small group discussion format. Each group consisted of approximately 5-9 discussion participants, a discussion group facilitator, an NHLBI observer, notetakers from Morgan State University Public Health Program, and approximately 1-2 cofacilitators. The cofacilitators were members of the resident recruitment team and assisted participants in completing the participant intake form and other administrative materials, and distributing and collecting documents. In order to create an open environment conducive to candid discussions, sessions were conducted in a small room or area of a large room. Each small group discussion was guided by a predeveloped discussion guide. Participant groups were segmented by age and gender and included persons ranging in ages 15–74. A proportion of sessions were exclusively comprised of participants with self-identified CVD risk factors (Figure 4). The sessions lasted approximately 2 hours. This methodology was applied in order to gain insight into several formative research question areas.

Figure 2. Qualitative Consumer Assessment Topics

- What are the current levels of CVH knowledge among public housing residents?
- To what degree are the current levels of knowledge reflected in the health practices and behaviors of public housing residents?
- Are CVH levels of knowledge, practices, and behaviors affected by public housing as a community and social context for CVH?
- What types of educational products and behavioral skills and techniques can be used to effect CVH-related behavioral changes amongst public housing residents?

The following list of guidelines were followed in planning, implementing, and managing the small group discussions:

Data Collection through Small Group Discussion

- A small group discussion consisted of five to nine persons.
- Several resident leaders elected to participate in the sessions as observers only.
 (Observers were not allowed to participate in the discussion.)
- Residents who joined the group after the threshold of nine was reached were allowed to remain as observers only.
- Non-African Americans were allowed to participate as observers only.
- The small groups were demographically stratified so that data collected on knowledge, attitudes, and beliefs would be reflective of each subgroup population within the public housing community.
- Trained facilitators were asked to guide the discussions and exhibit context neutrality in the facilitative process.
- Structured discussion guides provided by NHLBI were pretested with a group of residents. The content was adapted to address issues identified by residents. Fourteen discussion guides were developed. Ten percent of the questions on each guide were developed to be unique and targeted age, gender, and risk factor specific sessions.

- Graduate students in the public health program from Morgan State University were trained as notetakers.
- Each session was audiotaped.
- Participants were informed about their rights to confidentiality and signed an informed consent form.

The Facilitators

- Minimized involvement
- Avoided judgments
- Captured comments exactly as stated
- Followed the provided outline
- Remained flexible
- Sought to identify strong agreement on individual points
- Noted the instances of extreme responses and reactions as revealed verbally and/or through observation of nonverbal behavior. For example, loud noises of agreement or disagreement, vigorous head shaking or nodding, and similar behaviors are noted. Facial expressions indicative of intense agreement or disagreement were also noted and recorded by notetakers.
- Managed the group by keeping them focused
- Included all members of the group in each discussion
- Ensured accuracy of the write-ups

Discussion Session Group Age/Gender Segmentation and Recruitment Criteria

The small group discussions were designed to reflect the age and gender demographics of Baltimore City public housing residents. In addition, the segmentation strategy was based on the demographics of resident participants in HABC services and programs, including youth development centers, family support centers, and elderly programs. Figure 3 outlines the segmentation criteria for the resident-only small group discussions.

Figure 3. Segmentation Criteria

- Females ages 15–18
- Females ages 19–34 (2 sessions)
- Females ages 35–54 with CVD risk factors
- Females ages 35–54 with no CVD risk factors*
- Females ages 55 and over

- Males ages 15–18
- Males ages 19–34 (2 sessions)
- Males ages 35–54 with CVD risk factors
- Males ages 35–54 with no CVD risk factors*
- Males ages 55 and over

^{*}Because of a high prevalence of cigarette smoking, participants who smoked cigarettes were not excluded from this session.

Residents under age 15 were not included in this consumer assessment effort. The rationale for this cut-off is that adolescents between the ages of 15 and 18 and adults over age 18 make personal as well as family decisions with regard to CVH promoting behaviors and impact the behaviors of younger public housing residents (including food preparation and choice, extracurricular physical activity, and health care seeking behaviors). Therefore, health education products targeting public housing residents 15 years and older can effect behaviors changes of younger residents. The recruitment criteria is included in Appendix A of this report.

Recruitment Process

In order to recruit age segments of the public housing population, a recruitment process was initiated. In June 2002, an introductory meeting was held with resident leaders. This meeting was used to explain the origins of the effort, the goals of the project, and the role and level of involvement of resident leaders. Resident leaders were informed that the methodology for data collection involved dividing the Baltimore City into four quadrants—North, South, East, and West. Resident leaders provided qualitative guidance and input which led to the selection of specific public housing developments.

Resident participation in small group discussions was incentive-based and residents who attended a session received \$15, an amount consistent with HABC's stipend policy to cover residents' transportation and time to attend sponsored activities. While print materials, monetary incentives, home visits, and other methods were used in the recruitment process, public housing residents were reluctant to attend meetings outside of their development. One resident during a recruitment effort said, "We don't go over there!" In addition to residents' hesitation to travel to unfamiliar parts of the city, confirmation to attend did not guarantee resident participation. Resident recruiters identified several persons who stated they would be willing to attend, however failed to appear for the assigned session, even after several confirmations and followup contacts.

One scheduled session for women participants ages 35–54 was cancelled as a result of no-shows. In response, the project team implemented new recruitment strategies, including requesting participation from the area resident leader to encourage participation, personal visits to participants' homes, increasing the number of persons invited to attend a session (10–15), offering bus tokens as an incentive, and followup calls the day before and day of a session. Through the persistent promotion and recruitment activities of project staff and public housing resident leaders, including directly contacting residents, all sessions, including the males ages 19–34 sessions, which originally proved difficult in scheduling, were conducted successfully.

Use of Resident Recruiters

Resident leaders were offered the option of becoming recruiters themselves and/or nominating persons from their developments. Several resident leaders served as recruiters as well as submitted names of potential resident recruiters. A description of the duties and responsibilities of the recruiters was provided. At least 16 resident recruiters were hired to assist with recruitment activities. An additional 10 recruiters were acquired to assist with recruitment of residents and distribution of promotional materials at town hall meetings.

Resident recruiters received training, including addressing the issue of bias that may result from selecting participants who were family and friends of recruiters. The training was 2 hours in duration to provide recruiters with information on the type of selection process that was needed in order to maintain the integrity of the effort. Several recruiters called the outreach team prior to recruiter training, to inquire about when activities would begin and to inform project staff of participants they had identified from amongst their family members and friends. These requests reflected the level of enthusiasm of some recruiters to begin activities. The training covered each key area listed:

- The purpose of the project
- Systematic versus random error. For example, the recruitment of friends and family could introduce systematic errors since their view, values, and attitudes are more likely to be similar.
- Approaching residents for recruitment purposes
- Effective recruitment using verbal and nonverbal communication
- Using role-play
- Documentation of the recruitment process
- Timekeeping, reporting, and related areas

The agenda for the recruiter training is attached in the Appendix B of this report.

The resident recruitment team devoted nearly 300 hours to the recruitment process. Posters were placed at strategic locations in the community, fliers were distributed, and letters were mailed to key community leaders. Telephone contact and door-to-door canvassing was done, and bus tokens were distributed as incentives. Notable and respected resident leaders were recruited to contact key persons in the community to participate in the process.

Site Selection

All sessions were conducted in HABC developments, usually in a community room or auditorium. At each discussion site, the discussion rooms were prepared to encourage interactive and open small group discussions, including arranging furniture for small group discussions, and adjusting temperatures of the rooms. Discussion sites were selected based upon HABC's experience with locations that had previously been used for public housing events and activities. Sites were also selected based upon residents' familiarity with the location and comfort.

Discussion Questions

Improving an individual's CVH may require behavior modifications ranging from diet and nutrition to physical activity practices. In addition, it may require raising individuals' awareness about their risk and addressing gaps in their knowledge about CVD. NHLBI developed discussion questions to assess these areas.

To ensure that educational efforts are reflective of the target population, including their current knowledge, behaviors, and attitudes toward CVH, NHLBI conducts consumer assessment activities with the audience of interest. In this regard, the purpose of the small group discussions was to learn from public housing residents their current CVH knowledge, their current behaviors that either promote or reduce their CVH, and their preferences for education products and activities that may help to improve CVH lifestyles in public housing communities. The instruments developed for this exercise were based

upon and adapted from similar activities conducted by NHLBI as well as other U.S. Department of Health and Human Services (DHHS) agencies. Questions were developed on the following topics:

- Life priorities and goals among public housing residents
- Current health status, behaviors, and lifestyles
- Heart health knowledge
- Barriers and motivators to science-based heart health promoting behaviors
- Preferences for CVH educational products

The order of the discussion guide moved from the general area of life priorities to specific reactions to sample CVH educational materials and product preferences. The life priorities in public housing questions were adapted from a market research activity—Promoting Healthy Diets and Active Lifestyles to Lower SES Adults—conducted by the DHHS Office of Disease Prevention and Health Promotion (ODPHP). This series of questions identified general life motivations among public housing residents so that expectations and rewards of improved CVH through recommended changes in behavior could be written in a relevant context.

Current health status/behaviors and lifestyles questions assessed participants' perceptions about their own health, including their current health concerns and conditions and how they manage, control, or treat these conditions. The discussion questions emphasized current lifestyles exhibited by participants with inquiries about everyday diet and nutrition, physical and leisure time activity, health information, and health care seeking behaviors. The heart health knowledge questions assessed participants' knowledge about heart disease including causation, signs and symptoms of heart disease acute events (heart attack and stroke), and their knowledge of prevention skills and risk factors of heart disease. The questions pertaining to barriers and motivators to heart health behaviors assessed reactions from participants on behavioral recommendations for improved heart health. In particular, inquiries were made about meal selection (e.g., lowfat diets) and preparation (e.g., reduction of fried food consumption) behaviors, controlling high blood pressure, reducing high blood cholesterol, smoking cessation, and maintaining a healthy weight.

The final set of questions reviewed CVH educational products to assess participants' preferences for CVH-related educational products. Inquiries about the types of products that could serve as daily reminders/facilitators for incorporating CVH behaviors in their lives, as well as recommendations for an African American targeted brand name for heart health promotion were discussed. In addition, participants reviewed existing NHLBI CVH products and other materials to select those materials, that they felt were the most and least effective. A cursory examination of reading and comprehension levels were conducted during the discussions using a product developed at the eighth grade reading level.

The core discussion guide contained 37 items, including supplemental or probing followup questions. Using the core discussion guide as a framework, 12 unique discussion guides were developed for each age/gender session conducted, with at least 10 percent of the questions being unique. For example, a question specific to the ages 55 and older session asked, "As a senior, what do you feel is the hardest part of trying to stay healthy?" A unique question directed towards participants ages 15-18 asked, "There are a lot of advertisements about the health risks of young people. Some examples include smoking and drug use. What do you like or dislike about them?" The

goal in asking age/gender specific questions was to address special needs and issues of these population segments within a majority African American public housing community.

This consumer assessment project also held two sessions with key informants that serve the public housing resident community, HABC staff, and public housing resident leaders. The purpose of these two sessions was to hear these groups' perspectives on the CVH and lifestyles of residents and to provide recommendations on the types of programs and education material that might aid residents as well as service providers in promoting CVH lifestyles in public housing communities. The resident-only core discussion guide and session specific supplemental question, and the HABC staff and Resident Leaders discussion guides are listed in the appendices of this report.

This consumer assessment exercise was developed to thus:

- Link CVH to the social composition and environmental context of public housing communities
- Explore residents' behavioral "realities" and stages of change for heart health
- Identify individual as well as group/family strategies for implementing heart health lifestyles and skills
- Recommend nutrition, physical activity, and overall CVD prevention actions that are relevant and applicable in a public housing community setting

In addition to the discussion session, each participant completed a participant information form. This form contained 19 items, including demographic questions and a truncated version of the topical areas described above. The intake form was administered before the small group discussion began to assess whether differences existed between group and individual responses. The participant intake form is included in Appendix F of this report.

Discussion Guide Pretest Observations and Resulting Revisions

A draft of the core discussion guide was presented to a sample of public housing residents, including resident leaders. The results from the pretest were used to further refine the discussion questions before full implementation of the project. During the pretest, the participants were presented the participant intake form and the discussion guide. The participants felt that the income questions were private information and that many residents would not wish to reveal this information. Based upon this recommendation, the questions related to income and public assistance were deleted from the form. In some cases, participants in the pretest found certain questions to be intrusive. For example, one pretest participant commented that the content of one's meal was private information. The resident leaders were extremely protective of residents and sought to serve as a collective voice regarding the needs, concerns, and privacy of the public housing resident participants.

Sessions

A total of 14 small group discussions were held—12 resident only sessions, 1 resident leader session, and 1 HABC staff session. Figure 4 summarizes the session criteria, number of participants, dates, and locations of the sessions.

Figure 4: Session Criteria, Number of Participants, Date and Location			
Session Criteria	Actual Number of Participants	Date	Location
HABC Staff	8 participants	7/15/02	Monument East Apartments
Resident Leader	10 participants	7/15/02	Monument East Apartments
Males ages 55+	8 participants	8/12/02	Pleasantview Gardens
Males ages 35–54 (1)	9 participants	8/13/02	Monument East Apartments
Males ages 35–54 (2)	7 participants	7/30/02	McCulloh Homes
Males ages 19–34 (1)	8 participants	08/23/02	O'Donnell Heights
Males ages 19–34 (2)	8 participants	08/23/02	O'Donnell Heights
Males ages 15–18	9 participants	08/21/02	Claremont
Females ages 55+	5 participants	08/05/02	Pleasantview Gardens
Females ages 35–54 (1)	6 participants	08/13/02	Monument East Apartments
Females ages 35–54 (2)	8 participants	07/29/02	Douglass Homes
Females ages 19–34 (1)	6 participants	08/19/02	Pleasantview Gardens
Females ages 19-34 (2)	8 participants	08/07/02	Douglass Homes
Females ages 15-18	5 participants	08/21/02	Claremont

Limitations

This project included a number of implementation challenges. As mentioned, males ages 19–34 were not as interested as other public housing demographic categories in participating in the effort. This lack of interest is evident by the disproportionate number of males in this age group that did not allow recruiters to complete their presentation about the project. Even though the majority of residents in general supported the project, they too displayed a suspicion regarding the project. Remarks made included:

- "Every time the government is concerned about us, it is actually for their benefit."
- "Why haven't I seen any good come of . . .?"
- "The government must be trying to meet some numbers quota."
- "They don't send people down here unless they want something."

In spite of an alteration in recruitment protocol to increase the possible number of participants for each session, many residents still did not show up for their session, even though they had confirmed. Only one session required rescheduling because previously confirmed appointments were cancelled. Because of the reluctance of participants to leave their immediate development community, it was difficult to ensure that each session had representation from the four Baltimore City public housing geographic quadrants, even when transportation costs and incentives were provided. This limitation was addressed by decreasing the number of participants required from each quadrant.

Finally, because the small group discussions format is a qualitative research tool, the findings of this report are not intended to represent the knowledge, perceptions, opinions, beliefs, and behaviors among all residents of public housing locally or nationally.

IV. DEMOGRAPHIC INFORMATION

Age

The small group discussions consisted of residents ranging in ages from 15 to 74. The following is the age distribution of participants across all resident small group discussions.

Figure 5. Small Group Discussion Participants by Age and Gender Distribution*			
Demographic	Number	Percent	
Total	87	100%	
15–18	14	16%	
19–34	30	35%	
35–54	30	35%	
55 +	13	15%	
Male	49	56%	
15–18	9	10%	
19–34	16	18%	
35–54	16	18%	
55 +	8	9%	
Female	38	44%	
15–18	5	6%	
19–34	14	16%	
35–54	14	16%	
55 +	5	6%	

^{*}Because of rounding, percentages may not add to 100 percent.

Figure 6. Participants by Session Criteria			
Session Criteria	Expected Participants	Actual Participants	
Male			
15–18	9	9	
19-34 (session 1)	15	8	
19-34 (session 2)	8	8	
35-54 (session 1)	9	9	
35–54 (session 2)	7	7	
55+	22	8	
Female			
15–18	7	5	
19-34 (session 1)	25	6	
19-34 (session 2)	6	8	
35–54 (session 1)	10	8	
35-54 (session 2)	7	6	
55+	5	5	

Gender

The implementation strategy was designed to have equal numbers of male and female participants in the small group discussions. There were a total of 87 participants. The actual distribution of male and female participants was 38 females (44 percent) and 49 males (56 percent).

Distribution of Participants by Location of Public Housing Development

In order to gather information from a cross section of public housing residents and to ensure that perspectives from a variety of residents were captured in the data collection, the small group discussions recruited residents from all geographic areas of Baltimore's public housing community. Using a public housing development geographic spatial plan that was devised based on the recommendations of resident leaders, each public housing development was assigned to either the East, West, North, or South region. Because difficulties were encountered in acquiring an even distribution of residents from each quadrant, the strategy was changed to include at least one participant from each

quadrant. This change in policy reflected a psychocultural barrier mentioned earlier—residents were unaccustomed to traveling beyond their quadrant and were generally unwilling to travel outside their immediate and or familiar community. However, efforts were made for each session to have at least one participant from each of the four quadrants. Appendix G is a map of the public housing developments of Baltimore City.

Income in Baltimore City Public Housing

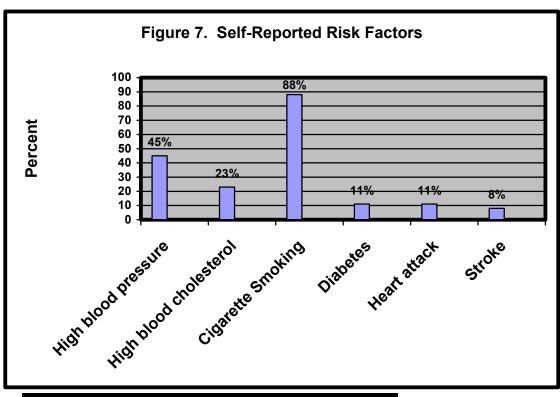
As discussed earlier in this report, no data were collected on income as a result of pretest recommendations. (See section titled "Discussion Guide Pre-Test Observations and Resulting Revision" for more information.) However, HABC administrative data indicate that the mean annual income of public housing residents is \$7,000 per household.

Education Attainment

Approximately 75 percent of the participants reported that they did not finish high school. Only one participant indicated education beyond college had been completed.

Presence of CVD Risk Factors

Using data from the participant intake form collected for all sessions, self-identified risk factors have been provided in figure 7.



Risk Factor	Number of Participants	Percent
High blood pressure	39	45%
High blood cholesterol	20	23%
Cigarette smoking	78	88%
Diabetes	10	11%
Had heart attack	10	11%
Had stroke	7	8%

V. KEY INFORMANTS: PERSPECTIVES

Resident leaders and public housing staff are charged with providing services and programs that benefit public housing residents. NHLBI held two discussion sessions, one with public housing staff, and another with public housing resident leaders to hear their perspectives on the CVH and lifestyles of public housing residents. Resident leaders and staff provided recommendations on the types of programs, materials, and service providers that might aid residents in promoting CVH lifestyles in public housing communities.

Current Health Status and Health Behaviors of Residents

Resident leaders and HABC staff members reported on the current health status and the health behaviors of public housing residents. These participants stated that a number of public housing residents have already developed health problems. In particular they cited diabetes, high cholesterol, asthma, and other respiratory problems. They stated that high blood pressure and stroke were especially affecting public housing residents. They stressed that residents will become concerned about health only after being diagnosed with a condition, and that preventive health is not a high priority. After diagnosis, some residents may not comply with physician recommendations, including taking medications, until an acute event or invasive treatment is needed (e.g., dialysis). The responses from residents during the small group discussions revealed that some residents are aware of the need to adopt alternative behaviors, and that they are making attempts through lifestyle and physician-prescribed medications to address these conditions.

Residents' Management of Heart Health Risk Factors

Resident leaders exhibited a greater knowledge about residents' ability to manage heart disease risk factors than HABC staff members and were aware of the barriers to residents' ability to exercise, consume reduced fat diets and smaller portions, decrease stress, and other heart health strategies. Public housing staff participants discussed residents' noncompliance with medication regimens as a barrier to improved health among residents. One participant went on to describe that residents make health care decisions based upon whether they perceive their health as worsening; if not, they do not comply.

Key informants also described that residents share prescription medications with one another. However, resident leaders voiced concerns about the barriers residents face when attempting to comply with recommended health-promoting lifestyles (e.g., healthy diets and food selections) and medicine regimens due to their own financial struggles. Some even stated that they themselves have experienced these constraints. Their comments revealed that noncompliance by residents in some cases is not an indication of lack of interest or willingness to adopt health promoting behaviors, but due to barriers in executing these behaviors.

Resident leaders and HABC staff alike stated concern about the disparate access to health care among public housing residents. They discussed that minors and seniors have sources of free health care and health insurance but residents ages 18–55 have limited or no access to these same health care opportunities. Resident leaders also

discussed the lack of health promotion and social programs geared towards residents who are neither elderly nor a minor, except in the case of substance abuse programs, for which health programs and services are more available. The observations by these discussants revealed that health programming in general, and heart health promotion specifically, are sorely needed for particular age segments of the public housing population because they are currently nonexistent.

Diet and Physical Activity of Public Housing Residents

Resident leaders and HABC staff cited limited income as the primary barrier to public housing residents' ability to purchase and consume heart healthy foods. They also stated that residents' dietary decisions are based on taste preferences as well as what food is available in local stores. They remarked that local stores provide little or no fresh fruits and vegetables. They also discussed that residents usually eat two meals a day. The first meal is consumed midmorning, another in the evening, in addition to snacks between meals. They mentioned that residents' lifestyles determine these eating patterns. Some residents, especially younger females, do not have cooking skills and therefore do not prepare foods at home. Cooking was described by a participant as one of the few activities that seniors can still perform. A participant went on to propose using the preferred meals and dishes of residents but "retrain" residents to prepare these meals for heart health. Resident leaders mentioned their personal commitment to adequately distribute donated foods provided by area grocery chains fairly among all public housing residents to address the nutritional deficiency issues in public housing.

Walking is the predominate method of physical activity among residents. However, a fear of crime and violence limits this activity, especially after daylight. Sponsored exercise programs were highly recommended by resident leaders as a way to encourage and foster physical activity. They noted that seniors currently participate in aquatic programs and that youth residents have additional physical activity opportunities by participating in formalized programs such as youth development centers and Police Athletic League.

Experience with Residents' Participation in Housing Authority of Baltimore City Sponsored Programs

The resident leaders and HABC staff felt that public housing residents would actively participate in well-publicized, regular programs that were provided onsite. They emphasized the use of incentives, including offering food at activities, giveaways, and trinkets. They urged that without these program components, resident participation will be low. Resident leaders were particularly concerned about sustainability of programs. One participant reflected that programs were initiated, but because of limited human or financial resources, they were discontinued. Low literacy programs that address the challenge of working with residents that do not read or write, were also recommended as an essential element of heart health programs. Health programs for seniors were strongly recommended. Resident leaders believed that food consumed by the senior residents was not nutritious. During the small group discussions with senior females, programs such as Meals on Wheels were not mentioned and the elderly residents themselves indicated that they do not eat balanced meals.

Recommendations for Materials/Activities

Recommendations were made that activities such as providing transportation to and from grocery stores to purchase fresh fruits and vegetables and providing transportation to pick up prescriptions could improve residents' ability to engage in recommended health behaviors including diet and prescription medication compliance. Cooking demonstration classes for men, women, and young adults that include information on how to cook heart healthy foods and shop within low budgets were recommended. Consistent, onsite health education and wellness programs for all age groups were also suggested. A public health nurse that would visit public housing areas was another activity mentioned during these sessions. Participants also recommended that heart health materials and program interventions must be designed to meet basic needs on a continuous basis and address low literacy levels. They mentioned that small group activities would be especially effective. Resident leaders in particular felt that educational activities should first train resident leaders, so that they (resident leaders) could then diffuse this information to the rest of the public housing community. Finally, participants of these two key informant groups suggested that different types of CVH materials be developed to meet the special needs of the various target audiences seniors, adult males and females ages 18-55, and teens.

RESIDENT-ONLY SESSIONS VI. CURRENT LIFESTYLES AND HEALTH BEHAVIORS

Personal Health Perception

Small group discussion participants were queried about their personal perceptions of their health. Their responses revealed low motivation to implement behavioral changes. Several residents defined "being healthy" very narrowly while others used a broader definition. For example, one resident from the men ages 35–54 small group discussion stated that, healthy refers to "...physically fit in body, mind, and soul." Many participants felt that they were healthy based on the fact that they were able to get up in the morning and begin their daily activities (a narrow definition). Many respondents were cognizant of the fact that their health could be improved if they changed habits, such as smoking and alcohol consumption cessation. However, many of the small group discussion participants also stated a lack of determination or will to accomplish these behaviors. Others felt that although they were able to complete their daily living activities, they were not healthy as measured by their lifestyle and/or habits. Such findings suggest prevention and outreach programs must be designed to motivate participants to adopt new health behaviors in addition to educating residents about the elements of heart healthy lifestyles.

Health/Diseases of Concern

The health concern mentioned most frequently across age/gender groups was cancer, especially in female sessions. This concern was based upon having a family history of cancer. Additional primary health concerns varied based upon the gender and age demographics of participants. In the ages 55 and above session, the greatest concern appeared to be diabetes and hypertension/high blood pressure. Senior women, in particular, mentioned managing pain ("being free of pain") as a major health concern. In addition to cancer and diabetes, asthma was another health concern cited by females ages 35–54. In the CVD risk factors session of males ages 35–54, obtaining medications and weight control were mentioned as concerns. Males 19–34 mentioned diseases that run in the family, like diabetes, and smoking-related diseases—heart attack and cancer. Males ages 15–18 did not appear to be concerned about cardiovascular or other diseases.

Eating/Diet and Nutrition

Cooking and Food Preparation Responsibility

Diet and nutrition are critical elements in the journey towards heart healthy behavior. Thus, those persons who are responsible for food preparation are gatekeepers in this area. The small group discussions revealed that adult participants usually took primary responsibility for preparing food and/or shared this responsibility with other household members. In particular, male discussants stated that they took primary responsibility for shopping and meal preparation. Further probing revealed that even in cases in which a female was present in the home, the men tended to cook in order to ensure that the food satisfied their individual tastes. Men with CVD risk factors and/or who had suffered a CVD event stated that they cautiously followed physician recommended diets and food preparation, and preferred to prepare their own meals. One male in this session remarked, ". . . and now that I am cooking healthy for myself, the rest of my family eats healthy."

Participants from all female discussion groups indicated that they assumed responsibility for shopping and preparation of the meal. Females ages 15-18 were an exception to this finding. They stated that cooking was a shared responsibility with adults and siblings or that it was the responsibility of the adult in the household. Such data suggest that nutrition-based interventions must be directed towards males as well as females. Males ages 15–18 denoted their mother as the member of the family that prepared food. However, they stated that they have input in the choice of meals and how it is prepared (baked or fried).

Meals

Many of the participants indicated that their first meal of the day occurred around the noon hour which would be considered lunch. Some participants stated that they eat only one meal a day, and on some days do not eat at all. When breakfast was eaten, the majority of participants consume typical American breakfast foods such as bacon and eggs, toast, oatmeal, and cereal. However, the younger age groups (ages 15–34) indicated that they eat noncustomary foods for breakfast, like hot dogs, potato chips, or other fast foods. The ages 15–18 sessions cited more fast food consumption than other sessions. When the first meal of the day is consumed in the late morning or early afternoon, it may also consist of left-over foods from the previous evening. The group indicated that lunch consists of a sandwich of luncheon or other meat, chips, soda, a fast food fried chicken combination ("chicken box"), or whatever is available from the prior evening's meal.

Dinner appeared to be the primary meal of the day, which is usually home cooked. Meatloaf, fried or baked chicken, a vegetable, and a starch were the types of menus that were common to the evening meal. Dessert was seldom mentioned unless the youth and young adults referred to eating "junk food." Thus, education related to heart healthy eating should include information about the importance of breakfast, proper meal preparation, and nutrition education for all public housing residents, regardless of age or gender.

Physical Activity

For public housing residents, the dominant form of physical activity was walking. They described walking as a means to conduct errands, to get to appointments, and to do everyday activities. In fact, walking appeared to be the primary mode of transportation for all housing residents. The majority of the participants also cited walking as a method of recreation and relaxation. Walking to various destinations, like to the park, appears to be used by residents to relieve stress and provide a healthy opportunity to vent frustrations. Because there were several references to public transportation, it appears that few of the residents own cars or trucks. Participants in the male small group discussion ages 15-18 cited basketball as their main form of exercise. A few participants mentioned being involved in formal exercise programs with family members. One participant in the female small group discussion ages 15-18 cited going to the track, and exercising every Tuesday and Thursday, with an older female family member. A participant in the ages 19–34 small group discussion stated working out with her family to address her overweight status. Others in the small group discussion cited walking in the mall as a form of exercise. Females ages 19 and older cited babysitting and caring for the children and grandchildren as a source of exercise.

Leisure Time Activity

Leisure time provides an excellent opportunity to engage in heart health activities. When participants were asked what types of activities they do during their leisure time, their responses were very similar within the same age/gender groups but different across age/gender groups. For example, males ages 15–18 enjoyed playing basketball and watching television. Females ages 15–18 preferred various arts and musical entertainment, including singing, dancing, and writing poetry as preferred leisure activities. Females ages 19–34 appeared to be preoccupied with their family responsibilities and had little time for recreation. Several women in this age group mentioned not having any "free time" until late at night when their children were asleep. One female participant of the ages 35–54 with risk factors session stated she colors her hair for relaxation. Males ages 19–34 cited "being out on the streets" and watching television as leisure time activities. Males ages 35–54 cited television as their primary form of entertainment.

The males ages 55 and older indicated that their leisure time activities included playing cards, going to the racetrack, watching television, and walking. Females ages 55 and older cited attending church, and cooking for most of the day on Sunday as activities they do for their own personal enjoyment. A variety of possible intervention strategies to improve heart health behavior emerged from this discussion of leisure time activities. Some examples are:

- Conducting education and promoting leisure time activities that include physical activity
- Using television as a medium for providing heart health information and promotion
- Partnering with hair grooming producers to target females to promote heart health behaviors on product packaging and other marketing venues
- Using performing and creative arts to target teens for heart health messages and physical activity promotion
- Promoting family-oriented physical activity, especially to address barriers to women who care for children.

Health Facilities Used

The participants collectively named local clinics, emergency rooms, hospitals, and physicians' offices as the health facilities sought when in need of health care. However, many cited lack of insurance and difficulties in obtaining publicly funded health insurance and services as barriers to seeking care. A male participant in the ages 35–54 small group discussion shared his experiences and perceptions of health facilities. He described being discriminated against and treated as if he were "inferior" and felt that African American males in particular experience societal discrimination in seeking services and help that other groups do not experience. A few of the older male participants have no preferred health facilities. Efforts to improve heart health among public housing residents will need to involve the health care providers and institutions serving public housing communities in order to address perceptions of lack of quality care and discrimination that may hinder care seeking and compliance by public housing residents.

Seeking Health Advice

A majority of participants in all of the small group discussions mentioned that doctors, nurses, or clinics were the primary sources they trust for the receipt of reliable health information. In addition, family members with clinical or medical training (nurses, lab technicians) were also persons sought for health advice.

Discontent with Formal Health Care

A few participants, both male and female, felt that not all practitioners and health care facilities provide reliable and/or safe health advice. This conclusion was based upon personal, as well as family experiences in which one's health did not improve as a result of accepting and following the advice of physicians. Participants who made these statements were very skeptical of the formal medical health care system, and even suggested that they were receiving poor care intentionally.

One female senior participant reflected on the amount of medications she is prescribed as well as other African American females, and concluded that black women are "loaded down" with pills. She believed that some of the pills she takes may actually be detrimental to her health, and were negatively affecting her quality of life by slowing her down and making her drowsy. The participant stated her prescription drug regimen included medication for high blood pressure, her heart, arthritis, potassium, and for fluid. She went on to say that she does not take some prescribed medication because she would be unable to leave her home if she did due to drowsiness. She stated that her sister called her a "legal junky" because of the amount of pills she is prescribed.

Participants who made similar statements regarding the ineffectiveness of medical care including prescription drugs were very vocal about their position. Other participants indicated that when they felt sick they would rest/lie down (e.g., in bed for example) until better, call a family member, stay alone, or try to relax. One female in the ages 35–54 age group with risk factors cited if she is not feeling well, "I will just suffer. I have no insurance, since I got laid off." Another stated she had no telephone so she would go to her daughter's house until she felt better.

Health Advice in the Home

Teen participants (ages 15–18 years) stated that they would first inform an adult household member (mother) if not feeling well. Some participants stated that they would try over-the-counter medications as a first course of action to address a health problem. Home remedies for CVD-related conditions that were mentioned included drinking vinegar and water or using garlic for high blood pressure and taking a hot shower even when temperatures are high, and "drip dry."

Because a majority of participants seek advice from formal health care systems, these institutions are potential channels for heart health education in public housing settings. However, some participants were skeptical of formal medical advice. Consideration must be given to the potential barrier to heart health programming efforts in public housing communities based on the beliefs and attitudes among some public housing residents about formal medical care.

Lay Health Information Messengers

To probe participants about persons in their immediate community who might be effective health information messengers, two questions were asked: (1) Are there people in your community who you feel have a lot of knowledge about programs and activities that can benefit you? And, (2) Who in your home do you turn to when you are not feeling well? The responses to these questions suggested that seeking health information for many of the residents was not a priority. When necessary, residents expressed great confidence in the resident leaders in the community as excellent sources of valid health information. A sense of confidence and trust was revealed in participants' discussions of these individuals' ability to direct them to appropriate health and nonhealth resources. In each group, when this question was mentioned, either a unanimous answer was provided, or the answer was not disputed.

Family Members and Friends

One's own mother or a close relative (usually female) were also cited by participants as persons trusted for providing health information. Fathers were not mentioned as a resource for health information in any of the small group discussions. However, some male respondents in the ages 19–34 felt it was their duty to encourage healthy lifestyles for their children. Males in this age group also mentioned looking out for each other (their male peers) in general, including providing each other with health advice. Participants ages 34 and above also identified younger people and younger generations as being more knowledgeable about being healthy and health conscious in general. One participant identified young people eating vegetarian meals as an indication of being health conscious.

According to these responses, public housing resident leaders, female family members, family members with health backgrounds, male peer-to-peer health education activities, and messages from younger generations to older generations are the CVH information messengers and messaging techniques that would be effective. In addition, because of the distrust that some participants expressed towards medical health care systems (hospitals) and providers (physicians), the family and community health information mediaries identified by participants will be essential to encourage seeking formal care when appropriate to address CVD among public housing residents. Heart health interventions will require education programs to reduce and hopefully eliminate the distrust that some public housing residents have of providers as sources of health information. These findings also indicate the appropriateness of training resident leaders to serve as community health educators since resident leaders serve as the most significant unofficial source of health information.

VII. HEART HEALTH AND DISEASE KNOWLEDGE

A majority of participants stated that the heart is critical to the continuation of life and, accordingly, it is important to try to take care of one's heart and heart health. Participants listed clogged or hardened arteries, heredity, lifestyle behaviors, and clinical risk factors (high blood pressure, overweight), angina, congenital heart defects (heart murmur, irregular heart beat), an improperly functioning heart, and chest pains to define heart disease. Several participants across the small group discussions mentioned heart murmurs in particular and some stated having this condition. Participants expressed a desire to have a healthy heart.

Persons at Risk for Heart Disease

Participants across the small group discussions agreed that anyone can develop heart disease. Many of the participants had experienced acute cardiovascular events. The participant, his or her family member, or friends have had a heart attack or stroke and, as a result, participants have been educated through this personal experience about the prevalence of heart disease. Yet, while participants expressed the belief that heart disease can affect anyone and had had personal experiences with the impact of heart disease on one's life, some seemed hesitant to commit to actively making changes, like smoking cessation, reduced alcohol consumption, heart healthy diets, or reducing stressful activities.

Participants believed that heart disease is affecting their community as well as the overall black community. They cited that behaviors (poor diets and smoking), as well as socioeconomic factors were causing poor heart health in their communities. The responses in this section illustrate that knowledge and experience with heart disease is not contributing to improved heart health behaviors. Thus, heart disease prevention and treatment strategies must strongly urge housing residents to not only know their lifestyle risks, but to begin adopting healthier behaviors to prevent increasing their CVD risk.

Signs of Heart Attack

Discussants were highly knowledgeable about the signs of a heart attack. Shortness of breath, chest pain, and tingling in the arms were among the symptoms most frequently noted as signs or symptoms of a heart attack. Other signs or symptoms mentioned were dizziness and sweating. Participants in all small group discussions were generally aware of the symptoms of a heart attack. Participants suggested that health education materials with pictures of persons experiencing heart attack symptoms would be useful.

Signs of Stroke

The majority of the participants did not appear to be as knowledgeable about stroke symptoms compared to those of heart attack. The most common symptoms mentioned were weakness, blurred vision, and slurred speech in addition dizziness, headache, tingling in the arm, fainting, and gas-like symptoms. Participants were aware of a myriad of signs and symptoms, but in some cases, were uncertain if these signs were related to a heart attack or a stroke.

Perception of Life after Having a Heart Attack or Stroke

The participants in each of the age groups reflected on the changes in health and quality of life that occurred in family members or friends after having a heart attack or stroke. Participants noted that both heart attacks and strokes create marked changes in the mobility of the person and an inability to continue fully engaging in the activities of daily living. Changes in mental status, working status, and the ability to live alone were cited as results of having a heart attack or stroke.

In the small group discussions of participants with risk factors, the participants spoke personally of the recommended heart healthy lifestyle modifications that they have made. One female participant in the small group discussion ages 15–18 years stated that her grandmother has difficulty breathing and suffers from stiffness in her arm, as a result of a heart attack. Another participant in this same small group discussion stated her uncle had three heart attacks and after the third one, "he couldn't get it back together." These observations and comments reveal that participants are aware of the life and health impact that a cardiovascular acute event can have. This audience therefore is aware of CVD impact but they need other deterrent information and heart healthy lifestyle adoption encouragement and support in order to adopt heart disease preventive behavior.

Information that Might Have Prevented Risk Factor Development or Developing CVD

The participants in the small group discussion sessions designated for persons with CVD risk factors stated that if they had been educated about CVD earlier in life this might have helped them to prevent their CVD event. One participant said that he wished that he had received the heart health information in high school. He felt, however, that when he was younger, he was infallible. The inference from this statement is that even if he had been given heart disease prevention information early in life, he would not have adhered to the needed behaviors. One participant suggested incorporating heart health education materials into school curricula. Many participants indicated that they literally did not know the risks associated with poor heart health habits and the potential poor health outcomes. The importance of living a healthy lifestyle was unclear to them earlier in life. Moreover, current practices of preventive measures appeared to be minimal and, in some cases, nonexistent. Many participants expressed a commitment to living for the present rather than attempting to reverse their high-risk lifestyles.

In response to the query, "What information do you know now that you wish you had known before having a heart attack or stroke?" a male participant (ages 35–54) said that the slave ancestors of African Americans were poisoned by being given only the bad parts of food—cuts from the hog, like the head and tail—and these historical dietary behaviors are what have led to current health conditions of African Americans. He went on to state that these practices "...have been part of an attempt to destroy 'us' as a people." Based on these perceptions, CVH education efforts must address a deeprooted and history-driven distrust of society and systems in order for participants to accept public health promotion messages as being reliable while simultaneously focusing on the ability of residents to have personal control over their health. A public health message to address these issues accordingly should promote individuals self-efficacy in their ability to adopt new, healthier lifestyle behaviors despite what they believe are learned behaviors that are a result of historical discrimination.

Behaviors to Prevent Heart Disease

When participants were posed questions regarding behaviors that can reduce heart disease risk, they exhibited knowledge of heart disease risk reducing behaviors. Many stated that exercising, eating right, not smoking or drinking, keeping regular doctor's visits, and reducing stress are heart disease risk reducing behaviors. One male in the ages 35–54 risk factor small group discussion stated "stress is the ultimate killer." Cutting out red meat was also a suggestion in the male small group discussion ages 35–54 with risk factors. The aforementioned lifestyle behaviors were referred to several times during the sessions in each of the small group discussions.

Role of Spirituality in Health

Faith in God and prayer are also fundamental to many of the participants' beliefs in their ability to be healthy and to withstand disease and illness, including CVD. For example, a male participant in the ages 35–54 group stated that he would pray to God first, during a health emergency. In response to the question, "What do you do right now for your health?," a senior participant stated that she prays. Based on this belief system, it will be important in outreach and education activities for CVH among this population to acknowledge spirituality and faith while encouraging health promoting behaviors.

VIII. CLINICAL AND BEHAVIORAL HEART DISEASE RISK FACTORS

In order to target information to this audience, the small group discussion guide included an inquiry to determine whether participants were knowledgeable about the specific clinical and behavioral CVD risk factor terminology or concepts: (1) high blood pressure, (2) high blood cholesterol, (3) overweight/obesity, (4) physical inactivity, (5) diabetes, (6) alcohol consumption, (7) drug use, (8) stress, (9) smoking, (10) having a previous heart attack or stroke, and (11) having a member or members of your family who have been diagnosed with heart disease or have had a heart attack or stroke.

Primary Risk Factors Cited

Participants were provided the statement, "There are some health conditions and behaviors that can put people at risk for heart disease. Tell me some of those things." In response, participants within each small group discussion were able to cite at least two primary CVD clinical or behavioral risk factors. Among risk factors recognized were high blood pressure, smoking, overweight/obesity, high fat diets, physical inactivity. cholesterol, alcohol, and smoking. In some of the small group discussions, most CVD risk factors were either stated without the facilitator probing, or participants agreed with the facilitator's prompting of factors. Cholesterol was least cited across age and gender groups. When further probing was performed, including prompting participants with a factor and inquiring whether participants believed the factor was a risk for heart disease, participants usually agreed that diabetes, previous heart attack or stroke, and family history of heart disease were risk factors. Many of the participants felt that having a previous heart attack or stroke would predispose one to having another heart attack. Statements such as, "Yes, diabetes will increase your chances for heart disease as well." were made. Further exploring by the facilitator found that participants also were aware that having a family history of heart attack or stroke is a predisposing risk factor for CVD.

Risk Factors Questioned

One male in the ages 35–54 group stated that he was certain diabetes was not hereditary as often thought. For some risk factors—previous heart attack, family history, diabetes, cholesterol—a few participants questioned whether these were risk factors. One senior female participant stated that she questioned whether cholesterol was a risk factor, and instead attributed chemicals put in foods and what animals are fed as what is causing poor health. A similar perception about food production and chemicals was a strong belief among men in ages 35–54.

Stress—Mental and Emotional Health

Stress, anxiety, and inability to manage anger were emphasized as leading factors causing heart disease throughout small group discussions. Stressors included child rearing and children, police surveillance, romantic relationship partners, family and friends (their problems), discrimination (against black men), jobs, and being a senior.

History Factors and Health Disparity

Some participants voiced concerns about health disparities among African Americans. One male participant (ages 35–54 group) stated, "It seems like we're a cursed people. Every time you turn around, they come on TV [and say] black people dying. They got

more of this than white people. They got more of that than white people..." This statement was also supported by another participant who stated, "It ain't that [we're a cursed people]. Our ancestors were poisoned. During slavery days we didn't get the right kind of food to eat. We got like the cuts from the hog, the tail, the head . . . stuff they didn't want. We got all the bad parts of the food. That's why we eat hogmaws and chitterlings and stuff like that now." The distrust of institutional relationships described by the preceding comment was also revealed in a senior female session where a participant stated, "It's not the food that we eat. It's the chemicals that they put in the food that we eat to make the animals grow faster. I think that is what is harming us as a race of people."

Income and Heart Disease Risk

In females ages 19–34 and 35–54, concerns were raised regarding the lack of financial resources needed in order to afford heart healthy lifestyles. They stated that choosing and purchasing healthier foods is more costly and, because of limited incomes as well as receiving Government food purchasing subsidies once a month, it is necessary to buy foods that are on sale and that will last until the next month's subsidy. Senior females mentioned that because fresh fruits and vegetables spoil easily, they choose these items less. Residents may need case management support to link them with low-cost food programs and nutrition education including preparation and storage instruction that can support dietary behavioral change.

Accessing Health Care and Health Insurance

Lack of adequate health insurance was another risk factor cited. Participants among all small group discussions stated that they are unemployed or underemployed and therefore do not have employer-sponsored health insurance to keep regular doctors' visits or purchase necessary medications. They also mentioned difficulties accessing Government supported health insurance programs, stating that age requirements and racial and gender discrimination (males age 35–54) limited their access to quality care.

Other Factors Believed to Increase Risk

Residents indicated that frequently some residents, especially elderly residents, must make a choice between food and prescriptions. Some participants' statements alluded to an element of destiny in whether they will have an acute CVD event independent of one's risk factors of behaviors as illustrated by comments such as, "You may be destined to have it despite any of this [heart healthy behaviors]." Such remarks suggest that many public housing residents do not feel empowered to attempt to change their behaviors and prevent heart disease.

Based on these findings, in addition to the science-based clinical and behavior risk factors for CVD, participants revealed beliefs in a broader concept of heart disease risk factors, which included social and environmental determinants of health including historical factors, income, and health insurance (or lack thereof). In addition, a few participants believed there is an element of destiny and fate for having acute cardiovascular events despite whether an individual practices heart disease preventive, management, or control behaviors. Heart health education and promotion programs must recognize these underlying social and environmental issues that the target

audience faces and possibly provide connection to the resources and corresponding social programming to address them, as well as respond appropriately to a belief system that includes destiny as a factor in health.

IX. REACTIONS TO RECOMMENDED HEART HEALTHY BEHAVIORS

Barriers to Engaging in Heart Healthy Lifestyles

In general, barriers to living a healthy life stated across small group discussions included child rearing as a source of excessive stress, the lack of financial resources and health insurance, lack of time, limited transportation (to get to medical appointments), community bars, job stress, unemployment, bad relationships, peer pressure, a high crime community (including drug trafficking), and environmental factors. Stress was a pervasive barrier, regardless of age or gender. Both males and females ages 15–18 cited stressful environments. Other barriers mentioned were lack of will power, having an sexually transmitted disease, and the notion of a societal norm which treats black men discriminatorily when seeking help for medical care and services. One respondent stated, "Society got this norm . . . a black man is supposed to work until he drops. A black man who goes to a place and says I need help, they look at him like he's in the wrong building. Whereas any other group of people or group of even [black] females [are] allowed to come in and get help [there]. When I went to get my medical assistance, people were looking at me like I was below the level of them. [It] made me feel inferior."

Reinforcers and Enablers of Healthy Lifestyles

Residents felt that the following activities could help them to live healthier lives.

Table 1. Reinforcers and Enablers of Healthy Lifestyles

- More education and health awareness programs located in their public housing community
- Pamphlets with helpful information on healthy cooking on a low budget
- More assistance in finding employment
- "Hands on" assistance while grocery shopping
- Cooking demonstrations
- Diet and nutrition counseling

- Health care
- Finding peace of mind/balance in their lives
- Eliminating stress
- Developing routines
- Faith, God, and prayer
- Determination
- Support network/groups
- Health professionals (doctors and nurses)

Both gender populations stated an interest in participating in onsite health promotion activities if they were readily available.

When responding to questions related to core CVH behavioral lifestyle recommendations, participants across age and gender small group discussions appeared to respond in a variety of ways irrespective of the demographic category to which they belonged. The following are reactions to specific lifestyle behaviors to reducing heart disease risk.

Cutting Down on Salt

Actions Participants are Taking To Reduce Salt Consumed

Cutting down on salt was a behavior that participants in all age and gender small group discussions knew was an important way to modify their diets to improve heart health.

The teen male and female groups were conscious of salt intake and, with the exception of the teen male small group discussion, a contingent of participants within all age/gender groups cited practices to reduce the amount of salt they consume, including using salt substitutes, not adding salt once food is prepared, using more herbs and spices (garlic), and buying products that indicate lower sodium. One participant in the female ages 19–34 session remarked on the high salt content of manufactured foods and recognized that adding table salt is an "over exposure." Some women in the ages 35–54 group with risk factors suggested the use of nonsodium substitutes such as Mrs. Dash and NuSalt, as well as garlic and other flavorful herbs to reduce salt consumption. A male participant in the ages 35–54 group with risk factors indicated that since his development of heart disease, he cooks both his and his family's food without salt. This respondent indicated that he feels a sense of accomplishment in knowing that he is encouraging his family to eat healthily.

Views of Participants Not Contemplating Salt Reduction

A few of the male participants in the ages 19–34 and the 35–54 groups were unwilling to reduce salt usage because of a perception that it will decrease the tastefulness of food. A contingent of participants stated that they "think" about reducing the amount of salt they consume occasionally, but it is not something they think about often or practice consistently. Still another contingent of participants were unwilling to eliminate or reduce salt consumption because of preferred taste. One participant in the female ages 19–34 group cited that people need to consume salt in response to the recommendation to reduce the amount of salt consumed. Participants also mentioned needing a reason to cut down on salt. Some who admitted to having high blood pressure stated they still did not practice salt reduction.

From these responses, many participants are willing to practice or currently practicing salt and sodium reduction. Therefore, materials and activities to support and help participants maintain these behaviors would be appropriate, such as low salt recipes and teaching skills on how to select packaged/manufactured food products that contain lower sodium. For persons currently not considering reduced salt consumption, messages to promote the adoption of this behavior must address taste preferences and give reasons and incentives to try low salt foods. Food demonstrations with low salt tasteful recipes would also be an appropriate outreach activity.

Eating Smaller Portions

Responses to the recommendation to eat smaller food portions also varied across small group discussions. The males ages 15–18 small group discussion and the males ages 19–34 small group discussions did not consider eating smaller portions as a reasonable option—even those who identified themselves as being overweight. Women ages 35 and older with or without risk factors were more willing to reduce portion sizes. Women for whom a doctor had made this recommendation were even more willing. One female between the ages of 35–54 described her personal experiences that led to a weight loss of over 70 pounds. She attributed this success, in part, to a reduction in food portions. One participant during this discussion recommended a strategy for reducing portion size. She suggested eating smaller portions more frequently throughout the day and not to eat just prior to retiring in the evening.

Reasons Cited for Not Limiting Portion Size

A few female participants ages 19–34 stated an unwillingness to consume smaller portions. They stated if they ate smaller portions, they would just eat more servings, "go back for more," or eat something sweet if still hungry. One female participant reflected on her size and stated she is a "big girl" and needs a big portion. The unwillingness to experience hunger was also cited as a reason for not reducing portion size. A related response to the issue of portion control made by a male participant (ages 19–34 group) regarding reading food labels was, "no one is counting calories around here." Teen males believed that because they are very physically active playing group sports like basketball and football, their active daily active lifestyles created a balance between the food they consumed and their energy output. Many participants throughout the various small group discussions stated that they do not eat breakfast and therefore eat large amounts at the dinner meal.

Based on these findings, there is gender difference in this audience's willingness to eat smaller portions. Accordingly, gender segmented messages regarding portion size will be necessary to meet the divergence of attitudes by males and females in this audience. In addition, hunger mediates participants' willingness to regulate portion size, as well as eating patterns that involve eating one large, main meal in the evening. Skills and nutritional information on portion size and hunger will be a necessary topic area for heart healthy eating for this audience.

Choosing and Preparing Foods Lower in Fat

A proportion of residents were not willing to consistently adhere to the dietary practice of choosing foods lower in fat. In particular the removal of skin from chicken, the selection of 2 percent or skim milk rather than whole milk, and the use of canola oil rather than lard or vegetable oil were rejected by some. A senior female in response to trimming fat off foods and removing chicken skin, stated, " . . . If you're going to have a heart attack, you're going to have it anyway . . . it's as simple as that . . I've seen people try to do everything and they still have a heart attack." The attitude among participants regarding food was to prepare and eat foods to enjoy. Participants were less willing to eat and select foods based on health recommendations or benefits. Some of the female participants mentioned cost as a limitation in the selection of products that are labeled lower fat. Participants were also concerned that some fat free and lower-cholesterol foods have more sugar and sodium.

A proportion of participants shared their dietary practices to lower amounts of fat consumed including the use of lowfat cooking alternatives such as Pam cooking spray, and using lowfat skim milk. Some remarked that they did remove skin from chicken, while one respondent noted removing fat from underneath chicken skin but not removing the skin. Some participants citing the use of 2 percent milk were unwilling to use lower-fat milk because they believed the other lower-fat content varieties are "watered down." These responses yield that taste preferences and limited budgets must be addressed when promoting the specific behavior of consuming lower-fat foods

Reading Food Labels

Some reactions to the recommended behavior of reading food labels to select heart healthy foods are listed in table 2:

Table 2. Reactions To Reading Food Labels To Make Heart Healthy Choices

- Yes, I read labels but do not do anything with the information.
- Yes, I read them all the time and make decisions based upon the information.
- No, I don't read them because I don't know what it says.
- I try to go by that, but they lie so much.
- No, I never think about it, I just buy what I like.
- No, nobody's counting calories around here.
- If it looks good [picture] on the box, I'll get it.
- If I buy the food on a regular basis, no, I don't read the food label.
- Yes, sometimes.

These responses characterize the viewpoints across small group discussions, irrespective of age/gender demographics. For example, in the two sessions conducted with females ages 19–34, opposing views were shared regarding reading food labels. Participants in one session unanimously stated they read food labels while the majority of participants in the second session would not consider reading labels. Several respondents indicated that they read labels when they are purchasing an item for the first time and need instructions on how to prepare the food.

The facilitator was asked to verify whether the participants who did not read labels were illiterate by determining whether the respondent completed the participant intake form. There did not appear to be a correlation. However, some participants did state an inability to read words on food labels. Specifically, a male participant in the ages 35–54 session stated, "We don't read when we go to the market . . . Some of those words, I can't even pronounce . . . I'm not going to lie to you. And then I don't know what they are [the words on the food labels] . . . I know mamma bought ground beef . . . so, I'm going to buy ground beef."

The responses to this inquiry revealed that a majority of participants and in particular male participants were not currently practicing this behavior due to: (1) reading limitations; (2) reading dietary information was not a learned or familiar practice; or (3) personal attitudes which did not find utility in this behavior because of a disinterest in selecting foods based on nutritional content. Interventions to address food selection based on dietary information must address limited literacy skills among this population as well as promote and motivate residents to adopt a behavior not currently practiced.

Choosing Foods with Fewer Calories

Choosing foods with fewer calories was not a realistic recommendation for many of the participants. Participants did not select foods with fewer calories because they stated these foods cost more. Others did not consider foods with fewer calories as an option because of their lack of interest in reducing calories, perceptions that these foods are less flavorful, or generally choosing foods they like, which they acknowledge are not the

healthier choices. Some participants were not interested in reading food labels for any dietary information, whether it be calories, sodium, or fat content.

Some participants stated that while the label may indicate that the product contains less fat, it may fail to mention that it contains more sodium. One participant in the senior female small group discussion (ages 55 and above) mentioned that fat free items may also have higher amounts of sugar. The participants who were practicing the behavior of selecting foods with lower calories stated that they select ice creams that are lowfat, use lowfat versions of traditionally fatty foods, and reduce added sugar consumption. A teen male, for example, mentioned eating Cheerios (cereal) without sugar. Education and teaching skills on selecting lower calorie foods that do not have the taste, cost, and dietary content changes that are described as barriers will need to be emphasized if this behavior is to be consistently adapted.

Reducing Fried Food Consumption

When queried about their efforts to reduce fried food consumption, participants described their intent or current behaviors to select and incorporate alternative preparation methods. Many participants stated consuming baked, broiled, and steamed foods in addition to fried foods, and were creating a balance between these preparation methods. Some males ages 15–18 stated that they ask their parents to prepare baked chicken rather than fried. A participant in the males ages 35–54 with CVD risk factor small group discussion indicated that he no longer prepares fried foods at home and does not have a frying pan or keep cooking oil in his home. Participants in this group remarked that they personally prepare their food to ensure a healthy meal.

Participants who remarked that they were not consistently reducing the amount of fried foods in their diet recognized the benefits of reduced fried foods consumption, and stated that they occasionally forego fried food selections. However, they stated that they were unwilling to eliminate fried foods from their diets completely. Still another contingent admitted to eating fried foods as often as they wished, with no intention to reduce the amount or how often they eat fried foods, as indicated by the comment "...if I am going to have heart disease because of fried chicken, well . . ." Participants stated that sometimes recipes that are intended to be fried do not taste the same when prepared using other methods. In each small group discussion, a meal called a "chicken box" consisting of fried chicken was mentioned as a preferred fast food meal. In addition, some participants mentioned eating meals at popular neighborhood fast food restaurants.

For those participants averse to eliminating fried food consumption, in addition to recommending alternatives to fried foods, specific guidelines on what the maximum consumption levels should be may be helpful in reducing the amount consumed among persons who are not contemplating this behavior.

Preparing Meals at Home

Home-prepared meals were a primary preference among participants of all small group discussions. Many mentioned cost as a primary factor for in-home preparation of meals since eating out costs more. Other participants mentioned that they were suspicious of how the food is prepared when eating out, and therefore choose to eat at home. Eating out was considered an "extra" for special occasions. One female participant in the ages

15–18 group stated that eating out was a waste of money. Other statements made in reaction to this behavior included:

- "I enjoy food more when I eat out."
- "My parent(s) cooks during the week and on Sunday."
- "Its healthier to eat at home."
- "I'm busy, so I do both." (eat out and prepare meals at home)

For the majority of participants who state that they prepare home cooked meals, this current practice among the audience should be encouraged as well as augmented with skills to ensure that home prepared meals are heart healthy. For persons who are eating their meal in restaurants, information should be provided on making heart healthy selections.

Eating Fruits and Vegetables

The majority of residents, despite age, gender, and CVD risk factor status, knew that eating fruits and vegetables is a healthy habit. Many expressed the intent to eat these foods on a daily basis and the only limiting factor was the accessibility of fresh produce in their community. The residents mentioned the lack of "good" grocery stores that have fresh produce within walking distance. Participants stated that when they are unable to obtain fresh fruits or vegetables, frozen and canned selections are options. In addition to barriers accessing fresh produce locally, some participants mentioned that these foods spoil easily leading to food waste.

A few participants stated they were not "fruit eaters" or that they eat fruit seasonally (e.g., during summer months). However, participants were aware of the preventive benefits that consuming fruits can have. One male participant in the ages 35–54 mentioned that eating fresh fruit and vegetables helps to prevent cancer. A senior male participant stated that he enjoys eating fruits and his ability to make a meal consisting only of fruit. A teen female remarked that she enjoyed eating fresh raw carrots with salad dressing. A senior female participant stated that following the recommendation to eat more fruits and vegetables can be wasteful. She described how fruits and vegetables spoil if not consumed quickly. Accordingly, this participant was hesitant to buy fresh produce because of her desire to not waste food.

To address barriers such as limited availability of fresh produce and spoilage of fresh produce, education is needed on selecting packaged vegetables and fruit that are the best choices for a heart healthy diet, such as frozen varieties, canned products with low salt and no added sugars or syrup, as well as food preservation skills to limit waste of fresh produce. In addition, recommendations to limit the amount of high-fat and high-calorie condiments and sauces on fruits and vegetables may be necessary as one respondent mentioned eating vegetables with a ranch dressing that may be high in fat and calorie content.

Being Physically Active 30 Minutes or More Daily

While the majority of participants were not aware of the specific recommendation to exercise at least 30 minutes everyday for improved health, participants believed that getting regular physical activity was important for good health. Many participants felt that they met the physical activity recommendation while conducting their daily routines, such as caring for children (females ages 18 and above), performing housework

(females ages 18 and above), walking to appointments and to accomplish everyday tasks, and fulfilling the requirements of their job.

The majority of participants indicated that their primary method of getting regular physical activity is walking, irrespective of age, gender, or CVD risk factor status. One participant with a physical disability (the result of vascular disease) mentioned walking in spite of his physical challenge. Teen males and males ages 19–34 felt they met and exceeded the 30 minute minimum recommendation for physical activity. Teen males (ages 15–18) stated that they participate in group sports (basketball) for 1–2 hours a day, and on some days the entire day is spent playing sports.

Barriers to Daily Physical Activity

Some participants cited that they were not actively engaged in daily physical activity. One participant in the female ages 35–54 group mentioned that her computer prevents her from exercising since she spends the majority of her day at the computer terminal. A male participant who had suffered a heart attack remarked that he limits his exercise based on his physician's recommendation due to his heart condition. Some other barriers cited to getting regular daily physical activity included having knee problems, not having extra time to exercise, not making the time to exercise, and not having an interest in formal exercise programs.

Based on the responses by participants who demonstrated a willingness to be physically active, specific physical activities outside of general recommendations for adults may need to be tailored at the individual level to address other risk factors that may be exhibited in the population. For example, if persons are overweight or obese, the concepts of physical activity levels based on caloric consumption may be necessary to develop an individual's plan for losing weight. Also, information on the amount of calories burned by specific activities is necessary to address possible misconceptions about the actual amounts of energy expended with activities such as childcare and housework. For participants who stated they are not getting regular physical activity, skills and information to address the following are necessary: (1) physical activity for persons with physical limitations or health conditions; (2) incorporating physical activity into a busy lifestyle; and (3) alternative forms of physical activity that do not require a gym or a "formal" exercise program.

Controlling High Blood Pressure

The participants who self-identified as having hypertension were aware that they need to lower their blood pressure. They stated clinical and behavioral actions to achieve lowered blood pressure such as taking medications, keeping physician appointments, diet (including reduced salt consumption), physical activity, reducing stress, and not smoking or drinking. Staying out of the sun and monitoring their blood pressure were other methods cited. A participant mentioned a home remedy to control high blood pressure—drinking vinegar and water before eating ham. Another participant indicated that the only way to control high blood pressure was with medication, and intimated to the facilitator that, if other ways existed, she would be interested in that information. A male participant in the ages 19–34 group indicated that sweating was a symptom of high blood pressure. Another participant in the same session stated that when one upsets a person with high blood pressure, they will say that you are, "getting my pressure up," alluding to a perceived link between stress and high blood pressure.

Participants with high blood pressure indicated that the challenges to controlling their blood pressure are stress (including family); interpersonal relationships and interfacing with social systems; quitting smoking; temptations of food; and taking medication regularly and on schedule, as well as drug side effects. When the facilitator probed a female participant (ages 19–34) to define high blood pressure, participants remarked that they could not define it. However, they stated they were aware of high blood pressure because it is common. A participant remarked, "You just know high blood pressure, because there are a lot of people who have high blood pressure." Skills and tips on improved medication compliance, stress reduction skills, dispelling home remedy beliefs, and ongoing smoking cessation programs are necessary to address high blood pressure control issues.

Lowering High Cholesterol

Responses to lowering high blood cholesterol indicated a low level of knowledge about cholesterol as well as the diagnosis of this risk factor status in the participant population. While those small group discussions consisting of participants with this risk factor stated being diagnosed by their medical provider, other small group discussion participants were uncertain about what cholesterol is and their positive or negative risk factor status. One participant stated, "I might have it. My doctor didn't tell me I had it [high blood cholesterol]. I can just feel it. I like to over eat." However, many of the participants knew that eating foods high in fat will contribute to high cholesterol levels. A participant commented, "I probably have it [high cholesterol] . . . I eat so many greasy and fatty foods." Those who were aware that they had high cholesterol stated that they needed to reduce fatty and fried foods and stop smoking. Some participants are using cholesterol lowering medications while others said that they were attempting to modify their diets. Reducing the amount of eggs, milk, and butter were mentioned as ways to reduce cholesterol, and eating more oats and grains were recommended. Many participants associated cigarette smoking with high cholesterol.

Some participants stated that the preferred taste or preparation of foods are deterrents to reducing cholesterol. One participant began to list foods that contain cholesterol including mayonnaise and ice cream. He went on to conclude, "It's just about in everything." Because of the low level of participants who had knowledge about their own cholesterol level, a primary message for this population is to promote cholesterol screening to first identify their risk factor status for high cholesterol.

Quitting Smoking

Prevalence Among Participants

With the exception of a few persons in each of the small group discussions, the vast majority of the participants were smokers across all gender and age groups. Data from the participant intake forms indicated that 88 percent of the participants were smokers (n=78). The only small group discussion that consisted only of nonsmokers were participants in the females ages 15–18 years session. This group mentioned that their family members' experiences of CVD and cancer caused by smoking cigarettes and consuming alcohol were deterrents for them to engage in these behaviors. Participants who smoked cited smoking as a source of relaxation and a habit that many started as teens. One participant began smoking at nine years of age. Teen males who were smokers stated that they were making attempts to quit, but because of stress it was difficult.

Cessation: Attitudes, Attempts, and Relapse

Participants were very aware of the risks associated with smoking. All small group discussions were aware that tobacco use leads to diseases but many persons admitted an inability to quit. Some participants indicated that their smoking cessation efforts have been unsuccessful. Others stated that they have successfully discontinued smoking for long periods of time, some over 2 years, but began smoking again when a stressful event or social gathering served as a trigger. The correlation between smoking and social drinking was identified by participants and mentioned as a key determinant for relapse of smoking cessation behaviors.

Others cited the use of patches, gum, stopping cold turkey, or reducing the number of cigarettes smoked by buying individual cigarettes instead of a whole package, as methods that they have tried to stop smoking. Some participants described experiences with smoking cessation techniques. Several participants using nicotine patches indicated that they smoked while using the patch and had negative experiences, including nose bleeds and passing out. One participant described an incident in which she passed out while wearing two nicotine patches and smoking a cigarette. She explained that she forgot she was wearing the patch. Others stated that they tend to buy more cigarettes when they seek to reduce usage by purchasing cigarettes one at a time.

Some participants in the sessions designated for persons with CVD risk factors stated they had no intention to stop smoking. One participant from the female ages 35–54 with risk factors session stated, "I am a smoker and that is it. Smoking is what I do, if something happens to me, well, it just does. I have no intention of quitting." A participant in the male small group discussion ages 19–34 made a similar comment.

Other participants mentioned that "quitting" is difficult because their entire family smokes and their neighbors and friends smoke. Therefore at family and social gatherings, smoking is a main feature. Participants also reflected that most of their family members who smoked did not die because of smoking-related illness. Specifically, they stated that their family member who smoked did not die from cancer. However, they mentioned these same family members suffered from high blood pressure. The inference from these comments is that participants recognized the outcome of cancer death related to smoking but not high blood pressure related morbidity and the relationship to smoking.

The high cost of cigarettes was mentioned as a motivation to quit smoking, but it has had little effect based on the continued smoking behaviors of participants. The participants, especially in the male small group discussion sessions, expressed a lack of concern about CVD until an adverse health event detrimentally affects their lives, so forgoing behaviors such as smoking to prevent disease is not a motivation. However, several senior male participants identified smoking cessation as a life priority and goal.

Smoking cessation programs and messages, especially those that emphasize the social and familial environments with which smoking takes place, are essential interventions for this target audience. Activities and materials will also need to be tailored to the individual's readiness level as there was a variety of levels, including previous smoking cessation attempts exhibited by the participants.

Maintaining a Healthy Weight

Participants across the small group discussion sessions agreed that maintaining a healthy weight was important to heart health. Many participants that self-identified as overweight desired to lose weight. However, they expressed difficulty in consistently engaging in weight loss activities. An overweight male in the ages 19–34 group indicated that he eats several hot dogs for breakfast each morning and recognized that this eating behavior is not helpful in his goal to lose weight. In addition, participants remarked that in order to lose weight a person must go on "diets" that are expensive, as indicated by the remark of a senior that "diets cost money." Some participants experienced weight fluctuations in their attempts to lose weight, remarking that they have been successful with losing weight but have regained. One participant stated not having made a final commitment to lose weight, and contemplates weekly taking actions to do so but does not consistently follow through with her plans. Teen females felt that there is a lack of places for them to engage in physical activity in their community. A participant remarked that if she were able to belong to a gym or a "Y" she could "do it" (exercise and lose weight).

A few participants had been successful in their weight loss efforts. A heart attack survivor remarked that weight loss is a key element to his recovery and recently he lost weight. A female participant in the ages 35–54 group described losing over 30 pounds using meal replacement drinks. A few participants remarked that they needed to gain weight, and overweight was not an issue for them. Practical skills and planning to assist participants in their weight loss endeavors are needed, especially those that are demonstrated to be low cost or within one's existing budget.

X. PROMOTING CARDIOVASCULAR HEALTH: RECOMMENDED THEMES, MESSAGES, INCENTIVES, AND MOTIVATORS FOR HEALTH EDUCATION PRODUCTS

Daily Reminders for Health

Participants were queried about what could serve as a daily reminder to take care of their health. In response, participants described products and tangible items that could serve as daily reminders. In addition, participants cited that their own personal thoughts and personal motivations, including caring about family members and loved ones—especially wanting to ensure that their children have healthy lifestyles—are daily reminders. Participants also remarked that their personal will and motivation to be healthy and take care of themselves are motivators. Some participants stated that the action of looking in the mirror at themselves is a reminder to care for their health. A few participants remarked that they do not need a health education product or reminder to tell them to be healthy. They felt that their health is their personal responsibility.

When describing daily reminder products, many participants identified charts, calendars, planners, and listings (to-do list) that detail the health behaviors that they should and should not perform, as well as a schedule to actually place dates and times for the behaviors. Some participants recommended focusing on positive results of taking on recommended health as well as the negative effects of risky behaviors. A participant used the example of smoking. She described showing both the benefits of not smoking and the negative results of smoking. She described that one message would be of a man who purchases cigarettes but does not have money to purchase other items he really wants. Therefore the benefit of not smoking is additional funds. The message to coincide with the former would be to show a future picture of his children as smokers. This is the negative result of his smoking—his children taking on his smoking habits. The participant went on to describe that most people do not want their children to smoke although they are smokers.

Participants also identified personal motivational notes and other small products that can be hung conveniently as good daily reminders. Often, the suggested location for placement of the daily reminder product was a refrigerator. In addition, participants suggested placing the hanging product on a wall, in the bedroom, on bathroom mirrors—places in general where it is easily seen. A female participant in the ages 19-34 group remarked that these messages should be in all rooms of the home, especially strategically placed cigarette smoking information in areas of the home where the person usually smokes.

A teen male participant recommended a card to be placed in one's wallet with no smoking messages. He stated the product would read, "Don't do it, it's suicide." A male participant in the ages 35–54 session with risk factor described a visual brochure with a "now and then" theme. The imagery would include a scene depicting the present (now) of a young healthy male including his blood pressure reading and a future (then) scene 20 years later of the same male, aged, lying on his back, the result of compromised health. The participant stated that this type of message, especially for young males, is important because of their belief that nothing will happen to them. Several participants recommended visual and graphic depictions on products.

The family and children in particular were cited frequently in all small group discussions, except in sessions with participants in the ages 15–18 demographic, as a daily reminder for making heart healthy choices. Male participants were more likely to mention motivational reminders, than tangible products, as daily reminders, and in particular mentioned that thinking of their family members, especially children, but also family members who have died due to CVD as motivations. Male participants also mentioned that seeing the effect and toll that CVD and other disease have had on people first hand, by observing members in their community, working in nursing homes, and watching real health stories on television, are effective reminders to take care of their own health.

Message Delivery Channels

Participants were queried about their preferred method for receiving health information, other than in pamphlets and brochures. Television, radio, and information from friends and family (word of mouth) appeared to be the most desired mechanisms for receiving health information. Participants mentioned in particular watching cable health channels, and cable cooking channels to receive health and food preparation information, and health advertising (national antismoking public service announcements and local Baltimore smoking prevention campaigns). Participants in a female ages 19–34 session recommended a public television station devoted to health information or public television programs on health.

A few respondents stated that videocassettes, audiocassettes, CDs, and the Internet/computers are media they would use for health information. However, participants stated that music, including gospel and rap should be used to enhance audio products. Having someone just "talking" about health on a product would not be of interest. Senior males stated that they seek health information from existing sources in their immediate community/building, in particular a community bulletin board, and therefore health information posted in these venues would be effective. A senior female mentioned attaching health messages to existing services provided to senior public housing residents. The participant recommended adding positive messages such as, "Today is the first day of the rest of your life" to senior wake-up calls provided by the housing authority at some senior developments. Requests were also made to have more health education programs at the various public housing community sites. Several participants also mentioned public billboards and messages on buses as media where they have seen health messages.

Cultural Themes for Culturally Relevant Heart Health Messages

In response to the discussion guide query, "What are some words of wisdom sayings, songs, or stories about feeling good or being healthy that you agree with or follow?" few participants provided responses. Teens and males ages 19–34 in particular stated that popular songs do not deal with health or health related topics and they could not think of sayings. Some male participants went on to state that health is not a popular topic in general unless someone becomes ill or experiences a health problem. This question was broadened to illicit more responses and for participants to identify mediums that make them feel good. The most common medium that female participants ages 18 and older cited was gospel music and thinking of God. Some respondents identified television programs. A senior participant stated enjoying medical dramas such as E.R. A female participant in the ages 35–54 mentioned comedy programs. She explained that programs which make her laugh are what make her feel good and she stated she

particularly did not watch programs about murder, because they are depressing. A few participants did provide words of wisdom. One female senior from the ages 55 and older group mentioned "God will take care of you." Another participant stated a positive affirmation that applies to health. She said, "I am somebody. I'm going to be somebody. If I don't take care of myself, no one else will because I love me." Males in the ages 35–54 group stated that music in general makes them feel good and identified local radio stations with an "oldies" format. Comments given throughout the small group discussions yielded a preference by participants for family-oriented and positive messages. One female participant in the ages 19–34 session identified a song from a popular R&B artist (Jerzee Monet) as one which is inspirational because it focuses on family and children.

Recommended Program Names

Table 3 provides a sample of program names participants suggested to signify and identify a heart health education program developed especially for African American communities.

Table 3. Suggested Program Names

- Let's have faith
- How high can you go
- Doctor Feelgood
- Eating healthy living longer
- Save our souls
- Healthy hearts and minds
- Good life
- Eat swell to keep on smiling
- Without you

- Heart power
- Black hearts
- With every beat of my heart
- Home is where the heart is
- Heart to heart
- Health movers
- Smoking rangers
- With every beat is life
- Don't you want to be around for them (senior age group)

One participant remarked in an earlier part of the discussion that black people are cursed because of the health disparities they experience as compared to whites. In response to suggestions for a name for a heart health education program for black people he recommended, "Cursed People." Although the respondent laughed after making this recommendation, it may suggest a belief of fatalism or frustration among participants regarding the health status of African Americans. Some male and female participants ages 18 and older selected a campaign slogan because it used the word "power." Males and females in the ages 19–34 sessions remarked that they preferred campaign names and products that are "straight to the point" and "plain and simple" (e.g. "Know Your Heart," "Keeping Hearts Alive"). Instead of a program name, a senior recommended having a celebrity represent the program—one who has survived a heart attack with whom African Americans are familiar.

When the discussion facilitator provided a list of program names, participants had strong group preferences for the following:

- With Every Beat of My Heart (females 35–54, Males 55+)
- Keep The Beat Going (females 15–34 and males 15–18 years)
- Know Your Heart (males 19–34)
- Healthy Hearts and Homes (Senior Men)

Based on the responses yielded from this discussion topic, table 4 is a summary of concepts for themes, messages, incentives and motivators to promote CVH.

Table 4. Concepts for themes, messages, incentives, and motivators to promote CVH

- Family and children as a major motivation for adults
- Posting heart health behavior messages in the home (what to do /not to do)
- Product content and words that are clearly stated, direct, and to the point
- Personal responsibility (for some) for improving health
- Spirituality, gospel, and God as cultural context to supplement heart health messages
- Inspirational and motivational messaging (loving oneself, caring for one's health)
- Peer education and word of mouth to teach skills about heart health
- TV, radio, popular message delivery channels
- Popular music (rap, R&B, gospel, oldies)

XI. CARDIOVASCULAR HEALTH EDUCATION/PROMOTION PRODUCTS— PREFERENCES AND USER RECOMMENDATIONS

Format

Participants reviewed a set of heart health educational and other products and were asked to select the one print product that they liked the most. While a variety of print products were selected, participants' choice was based on the words or the messages on the product rather than the picture or the material format. When asked why a particular brochure was selected, participants clearly referred to the message and the precise words on the front of the brochure. The second point of attraction was the picture or the graphic design. The third and apparently minor point of attraction was the format of the document. Binding did not appear to be a significant factor, especially if the brochure provided information of interest. Many smokers selected information on how to stop smoking. Participants who were overweight selected information on heart healthy eating. Persons concerned about exercise chose brochures on physical activity. Some teens' selection process was based on graphics, pictures, and images as the first point of interest. One teen participant selected a product because he believed the images were, "What was happening, for real," including people walking down a city neighborhood street and another person smoking cigarettes. He felt the pictures were representative of his community. Male participants ages 15–18 selected a comic book inspired health brochure. One participant stated he would rather read a comic than a regular brochure. A female teen selected a teen focused brochure and stated she made this choice because it was especially made for teens. However, a few of the male teen participants' reaction to the same product was to ridicule the African American teen males who were pictured on the front cover. A statement which characterizes this reaction was, "I don't like him [person pictured]. He's ugly and he's cheesin' [smiling]. .and he has braces. What's wrong with you [the person pictured]?"

The facilitator asked the teen male participants why they didn't like the young men pictured, especially since they were African American. A youth male participant replied, "They don't have a bud [cigarette] or nothing. They have to be doing something negative to get my attention . . . or do something to catch my eye." The responses suggest that the young adolescent females were attracted to the teen male images, while the adolescent males felt that the male images were not representative of inner city male youth or not active enough to get their attention. A male youth participant had an opposing view to his peers and selected the same teen-focused product. He made this choice because the product would take a teen's point of view and address the problems of teens.

There was a tendency among participants to prefer larger products perceived as having more comprehensive information than smaller pamphlets. Persons who expressed interest in the pamphlets suggested that these materials should focus on various topics and lifestyle changes of interest. The participants stated that if these materials were placed in medical clinics, recreational centers, barbershops, beauty salons, grocery stores, convenience stores, churches, hospital emergency rooms, and on public transportation, they would likely pick up the materials for reading.

Creative Elements

In the process of assessing the cultural and creative elements for product appeal and relevance to African American public housing residents, it was clear that photographs of people and settings were overwhelmingly preferred by all audiences irrespective of age or gender. Positive comments were also made regarding artist illustrations which reflected family members participating in heart healthy activities. Minimal favorable comments were made regarding the line art drawings. One participant mentioned how the line art drawings were very graphic in depicting a person having a heart attack. Color preference varied among participants from the primary colors to bright colors such as red, green, yellow, and orange. Little preference was given to earth tones. One comment was made to include a red, black, and green color combination. This color scheme is often used to signify African American culture.

Reactions to Specific Content in Sample Products

Small group discussions with participants ages 18 and older felt that while a teen-focused magazine sample product did not target their demographic group, it would help teens learn healthy habits, demonstrating their interest in the health of younger generations. One comment was made that the teen focused magazine sample product resembled a specific religious denomination magazine and this created a negative reaction. One participant in the senior female group pointed out that a scene in a product was not realistic because no one would throw away their cigarettes and pick up an apple. Others mentioned that while it is good to eat the apple, no one would throw away cigarettes for an apple. Many participants felt that some brochures did not fully reflect the African American community based upon what they described as ambiguous racial ethnicity of the persons pictured in one product. A participant mentioned if the person is black then they should have black skin. The sample product referred included line art characters in which there was no shading-in of skin color in the black and white color scheme used.

When asked which brochure was least preferred, many persons identified a one page information sheet, and a heart health knowledge true and false test. These two products were text heavy with little graphics. A participant who did not find the heart health true and false test appealing stated that it reminded him of being in school. Participants also rejected products that addressed a health issue that was not pertinent to their personal health needs. For example, for nonsmokers that participated, the smoking cessation brochure was selected as least preferred. A comic book depicting an urban scene with African American characters received positive comments from several participants. Some participant mentioned that the images on the front of this comic book scene looked real—like their community.

Reading Level

For several of the sessions across all age and gender groups, participants needed assistance in completing the participant intake form. In one case, a senior female stated that she left her glasses and was unable to see the words. In other cases, persons indirectly alluded to the fact that they were unable to complete the form. Participants were requested to read a select portion in one of the books and provide a brief explanation of the information. Many participants were able to read the information and provide feedback and other attendees appeared to agree with what the opinion leaders stated. However, the facilitator remained cognizant of those participants that needed

assistance in completing the participant intake form and intentionally did not expose their literacy level. This finding implies the need for a variety of low-literacy materials.

XII. LIFE PRIORITIES AND GOALS

In an effort to link improved CVH to individuals' goals and priorities, participants were asked to share their life priorities and goals. Life priorities and goals were usually related to income, employment, home ownership, education, providing and caring for family and children, education, and health. Table 5 provides some of the goals cited by participants.

Table 5. Life Priorities and Goals Cited by Participants

- Living to obtain social security and pension
- Getting knee operation to work fulltime
- Taking care of health
- Becoming more independent
- Being free from pain
- Stopping smoking
- Having better things in life (good living and housing)
- Being able to get up in the morning and praise the Lord
- Furthering my education
- Getting life back on track

- Being alive
- Taking care of my family and children
- Living a life for Jesus
- Seeing my children reach their goals
- Keeping doctors' appointments
- Owning a home
- Having a job
- Providing for my family
- Getting money
- Staying off drugs and taking care of my family
- Having/buying a nice home

The adult male participants typically stated "providing for the family" or "getting a job" as a goal. In addition to caring for their children, female participants ages 19–54 were interested in completing their education and reaching career goals. The teen male and female participants cited that finishing high school and attending college were their priorities. Male teens mentioned playing college sports as a goal in addition to studying computer technology and masonry in college. Female teen participants identified that the professions they would like to have are pediatrician, lawyer, and business owner. Males in the ages 19–34 category mentioned obtaining the "American dream," which included a nice house with a white picket fence, nice car, providing for their family, and having a good, secure job. Participants describing this scenario talked about the lifestyles that accompany this image, including good health insurance and being able to send children to college. A few of these participants said that they needed to make changes in their current lifestyles before reaching these goals. One participant mentioned staying off drugs and alluded to his current participation in drug trafficking as a result of not being able to find a good, legal job.

Obtaining health insurance and addressing medical conditions were common life priorities among males ages 35–54, who described difficulties they experience in seeking public health insurance. Living a healthy life so that she could breathe was a priority for one senior female. Obtaining more health information, controlling blood pressure, and improving the quality of life were also mentioned as priorities. In addition, a few adult participants remarked that earlier in their life they had made mistakes. Some mentioned drug and alcohol abuse and their priorities were now to get their life back on track, eliminate drug and alcohol abuse, and reunite with their families. For the first

small group discussion, females ages 35–54, the "life priorities" question was asked last. However the process was modified and this question was asked first for later sessions.

XIII. SPECIAL CONSIDERATIONS/ISSUES BY AGE/ GENDER GROUP

There appeared to be no differences in CVH knowledge by age or gender. Knowledge is defined as session participants' ability to identify two or more CVD risk factors (clinical or behavioral) and knowledge of one or more heart attack or stroke signs. (Male and female participants ages 15–8 were not asked to identify heart attack and stroke signs.)

Individual participants did differ in current CVH practices, and usually this was not specific to a gender or age category, except in the case of teen males and females. Teen males were markedly more involved in more intensive and group forms of physical activity (basketball, football) in addition to walking, which was commonly cited across groups. Teen males were also more frequently involved in physical activity than other groups. Teen females were the only group where all participants were nonsmokers. This group was an exception as 88 percent of all participants positively identified smoking cigarettes on a participant intake form. Positive clinical diagnosis of CVD risk factors, high blood pressure, and high blood cholesterol appeared to be more prevalent among participants in ages 35 years and older. Two female participants ages 19-34 group mentioned having high blood pressure only during pregnancy. Heart healthy dietary practices also varied across and within small group discussions and varied by individual as well as based upon the specific dietary behavior. For example, a single participant may have indicated reduced salt consumption, but did not indicate reduced fried food consumption. In addition, some heart health behaviors that participants stated as current practices were not practiced consistently.

Attitudes and beliefs about adopting CVH promoting lifestyles also varied, but was not specific to a gender or age group. Some participants were opposed to adopting new heart healthy behaviors and stated no intention to consider change. However, many participants were contemplating or had made attempts to change, particularly with regard to smoking cessation, and had low levels of sustained smoking cessation. They mentioned barriers to success such as income, environmental and social triggers, and willpower.

With regard to social context, life situations, and outlook, some age and gender differences were apparent. Men and women ages 18 and older both identified family and children as foci of their lives but male participants felt that women had more responsibility for the health education and well-being of the family, especially younger children. For teen participants, life goals and foci were not around providing for family, but, rather, their personal futures including education and careers/professions. Males and females across age groups appeared to be concerned about the same community and social barriers. For example, both groups mentioned the stresses of their interpersonal and family life, poverty, joblessness, substance abuse, lack of adequate health care coverage, and lack of financial resources as barriers to improving their health. Women ages 18 and older, like their male counterparts, exhibited a general knowledge of the lifestyles that can contribute to improved heart health, but many stated that they lacked the willpower to create change in their personal or family life.

Participants appeared to be socially supportive and familiar with other participants who were members of their community. Many participants referred to others in the small group discussion as friends or neighbors. For example, in the women ages 35–54 group, one female stated that she had stopped smoking. She was challenged by

another participant who stated she had seen her smoking recently. The discussant went on to state that it was a good step to even "try" quitting smoking, even though she had relapsed. Men particularly in the ages 15–18 and the ages 19–34 age group were supportive of each other and demonstrated a sense of camaraderie. They described growing up together and knew each other's lifestyle and patterns. This observation implies that effective prevention and treatment measurement should include peer education.

The following age/gender profiles provide more contexts on promoting heart health among the demographic subpopulations of public housing.

Females Ages 15–18

The participants in this small group discussion expressed their personal goals and interests as well as their commitment to personal health. They were all nonsmokers, attending high school with a goal to graduate, engaged in exercise programs, and involved in the performing arts, such as singing and poetry. Participants within this session stated their future goals to become a pediatrician, own a law firm, and become a teacher. They understood the importance of remaining healthy in order to achieve these goals. These youth did not appear to be easily influenced by peers or discouraged by external factors in their community—although they identified factors such as drugs in their community as barriers to living a healthy life—and seemed to proactively seek educational and self-development opportunities.

As a sub group, females ages 15-18 exhibited high commitment to CVH lifestyles and cited their own current CVD primary prevention behaviors, including exercise, regular physical examinations, and abstaining from tobacco and alcohol consumption. Participants stated difficulty in adhering to some heart healthy dietary practice recommendations, including consuming smaller food portions, less calories, and reducing the amount of fried foods consumed. This group's current CVH behaviors are influenced by older adult family members (sister, parents, guardians, in-laws). Participants remarked that witnessing CVD and related diseases (heart attack and dialysis) of some family members due to CVD risk behaviors (smoking and alcohol consumption) influenced their own behaviors to not smoke cigarettes or drink alcoholic beverages. The parents and guardians of the participants in this group are also providing heart healthy lifestyles reinforcement and promotion by stocking their homes with lower fat items (1 and 2 percent milk) and encouraging healthy food consumption, and exercise. One participant stated that her sister encouraged her to become physically active, and they accompany each other regularly in physical activity.

Health education products that appealed to this group included products that would allow them to plan and monitor their heart health behaviors, like a calendar or planner. Participants preferred products that were targeted to their age demographic (teens). Participants preferred products that included photographs of people, but also showed preference for products using mixed media including stylized arts, animation, and graphics (3-D images). They also liked interactive products that might include fill-in-the-blank, quizzes, and other ways to test knowledge gained. Most participants in this group preferred a series product, as opposed to a single product. They felt it contained more information and was more interesting.

Table 6. Special Outreach and Education Considerations for Females Ages 15–18

- Highlight their current preventive behaviors (smoking and alcohol abstinence, physical activity) and encourage continuation
- Address barriers to adopting dietary heart health recommendations
- Incorporate creative expression and performing arts in recommended activities
- Link future goals for career and education to heart health lifestyles' messages

Males Ages 15-18

The participants in the males ages 15–18 years discussion group were generally informed about health and highly motivated to remain physically active. They expressed a great interest in physical activity, and group sports (basketball) appeared to be a part of the male bonding process.

Physical activity, especially group sports (basketball, football), was cited as an integral part of participants' everyday life. Participants remarked that they spend one or more hours a day, and sometimes a full day actively engaged in sports. Different from female participants in this age group, participants stated that they smoked cigarettes. They stated smoking helps them to deal with life stress. Participants in this group were actively reading food labels to ensure that what they eat is healthy. They mentioned looking at sodium, fat, and carbohydrates on food labels. However, participants were unwilling to eat smaller portions because they felt they were often engaged in vigorous physical activity and did not want to experience hunger. Participants in this group exhibited some interest and knowledge in physiological aspects of CVH, as one participant shared his knowledge about high blood pressure—that it involves increased heart rate when one is not active and increased blood flow. This interest was also revealed in participants' preferences for products that provide real anatomical pictures of the heart, for example.

Many of the male participants in this group lived with their mothers and received family support. Some stated that meals were prepared at home. They also indicated that they sometimes requested that food be prepared in heart healthy ways (baked). Participants welcomed heart health information and education and wanted to transform the communication method to one that would be of appeal to them—rap music. At the end of the session, the participants created a rap song called "Be Healthy." As with females, artistic outlets through rap music and poetry were cited. The participants were knowledgeable of heart disease and felt that it is important to live healthy now in order to be healthy as adults. However, as with the other small group discussions, health was not a common topic of spontaneous discussion

Product preferences of teen males also resembled those of teen females. They preferred colorful, engaging products that utilize creative graphic arts and 3-D. They preferred real photos, but also selected a product using animated characters in a comic format. Teen males were particularly affected by products that represent or resemble their community. One participant commented that a product that pictured a teen, African American male did not look real and that the male should be wearing a du-rag (head scarf) to reflect members of his community. Some teen males in this group also preferred products that deal with teen issues and are specifically made for teens. They also liked products in a series format.

Table 7. Special Outreach and Education Considerations for Males Ages 15–18

- Address smoking cessation, especially alternatives for stress relief
- Link sports performance to the broader CVH message
- Reflect the youth and public housing community cultural aesthetic in products
- Emphasize artistic and graphic elements in products

Females Ages 19–34

Participants in this age group appeared to be consumed with the challenges of child rearing. Many spoke of the stress level created by child rearing. Some participants stated that they had or presently have substance abuse challenges. Participants in this age demographic stated that they are the primary providers for their household and felt responsible for the health of their children and family. Many of these participants had not completed high school and were unemployed. Smoking was very prevalent and indicates some probable exposure of children to secondhand smoke. Some females stated they will go outside rather than smoke around their children. This suggests that a family focused approach targeted to household heads is key.

Participants varied in current CVH practices, including heart healthy diet, clinical risk factor control, and daily physical activity. A proportion of participants, however, stated they were currently not practicing heart health dietary recommendations (reduced fat, portion size control, reading food labels, cutting down on salt, eating foods with less calories). These participants stated that taste, experiencing hunger, and the body's nutritional needs for salt as reasons for not engaging in some heart healthy dietary recommendations. They also stated that they met the current physical activity recommendation of 30 minutes of physical activity daily, by caring for their children and household chores.

Participants believed that one's environment impacts heart disease, and the stress and demands of child rearing limits their ability to implement heart healthy lifestyles. They stated that their household and child care responsibilities leave no time for them to care for their own health.

Some participants who were smokers listed the cessation techniques they have tried or currently practice, including using nicotine patches and reducing the number of cigarettes smoked by purchasing single cigarettes rather than cigarette packages. While some cited they currently smoke and either did not desire or were not making attempts to quit, other participants stated activities to limit their children's exposure to cigarette smoke, including not smoking during pregnancy and not smoking indoors where children are present. Participants in this group also mentioned reproductive health issues that impact health, including their experience with weight gain while using birth control, and high blood pressure during pregnancy.

Participants preferred heart health information in the form of a comprehensive book compared to a series format. They believed that a single book product contained more information and was more user-friendly. Participants in this group were motivated by their children and products that emphasize the benefits of behaviors for their "children's sake" would be effective. Participants also stated that inspirational music and positive self-affirmations and sayings are motivational.

Table 8. Special Outreach and Education Considerations for Females Ages 19–34

- Focus on one's ability to improve the family's and especially children's health through heart health promoting lifestyles
- Provide tips and skills to incorporate heart health with the demands of childrearing
- Develop educational products that incorporate inspirational music and positive self-affirmations

Males Ages 19-34

Participants were concerned about their health as it related to their ability to care and provide for their family, but did not assign heart disease and heart health promoting lifestyles any higher priority or higher risk to them than other health outcomes, such as accidental and violent death. Several participants stated that they had not had a physical examination in several years. This population segment appeared to be largely concerned with managing a stressful daily life including critical matters such as joblessness and the ability to provide for their families. In some cases, the pressures of daily life lead to alternative risk behaviors such as illicit drug use. Similar to the female session within this age group, participants stated that their community environment was a source of stress, in particular police surveillance, and they cited stress as a heart disease risk factor. Participants were actively engaged in some heart healthy food consumption (fruits and vegetables, salt reduction) but were less willing to practice behaviors that can reduce fat and calorie consumption (lower-fat milk products, reading food labels, reducing chicken skin consumption)—even persons who self-identified as overweight, although the majority of participants were not in this category. Some participants stated that they are physically active, including group recreational sports. Participants indicated that the physical requirements of their work (lifting machinery, lifting people) provide them with additional physical activity.

Two separate group discussion sessions were conducted with male participants who fell within the ages 19–34 category. In one session, participants possessed knowledge of heart healthy lifestyles but their personal health care was not a primary concern unless they had experienced heart disease. Some participants felt the health of family members and children in particular was primarily the responsibility of their female partners, and in one case a participant stated that his older child (12 years) is responsible for the care and health of a younger sibling (5 years). In contrast, the second session within this age group had great concern regarding ensuring heart healthy habits for themselves and their children. One male participant in this group did the shopping and food preparation for the entire family, and was personally taking a regular regimen of vitamins for his personal health. Despite the high level of health consciousness expressed by this participant, smoking cessation was merely a "fleeting thought." The dichotomy of heart health and personal health behaviors in this session is illustrative of the diverse picture of the public housing population with regard to heart health and personal health attitudes and practices.

Participants in this group preferred heart health education products that were straight forward and provided the hard facts on heart disease. Some participants stated that products should be eye-catching and include a free gift inside as an incentive. Participants stated that products should speak to them on their terms and address their issues. Some participants also suggested graphic or shocking images to get one's

attention. One suggested imagery was of a person lying on the ground and another person standing over him holding a smoking gun. He stated that the content inside however would be about heart disease. Another participant suggested showing a graphic picture of a diseased lung.

Table 9. Special Outreach and Education Considerations for Males Ages 19–34

- Provide hard facts and statistics on this age groups' risk for heart disease
- Recognize "life survival" as a priority issue and link CVD prevention to this issue
- Develop eye-catching and hard-hitting imagery to relay the heart disease risk message

Females Ages 35-54

The participants of this age and gender demographic were concerned about health issues and the welfare of the family. Many participants smoked cigarettes. Some stated that they had a past history of substance abuse or are currently in drug rehabilitation programs. A participant mentioned suffering from depression and feeling that serious illness was inevitable for her (dialysis) because of having current health problems, including kidney disease and asthma. Many participants had chronic health conditions that required medical attention, and mentioned high blood pressure as one. Asthma and respiratory health conditions were mentioned by several participants in this group. Many participants were caretakers for their grandchildren and this activity consumed much of their time. Participants frequently mentioned stress and mental health issues as a barrier to their living healthier lives. For example, one participant stated that because of depression she is not at a healthy weight.

Participants reflected on their cooking and dietary practices and stated they were unhealthy. They stated that financial limitations are a barrier to consuming heart healthy diets. A participant described that she receives food stamps once at the beginning of the month. This necessitates buying foods that are on sale as well as buying foods that will last until the next month. These constraints reduce the amount of heart healthy food options, especially fresh produce. Participants in this group were very receptive to CVH education activities. Some participants specifically remarked that they needed assistance in planning meals and their diet. In response to one heart healthy lifestyle skill—reading food labels—participants in this group responded that reading food labels was not a behavior they practiced, except when they are unfamiliar or never have used the product.

Participants preferred products with positive images and messages. When selecting products, participants chose a youth-targeted product because the teens pictured were not surrounded by police. They felt this was a positive image. Females in this age group believed that younger females and teens are more knowledgeable and aware of health conditions and have valuable information to share with older women. Gospel music provided inspiration and words of wisdom for this group. They preferred products with "cheery" and bright colors.

Table 10. Special Outreach and Education Considerations for Females Ages 35–54

- Recognize comorbidities experienced and provide strategies for managing them
- Use intergenerational messages incorporating youth or young adults as messengers
- Provide skills for purchasing heart healthy foods on a limited budget which acknowledge the constraints of food assistance disbursement schedules
- Use positive and uplifting imagery in products as well as gospel and inspirational elements

Males Ages 35-54

Similar to the males ages 19–34, the males in this age group appeared to be burdened by addressing their basic needs (income, housing, jobs). Some stated that their health only became a concern for them after an adverse health problem was diagnosed. Many stated that they were not educated about health when they were young, and this was the reason for their earlier lack of concern. Some stated that they did not want to know their disease status—that knowing their status would just add to their stress. One participant stated his preference to not know his disease status. He went on to state that that if he knew he had heart disease, this would make him feel "miserable" and that he would rather find out his disease status after he "falls out" —the result of an acute cardiovascular event.

A proportion of participants indicated low intentions to incorporate preventive behaviors. Seeking medical attention tended to be more sporadic among participants and sought in cases when medical diagnoses have been provided and virtually nonexistent in the absence of obvious symptoms. The participants in the CVD risk factor session cited that their primary health responsibility was to maintain a regular medication regimen. If this was adequately done, the disease would diminish or complications would not arise. Even though participants stated that they would prefer lifestyle changes to taking medication, to cure and control disease, they placed emphasis on their need for prescription drugs. Some participants stated how generic medications were not as effective as brand name "real" medications. Health education message and activities must be crafted to incorporate therapeutic lifestyle and behavioral change with this group's current belief about the use of prescription drugs for improved health outcomes.

Health care insurance access was a major concern for participants in this group, especially participants with CVD risk factors who had suffered a CVD event. They described that health care access in particular, and social services in general, are especially difficult for African American males to obtain, especially when one has not reached the eligibility age for Social Security and Medicare benefits. One participant experienced a waiting period of over 1 year before receiving public medical assistance, while another participant described disparate treatment for black males when requesting and receiving free health care services at public facilities. The participant described being treated as if he were inferior while seeking services.

Participants were concerned about providing for the basic necessities of life, food, and shelter and, because of these basic needs, adopting new heart healthy behaviors held a lower priority. Also, some participants stated that their dietary behaviors were historical or learned behaviors. For example, one participant reacted to the recommendation of

reading food labels, that he does not read when going to the supermarket, and that he makes shopping decisions based upon what his mother customarily bought. Others commented that historical factors led to current health status and outcomes in African Americans, specifically slavery and the resulting dietary culture among many African Americans consisting of high fat and pork products. Many participants described a desire to gain control over their lives, including managing drug problems and generally getting their life back on track. Some participants in this group are making heart healthy lifestyle behavior changes including food and diet—in particular participants with diagnosed CVD. Those who had made attempts to quit smoking discussed that drinking alcohol stimulates their urge to smoke, as does being in the presence of someone smoking.

As with males ages 19–34, participants in this group believed that the care of children, including their health, is the responsibility of women. A participant also expressed an idea about what different types of households teach their children about health. He stated that a "nice" household teaches about these issues and he reflected that he and participants in the room did not come from "nice" households.

Participants preferred products with people pictured that they perceived looked "healthy" and desired to see African Americans in the product. Stronger preference was stated for a single book format over a series. Participants believed that information in materials should be current. Color preferences included red, gold tones, and purple.

Table 11. Special Outreach and Education Considerations for Male Ages 35–54

- Assist in referral to resources for health services
- Promote lifestyles as a component of managing CVD
- Encourage disease status knowledge—actions can be taken to manage disease

Females Ages 55 and Above

Some participants' outcome expectations were low regarding recommended behaviors that could improve their heart health. This was evidenced by a participant statement that heart attacks may be "destined" to happen. Several of the participants who smoked cigarettes were resistant to the recommendation to guit smoking. Some participants had low confidence in the ability of health facilities and physicians to address their health needs. Participants in this session reacted to some heart healthy behaviors as being problematic, in particular eating more fruits and vegetables. They stated that because fruits and vegetables spoil quickly, trying to consume more of these foods could be wasteful. One participants' response to being physically active was that she does not like to exercise (formal programs), but walks often in her everyday life. With regard to their current dietary practices, participants stated that they fry foods with lard and are currently not trimming fat from meats. They stated that they enjoy eating foods prepared this way. A participant described a home remedy to redress the harmful content in some foods she eats. She stated that in order to control high blood pressure, she drinks vinegar and water before eating ham. Dietary practices among participants in this group are a function of income. A participant stated that her shopping patterns and selections are guided by whether products are on sale. A similar statement was made by female participants in the ages 34–54 session.

In reaction to heart health recommendations, participants were concerned about the amount of new and changing information on healthy eating and food content. In response to this, one participant resolved to eat what she likes in moderation. Another participant attributed a CVD risk factor—high cholesterol—to the chemicals used in food manufacturing as well as the foods fed to animals that people then eat.

Some participants believed that in general they were not healthy due to the amount of medications they have to take to maintain their health. One participant described that some medications slow her down and make her feel drowsy. She believed this side effect was having an impact on her life because it limits her ability to be active. A participant made the observation that black women in particular take large amounts of medications, as compared to other demographics. Pain was a common health concern in this group and being free from pain was a life priority for one participant in this age group. Others believed that some amount or degree of pain is inevitable.

With regard to heart attack knowledge, one participant, an asthmatic, stated she suffered a heart attack but at the time believed it was an asthma attack. She stated that her heart attack symptoms were similar to an asthma attack, and because she was able walk during the event to the hospital, she did not believe she was having a heart attack.

Other concerns for this group were factors such as crime and environmental air quality. Many of the participants in this group discussed the impact of the area's construction (e.g., dust, poor air quality). Several mentioned personal and family experiences of persons with asthma and other breathing conditions. Despite the air quality and challenges to breathing, many of these women continue to smoke. Participants also believed that seniors in particular had higher amounts of stress than other age demographics, and this is affecting their CVH. However, participants cited a belief in the ability of God to intervene and change health outcomes and the use of prayer as a mechanism to deal with life stress.

Participants in this group preferred heart health products with positive messages and wanted their community to be represented in products (e.g., products that depict structural buildings and neighborhood environments which resemble their public housing neighborhood). Participants selected as their top choice sample products which depicted family scenes as well as images of youth that they perceived as positive. Color preferences included green, pastels and colors "of the rainbow." Participants stated that they would enjoy an audiocassette heart health education product format, one which included gospel music.

Table 12. Special Outreach and Education Considerations for Females Ages 55 and Above

- Address management of multiple health conditions including pain management
- Address prescription drug side effects
- Emphasize the importance of heart healthy diet
- Provide hard facts and statistics on the impact of lifestyle choices (diet, physical activity, smoking) to acute events
- Address beliefs about home remedies to control high blood pressure
- Address beliefs about food manufacturing and disease outcomes

Males Ages 55 and Above

Many of the participants in this session had experienced adverse health conditions (heart attack, vascular disease), but continue to smoke and consume alcohol. Several participants stated that smoking cessation was one of their life priorities. Tobacco and alcohol consumption, and adhering to medication regimens were heart health concerns identified by participants in this group. The participants in this group were able to state the components of a heart healthy lifestyle and indicated that taking medications is important and drinking alcohol is harmful. A participant cited that bars in the community create a barrier to adopting a more heart healthy lifestyle. The participants were, however, attempting to make heart healthy dietary choices, including reading labels and choosing to bake rather than fry foods, as compared to smoking cessation and reducing alcohol consumption. Participants stated that a source of stress in the community was that "young people" are killing each other, and this stress contributes to CVD.

Although participants identified medications as an important part of managing their health, adhering to drug regimens was a barrier, not only because of the difficulty in complying with medicine schedules, but the potential interactions from taking several medications simultaneously, and the interaction between some drugs and alcohol drinking. Participants expressed confidence that seeking medical advice from physicians and health centers can improve and help them to manage their health conditions. Participants were interested in accessing publicly funded health insurance programs for their health, but were unclear about how to access them. During the session an impromptu discussion ensued about health insurance options, Medicare, and Medicaid.

Participants preferred products that had pictures of healthy African Americans, and selected a product with African American youth that they perceived as positive, stating they want their grandchildren to look that way. A participant stated that the products should be attractive. Color preferences included black, green, and blue.

Table 13. Special Outreach and Education Considerations for Males Ages 55 and Above

- Focus on smoking cessation and reducing alcohol consumption
- Provide skills for managing prescription drug regimens
- Utilize formal health care settings to deliver health education as the medical system is trusted and considered reliable
- Develop products that incorporate intergenerational themes and positive images of youth

XIV. PARTICIPANT INTAKE FORM ANALYSIS

The participant intake form was revised in its presentation and content, including the exclusion of questions regarding income and public assistance, based on pretesting. Participants were given the revised form to complete prior to the commencement of the small group discussions. The majority of the forms were completed prior to the group discussions. When participants arrived late, the form was completed during the session. Some participants were unable to read or complete the form without assistance.

The analysis of the participant intake form yielded that participants provided similar written answers to questions as provided verbally during the actual discussion session in each category. A few participants during the discussions actually referred to the answers they had provided on the form. Health concerns identified on the participant intake form were the same as small group discussion oral responses. Participants stated on their forms similar concepts of health as stated during the oral discussions including "to be alive," "to care for my family," and "being able to get up every day." The major health concerns listed on the participant intake form were again similar to the oral responses provided during discussion sessions and included high blood pressure, cancer and stroke. A few participants listed HIV/AIDS as a major health concern, which was not mentioned as often during the oral discussion. The answers provided during the oral discussion were more descriptive than responses in written form. Few participants appeared to change their answers as a result of peer influence.

XV. TOWN HALL MEETINGS

The final phase of the project was the implementation of town hall meetings. The initial objective of the town hall meetings was to inform the community about the consumer assessment effort in order to garner interest and participation of public housing residents prior to conducting the small group discussions. The objective was modified to adhere to the small group discussion project timeline and was used as a forum to share preliminary results of the discussions. As described earlier in this summary report, public housing resident leaders and trained resident recruiters informed residents and garnered participation in the project.

The town hall meetings were conducted after the small group discussions were completed in September 2002. (See table 4 below). Recruiters disseminated posters and fliers throughout the various targeted communities and to encouraged attendance. The primary purpose was then to share the process, providing an update on the findings and information on CVH among residents. This was also an opportunity for community members and leaders to share ideas, concerns, or issues related to the effort. The town hall meetings were held on the dates listed below.

Table 14. Dates and Locations of Town Hall Meetings	
Date	Place
September 5, 2002	Douglas Homes
September 6, 2002	Cherry Hill Homes
September 9, 2002	O'Donnell Heights
September 13, 2002	Wyman House

Attendance

The attendance at each town hall meeting was less than expected. Based upon the recruitment effort, the intent was to galvanize many persons within the community to attend. The first town hall meeting had 15 persons in attendance while the final town hall meeting had 5 persons in attendance. As was revealed during the meeting agenda, some town hall meeting attendees believed that because the financial incentive of \$15 offered for participation in the small group discussions was not offered during the town hall meeting, attendance was low. Some participants suggested that incentives like door prizes be provided if financial incentives are not.

Agenda

The purpose of the town hall meeting was to provide the community preliminary feedback on the result of the small group discussions. Project collaborators shared the activity process, information obtained during the small group discussions, responses and key issues discussed during the small group discussions, as well as providing an additional opportunity for community members to vocalize their perspective on CVH issues in their community. The agenda provided an opportunity for HABC leadership to restate its commitment to programs to improve the quality of life for residents. Each town hall meeting also provided an opportunity for a member of the community to share his/her experience with CVH. In two town hall meetings, participants of the small group discussions shared their personal experiences with heart disease and vascular disease.

The agenda was flexible and permitted opportunities for residents to share information throughout the session.

Comments and Recommendations from the Participants

The comments and recommendations from the participants of the town hall meetings were very similar to the information received during the small group discussions. Table 15 provides the comments and concerns shared during the town hall meetings:

Table 15. Town Hall Meeting Participant Comments and Recommendations

- Improve the availability of healthy food choices at neighborhood grocery stores
- Remedy the lack of nutrition and health education programs and materials available to residents
- Provide information on healthy recipes and menus
- Provide onsite blood pressure monitoring services to residents
- Improve availability of medical services in public housing neighborhoods
- Increase the availability of healthy alternatives to the current mobile food trucks in community that serve candy, for example
- Improve computer services for residents
- Provide financial incentives to attend the town hall meeting
- Provide transportation for persons to attend the town hall meeting

XVI. SUMMARY RECOMMENDATIONS FOR TARGETED CARDIOVASCULAR HEALTH OUTREACH AND EDUCATION EFFORTS IN A PUBLIC HOUSING SETTING

The following tables are tailored outreach and education concepts based on the findings from this consumer assessment. These recommendations are put forth to provide cultural and contextual enhancements of the existing science-based comprehensive national guidelines for cardiovascular health education to reduce CVD morbidity and mortality nationally—the basis of the national education programs of the NHLBI.

Table 16. Target Audiences

- Family as a unit for CVH behavior change
- Household heads and child caretakers as messengers and key actors in family behavior change
- Male peer-to-peer education
- Young adults (ages 15–18) as a unique and specially targeted population

Table 17. Scope of Heart Health and Heart Disease Information

- Messages specific to age and life stage (senior, teen, child caretaker)
- Primary prevention and heart healthy lifestyles
- Management and control of diagnosed clinical risk factors and prevention of CVD events (including prevention of recurrent acute events) through therapeutic lifestyle change in conjunction with prescribed drugs
- Management of multiple CVH and other health conditions

Table 18. Heart Health Messages of Emphasis

- Tobacco cessation as a major behavior change at the individual, home, family and, community level
- Coping skills and stress management
- Heart healthy diet and nutrition information for limited budgets
- Address beliefs about food production (chemical in foods)
- Clinical diagnosis of CVD and CVD risk factor status

Table 19. Tone

- Factual information and statistics to support and validate heart health claims and recommendations
- Straight forward and direct information
- Specific cardiovascular lifestyle plans to meet individuals' needs and readiness levels

Table 20. Preferred Delivery Channels

- Peer/family member/neighbor CVH educators
- Television and radio
- Heart health-related education models and displays (e.g., life size model of diseased lung or heart)
- Formal health facilities and health care providers
- Local community outlets (public housing development bulletin boards, billboards, bus placards)
- Local schools
- Heart health information kiosks/product information displays in local community venues (barber and beauty salons, bus stops, churches, convenience stores, recreational centers)

Table 21. Motivations

- The welfare of family and especially children (providing for health and other needs)
- Reaching life goals and priorities
- Living a life for God
- Leading a productive life

Table 22. Content and Creative Considerations

- Content written for various literacy levels (including low literacy)
- Depict the public housing environment (building structures and neighborhood attributes, aesthetics, and style of people pictured, e.g., clothing worn)
- Convey messages using contemporary formats (e.g., rap, R&B, and oldies music)
- Convey positive and healthy images of youth, families, and communities
- Utilize faith, God, and gospel music as cultural elements of products
- Graphic and visual presentations of heart health messages, behaviors, and disease

Table 23. Outreach Activities at Public Housing Sites

- Heart health peer education training
- Smoking cessation classes and support groups
- Nutrition education (cooking demonstrations, grocery shopping planning, product selection)
- Community walking programs
- Group sports programs
- Heart health programming developed for adult and youth participants (with particular viability for participation by mothers with young children)

Table 24. Print Product Preferences

- Brief motivational and instructional heart health behaviors information in hanging display format for the home
- Products to chart progress or one's heart health behavioral change plan
- Comprehensive information in series format to address CVD risk factors

XVII. CONCLUSION

The comments made during the small group discussions suggest that programs targeting heart healthy lifestyles adoption for the public housing community population must address the various stages of readiness to adopt heart healthy behavior that are diverse and cross age and gender demographic lines. One behavior, cigarette smoking, is pervasive regardless of demographic (excluding teen females) subgroup and, accordingly, smoking cessation is a critical element of a heart health campaign for this audience.

Stress, from environmental and personal stimuli, was a major barrier to improving health cited by participants, including teens. Heart healthy dietary behaviors are not as consistent across age and gender groups nor within a homogenous demographic (e.g., females ages 19–34). Many discussants expressed readiness to adopt and maintain heart healthy diets, as shown by some participants' requests for nutrition education classes. However, there were as many discussants with an opposing practice or attitude regarding heart healthy diets who were resistant to change or to consistently adopting heart healthy dietary recommendations. Physical activity, current behaviors, and behavior change readiness also were functions of demographic groups. Although the majority of participants, irrespective of age and gender status, cited walking as their main means of physical activity, males ages 15–34 years cited sports, exercise programs, and the requirements of their occupation as additional sources of physical activity. Females ages 19 and older cited child care and housework.

Based on these findings, there are some content emphasis areas, smoking and stress in particular, that must be addressed in a CVD education program for public housing residents. With regard to other heart health topics, including managing CVD clinical risk factors, and dietary and physical activity behaviors, heart health education should meet the individuals' needs and be specific to their readiness level while addressing the socioeconomic and environmental barriers described by the audience.

APPENDICES

Appendix A: Recruitment Criteria

Public housing quadrant location	Equally divided among the four quadrants (North, South, East and West)
	(11010), 0000)
Work Status (adult and senior women and men sessions only, not youth)	2–3 participants who are employed per session
Household composition—children under 18	Half participants with children under age 18 years living in household
High school graduate or GED	 Half participants without high school diploma or GED Half with at least a high school diploma or GED
Heart disease risk factors session for adult men ages 35–54	For the sessions recruiting persons with risk factors, recruit 9 men between ages 35–54 who have all said yes to at least one of the following: - Have ever had a heart attack or stroke - Have been told they have high blood pressure - Have been told they have high blood cholesterol - Smoke
No heart disease or risk factors session for adult men ages 35–54	For the sessions recruiting persons without risk factors, recruit 9 men between 35 and 54 years who have all said no to all of the following: - Have had a heart attack or stroke - Have been told they have high blood pressure - Have been told they have high blood cholesterol - Smoke
Heart disease or risk factors session for adult women ages 35–54	For the sessions recruiting persons with risk factors, recruit 9 women between ages 35–54 who have all said yes to at least one of the following • Have had a heart attack or stroke • Have been told they have high blood pressure • Have been told they have high blood cholesterol • Smoke

No heart disease or risk factors session for adult women ages 35–54	For the sessions recruiting persons without risk factors, recruit 9 women between ages 35– 54 who have all said no to all of the following • Have had a heart attack or stroke • Have been told they have high blood pressure • Have been told they have high blood cholesterol • Smoke
Heart disease and stroke and risk factors	Half participants who responded Yes and half respondents who responded No to the following: Have had a heart attack or stroke Have been told they have high blood pressure Have been told they have high blood cholesterol Smoke
CVD event (except youth session)	3 participants who have had a heart attack or stroke
HABC staff session	At least 3 participants who have not been involved in the BCCHP (i.e., attended September 24, 2001 Strategy Development Workshop, attended planning meeting at Morgan State University or HABC Pleasant View Gardens, attended RAB meeting where NHLBI representatives presented information)
Residents Sessions	At least 3 participants who have not been involved in the BCCHP (i.e., attended September 24, 2001 Strategy Development Workshop, attended planning meeting at Morgan State University or HABC Pleasant View Gardens, attended RAB meeting where NHLBI representatives presented information)
Youth males ages 15–18	2 participants for each age (age 15, age 16, age 17, age 19)
Youth female ages 15–18	2 participants for each age (age 15, age 16, age 17, age 19)
Adult men ages 19–34	No more than 3 participants from each of the following age groupings: ages 19–24 ages 25–29 ages 30–34

Adult women ages 19–34	No more than 3 participants from each of the following age groupings: ages 19–24 ages 25–29 ages 30–34
Adult men ages 35–54	At least 2 participants from each of the following age groupings: ages 35–39 ages 40–44 ages 44–49 ages 50–54
Adult women ages 35–54	At least 2 participants from each of the following age groupings: ages 35–39 ages 40–44 ages 44–49 ages 50-54
Senior males ages 55+	No more than 3 participants from each of the following age groupings: ages 55-64 ages 64-74 ages 75+
Senior females ages 55+	No more than 3 participants from each of the following age groupings: ages 55–64 ages 64–74 ages 75+

Appendix B: Resident Recruiter Training Agenda

1. Have each recruiter sign in

2. Welcome Karolyn Banks (HABC)

Jean Drummond 3. Introduction of facilitators Jean Drummond

4. Icebreaker

5. Pass out folders

6. Purpose of the meeting Avon Alexander

7. Review of the NHLBI/HABC/HCDI project

a. Goal of the project b. Partners in the project

c. Timeframe for completion of the project

8. Discuss criteria for focus groups and town halls Avon Alexander

9. Role of the recruiters

a. Process

1. Recruitment function

2. Outreach strategies

3. Script

4. Use of screening information

b. Cofacilitator function

10. Discuss payment criteria for recruiters Avon Alexander

Appendix C:

Resident Only Core Discussion Guide

The following guide is used for females ages 19–34 and serves as the core discussion guide. Supplemental questions for all other sessions follow.

Section I. Life Priorities and Health and Social Environment in Public Housing I want to ask you about some life goals or priorities that you have. Tell me the three most important life priorities and goals you have.

Note: If no responses, give the following examples

- Being a faithful servant to God
- Being happy
- Being healthy
- Having a good job
- Keeping my children safe
- Living a long life
- Making good money
- Moving out of public housing
- Owning my own home
- Preparing my children (grandchildren) so they can have a good life
- Seeing the lives of all African Americans improve

For the goals you've mentioned how do you think improving your health or the health of your family can help you reach your goals and priorities?

Section II. Current Health Status, Behaviors, and Lifestyles

- When do you think about your health?
- Describe a person who is healthy: What do they look like? What do they do?
- Do you feel that you are a healthy person? Explain.
- What health conditions or diseases do you fear? Why?
- Do you feel that you are in control of your health? Why or why not?
- Are there things that you do right now to take care of your health? What do you do? (behaviors)
- Let's talk about your everyday life:
 - Tell me about the exercise you get during your regular day.
 - What foods do you usually eat and drink?
 - Do you have meals with others or mostly alone?
- If you are not feeling well and don't know what the problem is, what do you do? (health-seeking behaviors)
- Are there "home remedies" or ways to be in good health that do not use medicine, prescription drugs, doctors, nurses, or hospitals? (probing for holistic, home remedies, non-traditional healing, spirituality)
- Who do you think is the most reliable person or place for health information?
- Are there people in your community who you feel have a lot of knowledge about programs and activities that can benefit you? Who are those people?
- If you have children that are minors (under age 18), what do you feel you can do to help them be healthy?
- Who in your home do you turn to when you are not feeling well?

- In your home, who is responsible for cooking? Shopping for food?
- What are some times during the day or week that you find the time to do something just for you? What do you do?

Section III. Heart Health Knowledge

Heart Disease

- What is heart disease? (knowledge)
 - Who can get heart disease? (individual risk)
 - Is heart disease affecting your community? How? (perception)

Heart Attack

Say: Heart attack can happen to anyone.

What are the signs that tell someone they are having a heart attack? (knowledge)

Stroke

Say: Stroke can happen to anyone.

What are the signs that tell someone they are having a stroke? (knowledge)

Heart Disease Prevention

 What are some things that you can do so you do not get heart disease? (behavioral skills)

Risk Factors

Say: There are some health conditions and behaviors that can put people at risk for heart disease. Tell me some of those things.

Probe the following, if not mentioned.

- Tell me what you have heard about (knowledge):
 - High blood pressure (ask about causes)
 - High cholesterol (ask about causes)
 - Being overweight or obese (ask about causes)
 - Physical activity/exercise
 - Smoking
 - Alcohol
 - Drugs
 - High stress levels
- Tell me if you think the following plays a role in whether you have heart disease:
 - Having had a previous heart attack or stroke
 - Having a member or members of your family who have been diagnosed with heart disease or have had a heart attack or stroke
 - Diabetes

Section IV. Barriers and Motivators to Recommended Heart Healthy Lifestyle and Behavior Change

- What are some things that you feel get in the way of your living a healthy life?
- What do you need to live a healthy life?

Say: There are ways of choosing and cooking foods that can help you to have a healthy heart. I am going to go through a few of these and will ask you a few questions.

- Cutting down on the amount of salt you use
 - What do you think about this? (Probe to see whether participants think this is feasible or realistic based on the current lifestyle.)
 - Have you tried to do this? Why did you decide to try this? What did you do?
 - Are you still doing this? Why or why not?
 - What would help you to continue to do this or to start doing this?
 - What would prevent you from doing this?
- Eating smaller portions of food
 - What do you think about this? (Probe to see whether participants think this is feasible or realistic based on the current lifestyle.)
 - Have you tried to do this? Why did you decide to try this? What did you do?
 - Are you still doing this? Why or why not?
 - What would help you to continue to do this or to start doing this?
 - What would prevent you from doing this?
- Choosing foods lower in fat (for example trimming fat off of meats before cooking, using fat-free/skim milk)
 - What do you think about this? (Probe to see whether participants think this is feasible or realistic based on the current lifestyle.)
 - Have you tried to do this? Why did you decide to try this? What did you do?
 - Are you still doing this? Why or why not?
 - What would help you to continue to do this or to start doing this?
 - What would prevent you from doing this?
- Reading food labels to choose foods when you buy them
 - What do you think about this? (Probe to see whether participants think this is feasible or realistic based on the current lifestyle.)
 - Have you tried to do this? Why did you decide to try this? What did you do?
 - Are you still doing this? Why or why not?
 - What would help you to continue to do this or to start doing this?
 - What would prevent you from doing this?
- Choosing foods with less calories
 - What do you think about this? (Probe to see whether participants think this is feasible or realistic based on the current lifestyle.)
 - Have you tried to do this? Why did you decide to try this? What did you do?
 - Are you still doing this? Why or why not?
 - What would help you to continue to do this or to start doing this?
 - What would prevent you from doing this?

- Reducing the amount of fried foods you eat
 - What do you think about this? (Probe to see whether participants think this is feasible or realistic based on the current lifestyle.)
 - Have you tried to do this? Why did you decide to try this? What did you do?
 - Are you still doing this? Why or why not?
 - What would help you to continue to do this or to start doing this?
 - What would prevent you from doing this?
- Preparing more of your meals at home (eating out less)
 - What do you think about this? (Probe to see whether participants think this is feasible or realistic based on the current lifestyle.)
 - Have you tried to do this? Why did you decide to try this? What did you do?
 - Are you still doing this? Why or why not?
 - What would help you to continue to do this or to start doing this?
 - What would prevent you from doing this?
- Eating more fruits and vegetables every day
 - What do you think about this? (Probe to see whether participants think this is feasible or realistic based on the current lifestyle.)
 - Have you tried to do this? Why did you decide to try this? What did you do?
 - Are you still doing this? Why or why not?
 - What would help you to continue to do this or to start doing this?
 - What would prevent you from doing this?

Say: Being physically active at least 30 minutes every day is a recommendation for improving the health of your heart.

- What do you think about this? (Probe to see whether participants think this is feasible or realistic based on the current lifestyle.)
- Have you tried to do this? Why did you decide to try this? What did you do?
- Are you still doing this? Why or why not?
- What would help you to continue to do this or to start doing this?
- What would prevent you from doing this?

Say: If you have high blood pressure, it is recommended that you lower your blood pressure.

- Does anyone have high blood pressure?
- Have you tried to lower it?
- What did you do to try and lower your blood pressure?
- Are you still doing this? Why or why not?
- What would help you to continue to do this or to start doing this?
- What would prevent you from doing this?

Say: If you have high cholesterol, it is recommended that you lower your cholesterol.

- Does anyone have high cholesterol?
- Have you tried to lower it?
- What did you do to try and lower your blood pressure?
- Are you still doing this? Why or why not?
- What would help you to continue to do this or to start doing this?
- What would prevent you from doing this?

Say: If you smoke cigarettes, it is recommended that you quit smoking to improve your heart health.

- Does anyone smoke?
- Have you tried to guit?
- What did you do?
- Are you still doing this? Why or why not?
- What would help you to continue to do this or to start doing this?
- What would prevent you from doing this?

Say: Maintaining a healthy weight is recommended to improve your heart health and losing weight if you are overweight is recommended:

- What do you think about this? (Probe to see whether participants think this is feasible or realistic based on the current lifestyle.)
- Have you tried to this? Why did you decide to try this? What did you do?
- Are you still doing this? Why or why not?
- What would help you to continue to do this or to start doing this?
- What would prevent you from doing this?

Section V. Product Development Questions

- What would remind you every day to take care of your health? Probe:
 - Would a brochure, poster, letter, newsletter, be helpful?
 - What would it look like?
 - Where would you most likely see it?
 - Where would you keep it (your pocket/purse, book bag, a place in your house)? Where (at work, your building, school, church, etc.)?
- Other than brochures or pamphlets, how would you like to get information about taking care of your health? Probe, if not mentioned:
 - Audiocassette
 - Video
 - Computer/Internet
- What are some "words of wisdom," sayings, songs, or stories about feeling good or being healthy that you agree with or follow?
- We are looking for a name for a program made especially for African Americans, to let us know about how we can protect and improve the health of our hearts. This name will be shown on pamphlets, brochures, posters, and other information. The name should get your attention and let you know that it addresses the needs and concerns of African Americans. What names do you suggest?
 - We have a few sample names. Tell me if you like any of the following names:
 - Keep the Beat Going
 - The Beat Goes On
 - With Every Beat
 - Keeping Hearts Alive
 - Our Hearts, Our Power
 - Healthy Hearts and Homes
 - Our Hearts, Our Homes
 - We Have Heart
 - Heart Knowledge is Power
 - Know Your Heart

Say: Now we will review some sample materials.

Format

Note: Please give participants an opportunity to peruse these products. The purpose of this review is to assess preferences for different formats (pamphlets, tri-fold, spiral bound notebook, magazines, etc.)

Sample Products

- Use the following booklets/flyers
 - African American Seven-Easy-to-Read Booklets (show the set)
 - Eating to Lower Your High Blood Pressure
 - Healthy Heart Handbook for Women
 - Personal Wellness Record
 - Healthy Heart IQ
- Magazine (inquire about participants receptivity to a magazine-style product containing health information targeted to African Americans to be distributed periodically)
 - Use "In Teen"

Ask the following questions:

- Which of these publications do you the like the best? Why?
- Which of these publications do you like the least? Why?
- Do you think this publication is talking to you? Explain.
- Do you think this publication is talking to people in your community? Explain.
- What would you add or take away from this publication to make it more appealing to you?

Creative Elements

Note: Please ask participants to focus on the visual presentation (mainly artwork) or photos. The purpose of this review is to assess participants' preferences for use of photos, line art, or artist illustrations.

Sample Products

- Real photos
 - Use NHLBI/HABC product titled "Renew Your Life Now—Stop Smoking."
 Note: Please select the man and child cover for male sessions and the woman cover for female sessions.
 - Use product titled "WIN—Improving Your Health: Tips for African American Men and Women."
- Line art
 - Use page titled, "What Can I Do If There are Problems in the Family Because of Asthma?"
- Artist Illustrations
 - Use publication titled "Yourself and Your Family" artwork examples (pages 2,4,9,11,12)
 - Use NHLBI Seven Easy-to-Read pamphlets titled "Protect Your Heart"
- Cartoon
 - Use NHLBI publication "Do You Know Your Numbers—Understanding High Blood Pressure" (page 11 and 12)

The following are the probing questions to ask:

- What do you think of this picture (show artist illustration)?
- What do you think of this picture (show photos)?
- What do you think of this picture (show line art)?
- What do you think of this picture (show cartoon)?
- What would you add or take away from this publication to make it more appealing to you?

Reading Levels

Note: Ask participant to read the text (on their own). The purpose of this assessment is to take an initial look at participants' reading level preferences.

Sample Products

- 8th grade reading level
 - Use product titled, "Heart Healthy Handbook for Women" pages 52 and 53 (women sessions only)
 - Use product "Act in Time to Heart Attack Signs" pamphlet
- Easy-to-read/6th grade reading level
 - Use NHLBI product pamphlet titled "Protect Your Heart—Prevent High Blood Pressure (page 6)

- Low literacy
 - Use "Act in Time to Heart Attack Signs" double-sided sheet (use side one only)
 - Use product titled "Eat Right to Lower Your High Blood Pressure" (page 9)

Ask the following probing questions:

- Which of these publications do you the like the best? Why?
- Which of these publications do you like the least? Why?
- Do you think this publication is talking to you? Explain.
- Do you think this publication is talking to people in your community? Explain.

Session-Specific Supplemental Questions

Males ages 15-18

- Do you think the things you do now (health wise, for example what you eat), as a young person can affect your health when you are older? Explain
- When talking to your friends, do any health topics come up? What topics? Why?
- Do your parents or other adults influence the way you think about your health?
- In your home do you have a say in what's cooked or prepared to eat? Shopping for food?
- How important do you think your heart in your body is to your health? Explain.
- If someone has heart disease, what would that person look like?
- Has anyone known someone or heard about someone having a heart attack?
 - If you know someone, what is his or her life like after the heart attack?
 - If you heard about it, what have you heard?
 - Has this changed the way you think about your own health?
- Has anyone known or heard about someone having a stroke?
 - If you know someone, what is their life like after the stroke
 - If you heard about it, what have you heard?
 - Has this changed the way you think about your own health?
- There are a lot of advertisements about the health risks posed to young people. Some examples include smoking and drug abuse.
 - What do you like or dislike about them? What would you change about them?

Females ages 15–18

- Do you think the things you do now (health wise, for example what you eat), as a young person can affect your health when you are older? Explain
- When talking to your friends, do any health topics come up? What topics? Why?
- If someone has heart disease, what would that person look like?
- Has anyone known someone or heard about someone having a heart attack?
 - If you know someone, what is his or her life like after the heart attack?
 - If you heard about it, what have you heard?
 - Has this changed the way you think about your own health?
- Has anyone known or heard about someone having a stroke?
 - If you know someone, what is their life like after the stroke?
 - If you heard about it, what have you heard?
 - Has this changed the way you think about your own health?
- What would encourage or make you change the way you live your life (the way you eat, exercising, smoking, drinking alcohol)?
- There are a lot of advertisements about the health risks posed to young people.
 Some examples include smoking and drug abuse.
 - What do you like or dislike about them? What would you change about them?

Males ages 35-54 with CVD risk factors only

- Do you think a person with a health condition (like high blood pressure, suffered a heart attack or stroke) can live a healthy life? Explain.
- Do you feel you can do something about the health condition(s) that you have?
 Explain.
- What would you do if you or someone in your family had a health emergency?
- Have you or anyone in your home ever taken CPR or First Aid classes?
- If given the choice, would you prefer to take pills or to change your lifestyle (diet, exercise) to take care of your condition? Why?
- What are some of the things that you feel get in the way of you treating or managing your health condition?

Females ages 55 years and above

- As a senior, what do you feel is the hardest part of trying to stay healthy? Explain.
- What is your favorite dish (meal)?
- Do you cook and food shop for yourself? If not, who helps you, and do you have a say in what is prepared or what food is bought?

Females ages 35–54 years with risk factors only

- Do you feel that you are healthy though you have or have had health problems in the past? Explain.
- What health problems are you most worried about?
 - Did you have this same concern before having a diagnosed heart disease problem (high blood pressure, high cholesterol, heart attack or stroke)?
- Do you feel you can reverse the health condition(s) you have?
- Do you feel you can prevent the conditions you suffered from in the past from happening again? Explain.
- Where can you now go to get health information?
- How do you find your life after having suffered a heart attack or stroke?

Females ages 35–54 without risk factors only

- What does living a healthy lifestyle mean to you?
- If you feel good, should you be concerned about your health?
- Do you feel you can make changes in your life to improve your health? Explain.
- What helps you to get through tough days?
- If you know someone who has had a heart attack or stroke, how do you think their life has changed since the heart attack or stroke happened?

Males ages 19–34 (session 1)

- What health conditions are you concerned will affect you someday? Explain.
- What do you do everyday to take care of your health?
- Who do you turn to for advice?
- What do you do to relax—to take away stress or anger?
- Can drugs affect the health of your heart? How?

Females ages 19-34 (session 2)

- Is there somewhere you can go for free health information? If yes, where?
- Who do you trust to talk about your health problems?
- What would help you to protect the health of your heart?
- What do you think prevents residents of public housing from protecting the health of their hearts?
- What type of materials would help you educate your children (about heart health)?

Males ages 35–54 without risk factors only

- What have you done when you or anyone in your family has had a health emergency? If you have not had a health emergency, what would you do?
- Are there ways of taking care of your health and home that you have passed on to your children or family members? What information have you passed on to them?
- What motivates you to keep going, even when you have had a hard day?
- What has gotten you through a difficult time in your life?

Males ages 19–34 (session 2)

- How do you protect your health?
- Who in your home makes sure that family members are in good health?
- What would cause you to change the way you live your life (health wise)?
- What can help someone to live a long and healthy life?
- What are some things that would help residents of public housing protect the health of their hearts?

Males ages 55 and above

- How would you rate your health (5 being best and 1 being the worst)?
- As a senior what do you feel is the hardest part of trying to stay healthy?
- Where do you go for health care services?
- Who in your family or community do you turn to when you are not feeling well?
- What are some foods that you like to keep in your home?
- What would you change in your community or neighborhood so that you can live a healthier life?

Appendix D: HABC Staff Discussion Guide

A. Current Health Status and Behaviors

- What are the biggest health concerns of public housing residents?
- Why do you think that public housing residents have these health concerns?
- Are their things that residents do right now, on their own, to maintain their heart health? What are those things?
- What are some of the life priorities of public housing residents? What are their aspirations/goals?
- When ranking life priorities, where do you think residents rank being in good health? Why?
- Tell me how you think a health program can be linked to and support residents' life priorities and goals?

B. Managing Heart Health Risk Factors

Are residents dealing with heart health conditions or risk factors (e.g., high blood pressure, high cholesterol, stroke, heart attack)?

Probe

- What do they do to manage these conditions?
- How well do you think they are managing these conditions?
- What would help them to manage these conditions or risk factors better?
- Can you tell me about the diets of the residents in public housing? What kinds of foods do you see residents eating (for breakfast, for lunch, for dinner)?
- In general, what kind of physical activity do you see residents involved in? Probe
 - What do residents do for fun?
 - What activities do residents do together (e.g., walk)?
- What are some of the barriers that might keep public housing residents from:
 - Being physically active each day
 - Having a heart healthy diet (low in fat and cholesterol, consuming five fruits and vegetables each day, reducing portion size)
 - Lowering their blood pressure (if they have high blood pressure)

C. Role of HABC Staff in Health Initiatives

- What role do you think you can play in promoting heart healthy lifestyles among residents?
- What would help you in promoting and maintaining the interest of residents in an ongoing CVH program?

D. Experience with Resident Programs

- How active are most residents in the services, programs (training), and events (social) that are offered to them by HABC? Probe:
 - Which programs?
 - Why do you think residents are active in these programs?
 - What are some of the reasons residents stop attending resident service programs?

- What kinds of materials, or learning aids (posters, pamphlets, games, songs) have you found to be most successful in promoting your programs and getting residents interested and involved? Why? Probe
 - Describe these materials (length, size, artwork).
- When you have been involved in activities to distribute information widely throughout developments (e.g., lease renewal/certifications, information on the dangers of lead poisoning) what are some successful strategies? What has not worked?
- What are the specific activities you found to be most successful and enjoyed by residents in your program offerings? Why?

Appendix E: Resident Leader Discussion Guide

A. Current Health Status and Behaviors

- What are the biggest health concerns of public housing residents?
- Why do you think that residents have these health concerns?
- Are there things that residents do right now, on their own, to maintain their health? What are those things?
- What are some of the life priorities of public housing residents? What are their aspirations/goals?
- When ranking life priorities, where do you think residents rank being in good health? Why?
- Tell me how you think a health program can be linked to and support residents' life priorities and goals?
- Do residents ask you for health information? What is the key source of health information among public housing resident?

B. Managing Heart Health Risk Factors

- Are residents dealing with heart health conditions or risk factors? (i.e., high blood pressure, high cholesterol, stroke, heart attack)
 Probe:
 - What do they do to manage these conditions?
 - How well do you think they are managing these conditions?
 - What would help them to manage these conditions or risk factors better?
- Can you tell me about the diets of the residents in public housing? What kinds of foods do you see residents eating (for breakfast, for lunch, for dinner)?
- In general, what kinds of physical activity do you see residents involved in? Probe:
 - What do residents do for fun?
 - What activities do residents do together (walk)?
- What are some of the barriers that might keep public housing residents from
 - Being physically active each day
 - Having a heart healthy diet (low in fat and cholesterol, consuming five fruits and vegetables each day, reducing portion size)
 - Lowering their blood pressure (if they have high blood pressure)

C. Experience with Resident Participation

How active are most residents in the activities and events (social) that are offered by the Tenant Council?

Probe:

- Which programs?
- Why do you think some residents participate in these activities?
- Why do you think some residents do not participate in these activities?
- What are some of the reasons residents stop attending?
- What kinds of materials, or teaching or training aids (posters, pamphlets, games, songs) have you found to be most successful in your offerings? Describe the materials (length, size, artwork).
- What kind of activities have you found to be most successful in your program? Why?

- What would help you in promoting and maintaining the interest of residents in an ongoing CVH program?
 What role do you think you can play in improving the health of residents?

Appendix F: Participant Intake Form

Please circle or complete the following information for each question

1.	Are you: □ Male □ Female		
2.	Are you a resident of an HABC development? \square Yes $\ \square$ No		
	What is the name of the development you live in?		
3.	Vhat are your three biggest life priorities?		
	1.		
	2.		
	3.		
4.	What are your three biggest health concerns?		
	1.		
	2.		
	3.		
5.	What does being healthy mean to you?		
6.	Do you feel you are healthy? Explain.		

7. —	Do you feel that you can do something about your health? Explain.
8.	Have you ever been told by a doctor that you have:
	 High blood pressure High cholesterol Diabetes Had a heart attack Had a stroke Yes No No No No No No No No
9.	If you answered yes to any of the above, are you doing something to manage, control, or reverse this condition? □ Yes □ No
	■ If yes, what are you doing? Explain.
	 What would help to continue doing this? Explain.
10	Do you smoke cigarettes? ☐ Yes ☐ No
11	. What does a typical meal such as breakfast, lunch, and dinner include?
Br	eakfast:
	ınch:
	пы.
Di	nner:

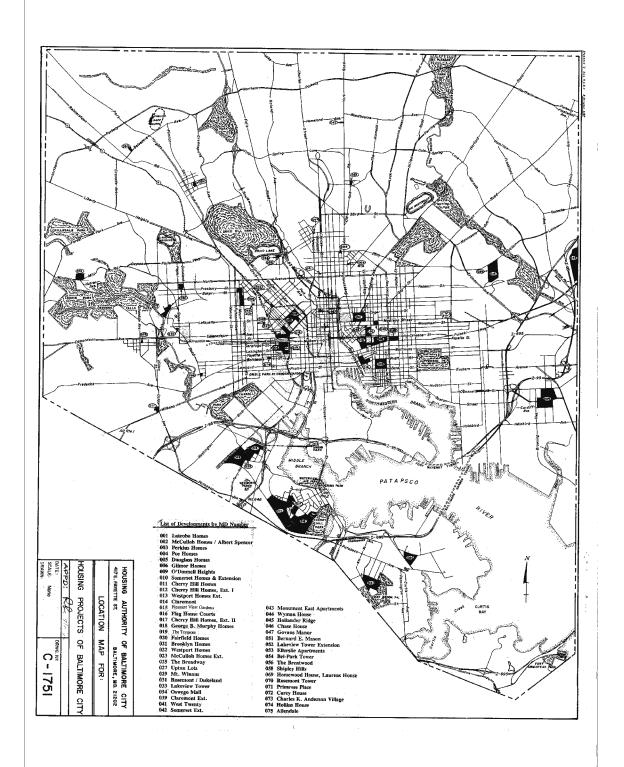
12. Do you th Explain.	nink that the foods you ate yesterday will help you have a healthy heart?	
13. What do	you like to do for fun?	
14. What do	you do to relax?	
	· • • • • • • • • • • • • • • • • • • •	
 15. Do you exercise? □ Yes □ No If you answered Yes to question 15, please complete section A. If you answered No to question 15, please completed section B. 		
Section A	What do you do for exercise?	
	How often do you do this?	
Section B	What would help you to continue? Would you like to start exercising? □ Yes □ No	
Gection B	Why or why not?	
	What would help you to start exercising? Explain.	
	Has anything prevented or discouraged you from exercising? Yes No If yes, what has prevented you or discouraged you from exercising? Describe.	
	Describe.	

16. Why do people get heart disease?
17. What are things you can do so you do not get heart disease?
 Do you do these things? □ Yes □ No Explain your answer:
18. What would remind you every day to do the things that can protect the health of your heart? (Explain what it would look like, where would you keep it, what would this thing do, what would it help you do.)
19. Other than in health brochures or pamphlets, how would you like to get information about taking care of your health?

Thank you for completing this form!

Appendix G:

Map of Baltimore City Public Housing Developments



For More Information

The NHLBI Health Information Center is a service of the National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health. The NHLBI Health Information Center provides information to health professionals, patients, and the public about the treatment, diagnosis, and prevention of heart, lung, and blood diseases. For more information, contact:

NHLBI Health Information Center P.O. Box 30105 Bethesda, MD 20824-0105 Phone: 301-592-8573

TTY: 240-629-3255 Fax: 301-592-8563

Web site: http://www.nhlbi.nih.gov







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