Published in final edited form as:

Soc Work Health Care. 2019 ; 58(5): 509–525. doi:10.1080/00981389.2019.1587662.

Perspectives on Diet and Physical Activity among Urban African Americans with Serious Mental Illness

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Individuals with serious mental illness (SMI) are burdened by high rates of comorbid physical illnesses (de Hert et al., 2013). These illnesses contribute to shortened lives, with persons with SMI dying 15 to 30 years younger than persons without SMI (Colton & Manderscheid, 2006; Druss, Zhao, Von Esenwein, Morrato, Marcus, 2011). Modifiable risk factors, including obesity, contribute to mortality and morbidity (Deakin et al., 2010; Kane, 2009). Epidemiological research finds that 25 to 60% of individuals with bipolar disorder (McElroy et al., 2002; Fagilini, Kupfer, Houck, Novick, & Frank, 2003) and 30 to 70% with schizophrenia (Dickerson et al., 2006; Theisen et al., 2001) are obese.

Issues directly associated with psychiatric conditions and their treatment contribute to obesity. Side effects of psychotropic medications, especially the metabolic effects of second generation antipsychotic medications, increase risk of weight gain (Newcomer, 2004). Psychiatric symptoms and treatments can affect diet, motivation and energy levels that contribute to obesity among persons with SMI (Allison et al., 2009).

Morbidity and mortality are often worse for persons of color (Breslau, Kendler, Su, Gaxiola-Aguilar, & Kessler, 2005; Levine et al., 2010; Wong, Shapiro, Boscardin, & Ettner, 2002). While results have varied from study to study, a review of the literature from 1986 to 2013 found that African Americans with SMI appear to be at higher risk of weight gain and obesity than other racial/ethnic groups with SMI, and are at higher risk for diabetes, a cardiovascular disease risk factor (Carliner et al., 2014). Co-occurring obesity and diabetes were almost three times higher among African Americans with SMI in a four-state study of community mental health service users (Cook et al., 2016).

Social determinants of health such as economic factors and neighborhood environments also contribute to obesity among African Americans with SMI (Commission on the Social Determinants of Health, 2008; Institute of Medicine, 2003). Social disadvantage is widely

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documented as a root cause of health differences (Braveman & Gottlieb, 2014), and can contribute to higher calorie diets (Larsen & Story, 2011; Ryan & Bauman, 2004), low levels of physical activity (CDC, 2014) and obesity (McLaren, 2007). Both persons with SMI (Luciano & Meara, 2014; Anakwenze & Zuberi, 2013) and African Americans (DeNavas-Walt & Proctor, 2014; Ryan & Bauman, 2016) are disproportionately affected by low socioeconomic status as compared to persons without SMI and whites. Environmental conditions in many low-income neighborhoods and communities of color present barriers to healthy diets through food deserts (Hill & Peters, 1998; USDA, 2008), and barriers to engaging in physical activity through decreased access to parks and community centers (Sallis & Glanz, 2009) and concerns about safety that hinder walking (Fleury & Lee, 2006; Siddiqi, Tiro & Shuval, 2011). Cultural factors are additional social determinants related to obesity. Among African Americans, culture-related barriers include diets based on traditional, culturally-valued foods that are high in calories (Kumanyika et al., 2007)

In turn, African Americans with SMI face significant challenges in eating a healthy diet, being physical activity, and losing weight. Indeed, African Americans have not fared as well as white Americans in clinical weight loss trials targeted to the general population (Kumanyika, Whitt-Glover, Haire-Joshu, 2014), and researchers have called for tailored interventions to address disparate outcomes (Krueter, Lukwago, Bucholtz, Clark, Sanders-Thompson, 2003). In addition, few weight loss interventions have been developed or adapted for persons with SMI. No known weight loss interventions have been tailored to address the specific needs and contexts of urban African Americans with SMI (Cabassa, Ezell, Lewis-Fernandez, 2010).

We sought to understand the needs of African Americans with SMI living in Chicago, Illinois in order to tailor the Veteran's Administration's (VA) MOVE! weight management program for urban African Americans with SMI. MOVE! for veterans with SMI is a manualized program that provides behaviorally-based self-management diet and physical activity support (Goldberg et al., 2013). The program includes a structured curriculum that emphasizes nutritional counseling and portion control and utilizes cognitive-behavioral techniques, goal-setting, problem-solving, and visual aids. The program is six months in duration and includes individual and group sessions (Goldberg et al., 2013).

Method

Through focus group interviews, we examined issues related to diet, physical activity, and weight. We utilized a community-based participatory research (CBPR) approach, in which researchers, community organizations, and community members partner in all aspects of the research process. CBPR is particularly appropriate for the study of health disparities, as it prioritizes the voice of persons who have traditionally been excluded from research and who may feel distrust of the healthcare system (Israel, Schulz, Parker, & Becker, 1998; Israel, Schulz, Parker, 2005; Mikler, Blackwell, Thompson, & Tamir, 2003). A CBPR team was assembled to address weight concerns among African Americans with SMI. The team was composed of an African American team leader with lived experience of mental illness, three researchers, and seven African American community members with lived experience of mental illness, one of whom was also a health care provider.

The team sought a deeper understanding of the perspectives of African Americans with SMI in order to guide the adaptation of the intervention, and agreed to conduct focus groups to determine how to best tailor the intervention to meet this group's needs. Over the course of four meetings, the team created a focus group interview guide (Appendix 1). Questions were selected to address the following areas: diet and health; weight and health; motivation to be healthy; barriers to healthy diet and physical activity; African American culture, healthy eating and physical activity; age-related and generational differences; diet and physical activity; and solutions to health barriers. Procedures for this project were approved by Illinois Institute of Technology's (IIT) Institutional Review Board (IRB).

Study inclusion criteria were being African American, age 18 or older, having a weight concern or a family member with a weight concern, and being a mental health service user. To recruit participants, CBPR members distributed over 200 flyers to a supportive housing building of a psychiatric rehabilitation service provider and in nearby neighborhoods. Interested participants were screened via phone interview and those who were eligible were invited to participate in focus group sessions. Participants were compensated with a \$50 gift card.

Focus groups were led by the CBPR team leader, who was trained and coached by project researchers. Training included instruction, observation of multiple focus groups in another project, and practice sessions prior to leading study focus groups. Five 90-minute focus group sessions with six to twelve participants each were conducted in English. Two research assistants transcribed participant responses verbatim. All participant names were excluded to maintain confidentiality. Transcripts were cleaned prior to coding.

Sixty persons were screened, and fifty-five were eligible and participated in focus groups. We used thematic analysis to examine focus group data (Crowe, Inder, & Porter, 2015). A senior researcher (LS) thoroughly read the transcript and developed preliminary codes. Three research assistants were assigned the same transcript and tasked with coding concepts individually. After completion, research assistants discussed and resolved discrepancies in coding strategies and additional codes were added to account for responses (i.e. "bytes") that did not fit into existing codes. This process was employed for coding a second transcript. At this point, inter-rater reliability exceeded .75 and coders proceeded to independently code remaining transcripts (1 each). The senior researcher then reviewed items within each code and met with research assistants to discuss and resolve uncertain items. Once these items were resolved, the senior researcher arranged similar codes into themes and subthemes, named and described themes, and displayed them in table format. Thereafter, the CBPR team and another researcher not involved in the initial coding process reviewed and discussed the thematic structure, leading to the final reorganization of codes into major themes and corresponding sub-themes.

Results

Thirty-eight participants provided information on their personal and demographic characteristics through a screening form that was distributed prior to each focus group. The group was 55.3% female (n=21) and 44.7% male (n=17), and the average age was 52.4.

One-half (50%, n=19) of participants self-reported that they were overweight or obese, 29% (n=11) did not identify as overweight or obese, 3% (n=1) said they didn't know if they were overweight or obese, and 18% (n=7) of the responses were missing.

Major themes identified were 1) Health, Weight and Diet; 2) Black/African American Culture and Health; 3) Age-Related and Generational Health Differences; 4) Barriers to Healthy Living; and 5) Solutions to Barriers. Table 1 summarizes the themes and subthemes. Results are described in detail below.

Health, Weight, and Diet

Many participants cited weight as the cause of many health problems. Participants reported a history of diabetes, respiratory problems, and heart attacks which they believed were caused by weight gain. Some of these conditions influenced the individuals' ability to partake in activities. One participant said, "[I] can't play with grandkids the way I used to 'cause my collagen in my knees rubs together... I get home depressed and eat more."

Participants discussed sources of motivation that inspired them to eat healthy food and be physically active at times during their lives. Some discussed spirituality (e.g. transitioning from one faith to another). Others talked about health-related motivating factors. These included diagnosis of physical illness; and desire for better metabolism, heart health, reduced need for medication, or a longer life. One participant said, "I wanted to live longer, and I knew that eating poorly and not exercising would hasten my time here on earth." Some participants said they were self-motivated, while others said inspiration came from family, friends, or coaches. Another participant wanted to stay healthy for her children: "I was able to play with them more. So that motivated me to exercise." Others were motivated by working out with a friend: "Another person motivated me to exercise with them; it's easier with someone else too."

Participants were also asked where they get their food. Most purchased their food at grocery stores. However, fast food restaurants, dollar stores, and local gas stations were used as primary food sources for some participants due to their close proximity or in the case of fast food, to minimize expenditure. At times, participants visited food pantries: "Sometimes I can't afford everything so I do go to the pantry as long as I can eat." Participants discussed how they got their food. This included family and friends providing reliable transportation, participation in the Supplemental Nutrition Assistance Program (SNAP, formerly known as the Food Stamp program), and assistance from others with shopping or preparing food. One person fully depended on a granddaughter who "grocery shops, so she handles it. I don't do shopping anymore." Some individuals ate at restaurants or ordered food for delivery. Public transit (i.e. buses, trains, Para Transit) was commonly used for food shopping. These were often chosen when traveling far or when seeking healthier food: "I usually take public transport, 'cause the only thing in my area, the southwest, is these tiny rip-off places." A few people walked when shopping locally while only one participant mentioned driving to the store.

African American Culture and Health

The impact of African American culture on health was discussed. Some healthy habits were described, such as growing fresh vegetables in gardens. “When I was growing up, we had our own garden. Our own squash, eggplant, corn, tomatoes, greens, and spinach.” However, substantially more people discussed culture in relation to eating high fat foods. Participants said that fatty meals were a staple of African American upbringing, with many high-fat foods passed down from generation to generation.

What we’re used to is how our mothers and grandmothers cook. They cook with a pound of butter and sugar and lard. And they teach us to eat unhealthy. We’re still doing it. I’ll cook what my grandma used to cook.

This was echoed by another individual, who noted that she feeds her family the same way:

The meals that our ancestors prepared from the south used a lot of fat, pork, and salt ... I was raised on southern fried chicken, fat-back, collard greens, chitlins. So I bring that into my lifestyle. When I learned how to cook that, I brought it and fed it to my children.

Others said that healthy eating was not part of their culture, and was even a source of humiliation: “You don’t want to be embarrassed by eating healthy in front of others. You’ll look a fool.”

Advertising and targeting unhealthy food and alcohol to African Americans was discussed. One individual thought that big corporations usually targeted minority and ethnic populations. There was also concern that these companies were banding together to limit what they sold to African American neighborhoods.

Spirituality was believed to positively influence the health of African Americans. Some participants said that there are health benefits of being spiritual: “I think that if you are spiritually fit, the more likely you are to eat healthy.” The effect of spirituality on emotions was also discussed:

You learn spiritual healing of the emotions because emotions cause me to eat. It helps me when I pray and look to a higher power to discipline me. When I attend my church, they talk a lot about the word of God. That is helping me stay fit emotionally... filling a void in my life. Spirituality helps me to discipline me.

Participants voiced that African Americans have positive characteristics that can help them, including determination, endurance, and self-motivation. One participant said: “I think we are very resilient and persistent. If one thing doesn’t work, we always try to find another way. I do feel that we are very resilient people.”

Age-Related and Generational Health Differences

Participants believed that there were differences in health habits across generations. Participants, many of whom were in their 50s, said that the younger generation was believed to have a need to be instantly satisfied: “They want everything to be quick right now.” Older generations tended to cook meals while younger generations bought meals: “Kids are raised on fast food these days. Back in the day, they wouldn’t let us go to McDonalds every day.”

However, participants described youth as more physically active through dancing, working out at the gym, and participating in sports. Still, some older persons said that they exercise more now than they did in their youth: “When I was younger I didn’t exercise because you’re just enjoying life. But now, since I’m older, exercise means more to me.” Another participant talked about an awareness of exercise’s importance to health now, whereas children “...don’t know any better, but at a certain age you know the health risks.” Others, however, said they no longer exercise at all and described a decrease in energy levels. Older generations had limited resources for exercising and opted to walk instead of going to the gym.

The impact of changing times on eating was discussed. Some focus group participants talked about how much food is processed today. Another participant talked about how today’s youth are not exposed to gardening. One participant said that the fast food industry now advertises and sells unhealthy foods. In addition, people have less time to cook these days so people are pushed to cook less healthy food that is faster.

Some participants said that older generations have changed their eating habits for the better. A participant said they were ignorant about healthy eating while growing up, but now they knew better. Some participants reported that they omitted fried and greasy foods or cheese from their diets or ate to avoid feeling tired and bloated.

Barriers to Healthy Living

Participants identified cultural customs within the African American community that are barriers to healthy lifestyle, creating difficulty in breaking old habits: “Growing up, eating certain things, it’s hard to break some habits and traditions.” These customs included growing up with eating certain kinds of meals, familiarity with southern foods, and participating in Sunday dinners. Because pork was affordable when participants were growing up, it has remained a staple of the African American community. One participant said that social gatherings were characterized by “...fried chicken, ribs, the usual.” Fried meals, soul food, comfort food, and food preparation contributed to unhealthy eating habits.

Eating because of temptation, the influence of others, and enjoyment of high fat and high sugar items were discussed as impediments to healthy eating. Despite understanding the importance of eating healthy, unhealthy foods were chosen: “The temptation. I can see fruit or chips and I’ll want the bad stuff. I know I have to eat healthy but I’ll want the bad foods to curb my appetite to be content.” Others spoke of a distaste for healthy foods: “I don’t like veggies so I don’t buy them. I don’t care for them; I won’t eat them. I don’t like the taste. I’ll eat greens but no veggies” and “Healthy food is nasty. The taste. Most of it looks nasty. I don’t like asparagus, tofu, none of that garbage.”

Food deserts were a barrier to good health. Many participants said that healthy options were not close by, and that fast food and unhealthy foods were readily available: “The places that are in the neighborhood, they aren’t healthy for us... greasy ribs, then there’s the donut shop next to it” and “Corner stores and liquor stores, but not much food.” As noted earlier, fast food restaurants, dollar stores, and local gas stations were frequented by some participants due to their close proximity or to minimize expenditure. To obtain healthy food, many

participants said they had to travel. One participant noted that a grocery store was nearby, but fast food was widely available and still the norm: “In my neighborhood, there are fast food places all over the block. We do have a Jewels [grocery store] but people still go to the fast food places.”

The prices of healthy food also hindered participants: “Healthy food costs way more than junk. I can’t buy the healthy food. You have 180 dollars so you have to eat what you can buy.” Another participant said, “It’s expensive to eat healthy. Cheese, lettuce, most black people don’t have money to buy all that. So most black folks just buy salami and that’s it.” Participants said that they bought fresh fruit and frozen vegetables when they had extra money to spend. Joining a gym was also described as prohibitively expensive.

Lack of time added another barrier to being healthy. Making a salad or cooking was time consuming but “buying junk and eating it is so easy.” One individual said: “Microwave dinners are convenient to me. I don’t always have the time.” Making time for exercise was also difficult: “You have to look for a job, get on the Internet, go to the library.”

The majority of participants blamed themselves for a failure to adopt healthy behaviors. Participants said that laziness, procrastination, and unwillingness to change were barriers to healthy habits: “I like veggies but they’ll just sit in my freezer forever. I can eat junk food and I’m too lazy to make vegetables.” Another participant said, “I do want to exercise more, but when that day comes, it’s like you know, I’ll do double the next day or something like that.” Only a few people said that fatigue, taking medications, and physical illness prevented them from being physically active.

Solutions to Barriers

Participants believed that the community should be involved in improving health. Most participants felt communities could help improve health by having more affordable fresh fruits and vegetables that last longer, and a wide variety of food and meat products: “If we get a store for our community, we can get what we really need.” Some said that stores should advertise healthy foods, and could note nutritional values and health risks associated with nutrition.

Participants said that the African American community lacked education on diet and nutrition, and therefore healthy eating education was needed. Participants said that having someone provide healthy eating education available at stores would be helpful for the African American community. Assistance with meal planning, the services of a dietician, or even pamphlets and brochures could be helpful. Participants also discussed the need for resources to assist with physical activity. Some participants mentioned the desire for a personal trainer. Participants voiced that more and better quality fitness centers, gym equipment and affordable memberships would be beneficial. In addition, centers for teenagers that offer basketball, skating and bowling could help them become less sedentary, and are needed because parks are unsafe due to shootings, drug sales, and loitering.

Some participants offered strategies individuals could use to lose weight. One participant suggested pairing up with a friend for support: “Like when you go out late at night, we could

do the same thing for your health. We can keep us accountable, and reach out like ‘Are you eating celery or are you eating cake?’” Others discussed smart shopping, including developing a grocery list, looking for sales, and getting the best deal.

Discussion

This paper discussed findings on the perspectives of urban African Americans with SMI related to diet, physical activity, and obesity. By and large, participants viewed obesity as the cause of many health problems, understood that diet and physical activity were important components of their health, and believed that health and weight of African Americans with SMI are shaped by many factors.

Structural barriers were discussed as hurdles to healthy eating and physical activity. This group of African Americans with SMI articulated many of the same structural barriers common to persons in African American and low-income communities. These include a lack of safe places to exercise, limited income that makes healthy food and gym membership unaffordable, and poor access to supermarkets and healthy food environments (Baker et al., 2006; Gordon-Larsen et al., 2006). Study findings emphasize the need for weight loss interventions for African Americans with SMI to attend to structural challenges and find ways to surmount them.

The diet of African Americans with SMI was also shaped over time and through culture. Interventions that address the life stage and overall interests of participants may prove more successful. Further, this study finds that familiarity with foods and cooking practices learned from their families play a strong role in dietary choices. As such, weight loss interventions must integrate these foods into programs. An understanding of cultural food preferences and how to incorporate culturally valued foods as part of a healthy diet are necessary in adapting diets for this group and consistent with findings from previous studies (Kumanyika et al., 2007; Antin & Hunt, 2012).

Some stated that healthy food was not a part of Black culture, which could be a significant deterrent to dietary changes. However, participants also saw many roles for the community to be involved in improving health, including increased grocery stores, better and more exercise facilities, and providing education on diet and nutrition and aid with meal planning. Assistance from African American community members in preparing meals that are both culturally appropriate and healthful could be explored as a means to narrow the perceived differences between culturally-valued food and healthful food.

Churches and faith-based organizations may also play a role in addressing overweight and obesity. Many participants viewed the church as a positive influence on weight. Churches and faith-based organizations in African American communities have worked to address inequities in African American’s lives, including health disparities. To date, early evidence, mainly through small-scale and formative studies, has demonstrated that faith-based organizations hold promise as settings for obesity intervention for African Americans (Maynard, 2017). Future studies are needed to determine the utility of this approach for this population and to attain evidence through large scale, randomized controlled trials.

Despite numerous structural and individual level barriers to good health, many participants said that they were to blame for their health, expressed as a lack of discipline, procrastination, and being lazy. While study participants were not specifically asked about barriers related to SMI, lack of motivation has been identified as a barrier to physical activity among persons with SMI in previous studies (Farholm & Sorensen, 2016). Contributing factors to lack of motivation include barriers directly related to mental illness, including symptoms of mental illness and side effects from medication. Increases in self-efficacy, autonomous motivation, and readiness for physical activity are linked to increases in physical activity (Farholm & Sorensen, 2016). Weight loss programs that include motivational interviewing have shown some success in health outcomes among persons with SMI, including for weight loss and diet and physical activity behaviors (Shagoury, Currier, Bemis & Fetter, 2010; Methapatara & Srisurapanont, 2011), but require further study to better address fidelity (Christie & Cannon, 2013). Research on self-management of chronic conditions has shown that increasing self-efficacy can improve health outcomes (Chodosh et al., 2005; Druss et al., 2010). Weight loss interventions should address self-efficacy and find ways to increase motivation among this group.

A significant strength of this research was its CBPR approach, which has shown promise in addressing health disparities (Minkler & Wallerstein, 2008). By working in partnership, each stage of the research benefited from the perspectives of African Americans with lived experience of mental illness. The incorporation of local knowledge helps to ensure that this research has meaningful outcomes. However, this research addressed the needs specific to African Americans in Chicago. Study findings may not be generalizable to other settings. In addition, this study did not consider gender-based differences of participants. This should be addressed in future research. Another limitation is that we did not directly assess severity of mental illness for focus group participants. While we assumed that most participants had a serious mental illness, as most were recruited through a community mental health center facility and attended focus groups during weekday hours (thus indicative of disability), explicitly assessing severity of mental illness would have added to these findings. Studies using a probabilistic, larger sample are needed to confirm findings.

Implications

While policy change to address structural barriers to health is the ideal solution, peer navigators may be one practical way to intervene on issues in the built environment. Peer navigators are skilled in locating and linking individuals to needed resources and could assist with locating health-promoting resources such as safe and affordable ways to be physically active and healthy and affordable foods in the community (Corrigan, Pickett, Batia, & Michaels, 2014; Freund, 2011; Jean-Pierre et al., 2011; Natale-Pereira, Enard, Nevarez, & Jones, 2011). In addition, as persons with lived experience, they possess empathy and an understanding of the unique needs of individuals with SMI. Peer navigators may help overcome factors associated with mental illness that inhibit health-promoting behavior, such as cognitive deficits, low motivation, and other signs and symptoms by providing support and teaching healthy living strategies, including problem solving skills and engagement through relationship building, self-disclosure and motivational interviewing (Hettema, Steele & Miller, 2005).

More generally, weight loss interventions designed for this group should attend to multiple individual, cultural and contextual needs. Based on this study, we adapted the MOVE! program to make the curriculum relevant for low-income African Americans with SMI who live in food deserts. Our adapted manual focuses on culturally-valued foods, and provides culturally relevant guidance on how to eat healthy and stay active in an urban area with limited income. This includes content that addresses shopping on a tight budget (e.g., buying in-season produce, looking for sales, limiting corner store purchases) or with Supplemental Nutrition Assistance Program (SNAP) benefits (e.g., supplementing with food pantries as needed), adopting healthier cooking practices (e.g., using an air fryer), substituting high-fat, high calorie foods (e.g., using turkey bacon), shopping when living in food deserts (e.g., purchasing food at corner stores, shopping in other communities), making healthier choices at fast food restaurants, and low-cost and safe ways to be physically active (such as tips on safe walking). This adaptation is currently being tested in a clinical trial funded by National Institute on Minority Health and Health Disparities (NIMHD). Future research is needed to confirm study findings and develop and test interventions addressing obesity in this vulnerable group.

Acknowledgments

This research was supported by a grant from National Institute on Minority Health and Health Disparities, #1U01MD010541

Appendix 1:: Focus group questions

Starting points

- How does weight affect your health?
- How might diet improve your health?
- How might exercise improve your health?
- Where do you get your food?
- How do you get your food?

Motivation

- Think of a time when you ate healthy food or exercised. What motivated you to do that?

Barriers

- What stops you from eating healthy food?
- What stops you from getting more exercise?

Black culture

- How does Black culture promote or create barriers to eating healthy and exercising?

- How does spirituality in the Black community promote healthy eating and exercise?
- How can strengths of Black culture be used to help you eat healthy and exercise?
- How do Black communities and neighborhoods affect healthy eating and exercise?

Age and Generational Differences

- How do younger African Americans eat differently than older African Americans?
- How do younger African Americans exercise differently than older African Americans?
- How does your diet and exercise program differ for you when you were younger or older?

Solutions to Barriers

- What changes in your community would help you eat healthier?
- What changes in your community would help you exercise more?

Abbreviations:

CBPR	Community-based participatory research
SMI	Serious mental illness

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Table 1

Focus Group Themes and Subthemes

Themes	Subthemes
Health, Weight, and Diet	<ul style="list-style-type: none"> • Health concerns related to weight • Motivation to be healthy • Where people get their food • How people get their food
Black / African American Culture and Health	<ul style="list-style-type: none"> • Health habits • Spiritual influences • Tight-knit community • Positive characteristics
Generational and Age-Related Health Differences	<ul style="list-style-type: none"> • Habits of youth and younger generations • Changes in habits of older generations
Barriers to Healthy Living	<ul style="list-style-type: none"> • Physical ability • Traditions that affect health • Habits that affect health • Food deserts/limited food options • Poverty • Lack of money • Lack of time • Exercise is boring • Readiness for change
Solutions to Barriers	<ul style="list-style-type: none"> • Ways the community can improve health • Ways individuals can address barriers