

TEXAS HEALTHY COMMUNITIES – WACO PROJECT

An Academic-Practice Partnership to Address Healthy Living in East Waco (76704)

Authors:

Kelly R. Ylitalo, MPH, PhD
Eva I. Doyle, PhD, MCHES
Kahler Stone, MPH
Renée Umstattd-Meyer, PhD, MCHES
Ramona Curtis, MA
Courtney Restivo Wollard, MPH







INTRODUCTION

The American obesity epidemic has become a national prevention priority. Underserved communities are particularly vulnerable to obesity-related risks because of barriers to engaging in healthy living habits. The Waco-McLennan County Public Health District recently detected high obesity levels in some low-income neighborhoods of Waco where environmental barriers to physical activity and healthy eating exist. Additional information is needed about related attitudes, knowledge, behaviors, resource access, and community capacity to invoke change.

For this project, focus groups and household surveys were used to obtain information in zip code 76704. This project was designed to answer the following questions:

- What factors contribute to obesity rates in 76704?
- What self-reported active living- and eating-related attitudes and behaviors exist among participants?
- What resources are participants aware of (resource awareness), using (resource use), and needed (resource needs) to develop and maintain healthy personal and/or family active living and healthy eating habits?

The Texas Healthy Communities – Waco Project: An Academic-Practice Partnership to Address Healthy Living in East Waco (76704) was completed during the spring of 2015. The authors are grateful to all of the stakeholders and community residents who participated in this project. The purpose of this report is to summarize the methods used to collect information and the results from focus groups and household surveys in zip code 76704 in a way that is useful for stakeholders and residents to continue battling the obesity epidemic and improve quality of life in their communities. Furthermore, these methods and findings may serve as a model for future work in other communities in central Texas and beyond.

FOCUS GROUPS

Five focus groups were implemented over a 3-week period among residents and key informants of the 76704 zip code. Focus group participants were recruited through the distribution of a project *facts sheet* to stakeholders and community residents who work as service providers, lead in community organizations, and/or live in the zip code. These stakeholders, in turn, issued invitations to individuals who were *key informants* (non-resident professionals/leaders with high knowledge about the community) or were zip code residents with specific demographic characteristics (older adults, adult women, parents/caregivers of elementary school children). A total of 49 adults participated in 1 of 5 groups: key informants/community leaders (n=14), service providers (n=6), older/senior adults (n=8), adult women (n=5), and parents/caregivers of elementary school children (n=16).

A semistructured group interview approach was used in each of the 2-hour focus group sessions. Questions generally focused on common behaviors, attitudes, barriers, resource access, and intervention ideas related to physical activity and healthy eating habits. Participants were also asked to brainstorm ideas and strategies for promoting physical activity and healthy eating habits in the community.

Transcripts from audio recordings, group-validated summaries written on large flip-charts, and observer notes were coded and analyzed by the research team to identify emerging themes. These themes are summarized below.

Section 1. Common Behavioral Patterns, Motivators, and Barriers

Figure 1 contains a summary of emerging themes related to common behaviors, motivators, and barriers linked to physical activity and health eating habits. Descriptions of these emerging patterns are discussed in the following subsections.

Physical Activity

Participants across groups indicated that most adults in the 76704 zip code are inactive. Those adults who are physically active were said to predominantly engage in Zumba classes at the YMCA, play basketball at the community center, walk to visit socially or on tracks at various locations, or perform "household tasks." Children predominantly participated in sports programs for physical activity; and some reportedly rode bicycles or played in yards or on existing playgrounds.

The participants believed that weight control and other health-related issues were primary motivators for physical activity among adults in the community. The also indicated that walking through the neighborhood, in particular, was important for enhancing social skills and social well-being.

Figure 1. Emerging Themes for Physical Activity and Healthy Eating Habits			
THEME	PHYSICAL ACTIVITY	HEALTHY EATING HABITS	
Common Behaviors	Mostly low activity. For adults engaged: Zumba Basketball Walking Household tasks For kids engaged: Sports	Mostly unhealthy habits. • Processed/fast food • High-fat/fried meats • Alcohol • Junk food/snacks • Excessive sugar/salt For those making healthy choices: • Vegetables & fruit	
Common Motivators	 Bicycles and play (yards/playground) Adults Weight control Health Social well-being Kids Fun and well-being Life opportunities (sports) 	Low-fat meats Health reasons Weight loss/appearance	
Common Barriers	Real/perceived financial cost (program fees) Low time (working/busy parents/women) Low access • Low non-sport options • Closed/gated playgrounds, tracks, pools • No local center for older adults • Community is not "walkable" Low knowledge/training • Activity types (including life-time activities • How to engage safely/effectively • How to motivate/engage kids. Lack of community-based mentors/trainers Emotional barriers • Fear of limitations (pain/injury risk) • Embarrassment/intimidation related to weight • Embarrassment about financial need	 Low access to healthy food Low choice options in local convenience store/restaurants No supermarkets in neighborhood/inconsistent availability in supermarkets Real/perceived financial cost Fresh produce may be more expensive Perception that healthy means "organic" Taste perceptions Belief that healthy foods do not taste good. Appearance of food impacts taste perceptions Time perceptions Healthy eating is more time consuming. Fast food is more convenient and timesaving. Low knowledge/training Preparation tips for taste and for time/expense savings. Health benefits Low awareness of local sources/services. Emotional barriers Comfort and familiarity Fear of hunger Embarrassment about financial need 	

Physical activity for children was deemed important for physical and mental health and for total well-being. Some community leaders who participated indicated that involvement in sports was important for children because of the long-range opportunities in life that success in sports could provide.

The most commonly cited and widely discussed barrier to physical activity was actual and perceived cost. The participants indicated that fees for physical activity programs and gym memberships were a major barrier. Though scholarships were available for those with financial challenges, low awareness of scholarship availability and reluctance to admit financial need were still considered strong barriers.

A lack of time and limited local access to facilities were widely identified as barriers to physical activity. The participants indicated that parents and women, in particular, had little time for physical activity due to work, family caregiving, and other commitments. Some indicated that grandparents could be serving as the caregivers of young children, which could also prohibit their ability to engage.

Some participants indicated that the lack of a place to go in the neighborhood to exercise, and the lack of childcare or ways to engage their children in existing exercise programs, were a barrier for adults. Low access to school playgrounds and tracks (after hours) and the lack of sidewalks and local (no-cost) community centers were frequently named as barriers for adults, including senior adults, who wished to engage in physical activity. The historical closures of neighborhood swimming pools and low options for children to engage in activities beyond group sports were also cited as barriers.

Other named barriers included the lack of knowledge and training that is needed to engage in physical activity in a healthful way. Parents indicated that they did not know how to motivate or guide their children to engage in physical activity. Older adults explained that they feared pain or injury would occur during physical activity. Some adults admitted the thought of engaging in physical activity embarrassed or intimidated them because they were overweight.

Healthy Eating Habits

When asked about common eating patterns, the participants indicated a perception that unhealthy eating patterns were more common than healthy eating patterns among residents of the 76704 zip code. Habits reported as unhealthy and common included the consumption of food that is convenient (processed, fast food), junk food, high-fat meats, and excessive sugar and salt. Parents (and grandparents) indicated that children tended to eat more junk food after school and/or while watching television.

Each group was asked about common habits of those who tended to eat more healthy foods. The participants indicated that healthful eating tended to focus on eating vegetables (including greens in particular), fruit, and low-fat meats. Health reasons and the desire to maintain one's weight were named as common motivators for those who tended to eat healthy foods.

Access to healthy food was widely discussed across groups as a common barrier to healthy eating behaviors. The participants discussed how convenience stores and restaurants in the local neighborhood were less likely to offer healthy options, and that residents had to drive outside of the neighborhood to find healthy foods in the nearest supermarkets.

For older (senior) adults, lack of transportation to those nearest supermarkets was identified as a common barrier. One group of women indicated they did have the ability to drive to the supermarket just outside of their neighborhood, but the availability of healthy foods (e.g., fresh fruits and vegetables) in that supermarket was inconsistent.

Other perceived barriers to healthy eating included the real and perceived financial costs of buying healthy produce. One pervasive perception related to expense was that one had to buy organic produce to be buying healthy produce, a factor that could have contributed to the perception that eating healthy costs more.

Much discussion ensued across groups about perceptions related to the taste and appearance of healthy foods. Participants commonly pointed out that unhealthy food tasted better to them than healthy food, and that their children often found the appearance of healthy foods offered in school cafeterias to be unappealing. The participants discussed the need to learn how to prepare healthy foods in ways that would taste good and that they did not know inexpensive and time-saving approaches to healthy food preparation. The participants also believed that few community members were aware of the health benefits and local sources available for healthy eating.

Emotional barriers to healthy eating were also identified. The participants indicated that most residents preferred to eat foods with which they were familiar and comfortable. When available food programs were mentioned, some participants indicated that some residents refused to sign up for free services because of their embarrassment about their financial need.

Section 2. Known Resources for Physical Activity and Healthy Eating Habits

When asked to name common places or resources used for physical activity by residents in the zip code, the YMCA was named across all groups as a commonly known and used resource. Some participants also named specific community/public housing centers as places where adults and families could engage in group activities for physical activity or social connections. For children, the city sports programs, Cameron Park, and existing playgrounds (e.g., at Estella Maxi) were identified as places or programs for physical activity for children.

Regarding healthy food sources, service providers and community leaders were more likely to talk about community gardens managed by local churches, the Veggie Van, Meals on Wheels, some recently-offered cooking classes, and some information sources commonly available to the public than were the participants in the women's group and the parents' group. Though some participants in these two groups also knew about some of the resources, other

participants expressed surprise that they had not heard about some of the resources available that promote healthy eating.

Section 3. Community Recommendations

Figure 2 contains a summary of recommendations provided by focus group participants. The focus group participants expressed a strong interest in developing community-based partnerships through which members of the community and local organizations can work together to promote physical activity and healthy eating. Collaborative efforts linked to *Prosper Waco* and other organizational efforts and the formation of community advisory groups were recommended.

Discussion emerged within multiple groups about the number of existing organizations and organizational efforts already underway in the community. Some concerns were expressed about the need for stronger communication across organizations to foster a more collaborative approach in resource use. The participants described strong interest in becoming tomorrow's leaders and mentors of future physical activity and healthy eating interventions for the community. Some recommended that community members become formally trained to lead programs. They tended to believe that a substantial level of community involvement would enhance the culturally competency of all efforts and contribute to more sustainable efforts.

Wide-spread and timely communication to the community about health needs and existing resource was recommended. Specific suggestions included the use of specific radio programs and the city cable channel as information conduits. Some community leaders recommended the development of "Information tool kits" that could be included in church bulletins and other common communication sources. Others recommended stuffing informational pamphlets in the utility bills that are mailed to homes and/or distributing pamphlets door-to-door.

Ideas related to specific community events emerged. Some discussed the idea of hosting specific community events, such as a "neighborhood walk" by community groups who wish to promote physical activity while simultaneously raising neighborhood awareness about a specific health service, program, or resource. Others explored the idea of organizing "neighborshelping-neighbors" events to promote physical activity among participants while also helping community members by painting/repairing houses, cleaning yards, etc.

The need for enhanced community infrastructure was recommended to enhance opportunities for physical activity and healthier eating. Some groups discussed the need for bike lanes, improved sidewalks, and more streetlights to enhance the ability of local residents to bike, walk, and jog in their neighborhoods. The participants recommended the development of a local community center through which culturally-relevant cooking classes and physical activity programs for local families and older adults could be available at no/low cost. Transportation for older adults to this local center, as well as to healthier food sources, was also highly recommended.

Figure 2. Emerging Recommendations

Partnerships

Community Engagement

- Communication within community
- Community advisory group
- Prosper Waco representation
- Leadership training in health promotion
- Engaged churches and schools

Service Organizations

- Enhanced communication <u>to</u> community
- Collaboration between organizations
- Equipped churches and schools
- Cultural competence among professionals

Infrastructure

Bike lanes

Sidewalks

Streetlights

Transportation

Local community center

Physical Activity Strategies/Interventions

Enhance Opportunities For

- Kids
 - Swimming, golf, tennis lessons.
 - Non-sports activities (e.g. dance, cultural arts)
- Family activities (parents + kids)
- Older adults (local, no cost)

Train community members as leaders and mentors

Healthy Eating Strategies/Interventions

Enhance Local Access

- Food service to older adults
- Community gardens
- Healthy options in local markets
- Food service in schools

Educate/Train

- School curriculum
- Family cooking classes
- Training for caregivers of older adults

The participants indicated that knowledge and skills related to effective physical activity and healthy eating were likely very low in the community. They expressed a strong desire to learn more about how to engage, and involve their families, in these health-enhancing behaviors. The community leaders also re-emphasized a desire for community members to be trained and equipped to lead health promotion efforts in the community.

HOUSEHOLD SURVEYS

The Community Assessment for Public Health Emergency Response, or CASPER, was used to collect information from households about healthy eating and physical activity. These methods are designed to provide quick and valid information about households.

For this project, zip code 76704 was selected to serve as the sampling frame for the CASPER survey. Not every household is selected, so a two-stage cluster sampling method occurred. In the first stage, the zip code was divided into census blocks according to the U.S. Census Bureau. Thirty census blocks were selected, with their probability proportional to the estimated number of housing units in each cluster. In the second stage, seven housing units were selected from each of the 30 census blocks for the purpose of conducting interviews with a household respondent. Seven households were selected with sequential sampling on-site by the interview team using a detailed map of the census block viewed in GoogleEarth.

Eligible household respondents were residents of the selected house ≥18 years of age who provided verbal consent to participate and agreed to speak on behalf of all household members. This report includes information provided by the adult survey respondents, referred to as "participants." Participants provided information about members of the household, healthy eating habits and barriers, and physical activity habits and barriers.

Section 1. Characteristics of the Households

One hundred households in 76704 participated in this project. There were 274 individuals who lived in these 100 households. Sixty-nine households had no children living at the house and 31 households had at least one child living at the house. The average household age was 43.3 years. For household race/ethnicity, 86% of participants reported all household members were black, 9% reported all members as Hispanic, and 5% reported that there was a mix of race/ethnicities, e.g., one member was white and one member was Hispanic. Participants were asked to report if any member of the household used benefits. The proportion of the household that used benefits is presented in Table 1 below.

Table 1. Proportion of households using benefits, 76704 CASPER, 2015.		
SNAP	36.0%	
WIC	11.0%	
Free and reduced lunches	20.0%	

In order to assess the health of household members, participants were asked to report if they or anyone in the household had been told by a doctor that they have a particular health condition. Household health conditions are reported in Table 2 below.

Table 2. Proportion of households with at least one member with a health condition, 76704		
CASPER, 2015.		
High Blood Pressure	55.0%	
Diabetes	29.0%	
Overweight/Obese	42.0%	
High Blood Cholesterol	34.0%	
Heart disease (not including high blood pressure)	14.0%	

Section 2. Healthy Eating

Participants were asked to give information about who shops for food in the household, how often shopping occurs, and transportation for shopping. Over 95% of participants reported that HEB in Bellmead was their primary grocery store. Additional information is presented in Table 3 below.

Table 3. Shopping for food, 76704 CASPER, 2015.			
Food shopper in household			
Female adult	65.7%		
Male adult	18.2%		
How often			
Multiple times per week	34.3%		
1 time per week	11.1%		
1 time per 2 weeks	32.3%		
1 time per month	21.2%		
Transportation to buy food			
Personal vehicle	76.8%		
Family or friend's vehicle	19.2%		
Public transit (bus)	2.0%		
Walk	2.0%		

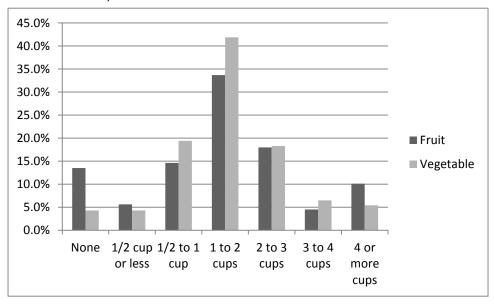
Almost all participants (97%) were aware that eating healthy foods improves their health outcomes, and almost all participants (92%) believed that the members of their household knew the difference between healthy food and unhealthy food. Two-thirds (63%) of participants reported that vegetable oil was the kind of fat usually used for frying, sautéing, and

baking at home. Participants were also asked to think about the items currently in their household refrigerator, freezer, or pantry. The proportion of households that reported each food item in their home at the time of the survey is presented in Table 4 below.

Table 4. Proportion of household with each food in home, 76704 CASPER, 2015.		
Fresh fruit	77.0%	
Fresh vegetables	72.0%	
Frozen fruit	40.0%	
Frozen vegetables	66.0%	
Canned fruit	71.0%	
Canned vegetables	87.0%	
Low fat milk (non-fat, 1%, skim)	42.0%	
Whole grains (100% whole wheat bread or pasta)	75.0%	
Lean protein (chicken, turkey, low fat ground beef)	96.0%	
Beans	95.0%	

Participants were asked to report about how many cups of fruit and vegetables they ate or drank (i.e., 100% pure fruit juice or 100% pure vegetable juice) each day. Participants were asked to report the fruit and vegetable consumption for themselves and for the oldest child living in the household. The usual daily fruit and vegetable consumption for the adult participant is shown in Figure 1 and the usual daily fruit and vegetable consumption for the oldest child in the household is shown in Figure 2 below.

Figure 1. Fruit and vegetable consumption per day for adult respondent, 76704 CASPER, 2015.



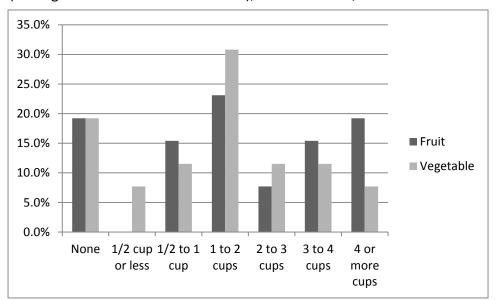


Figure 2. Fruit and vegetable consumption per day for oldest child in household (among 31 households with children), 76704 CASPER, 2015.

Participants were asked about potential obstacles or barriers to healthy eating, including cost, time, location, transportation, knowledge, preparation skills, and taste. Participants were read seven statements and were asked to agree or disagree with each statement for themselves or for anyone in their household. The proportion of participants that agreed with each statement is presented in Table 5 below.

Table 5. Proportion of agreement with barrier to healthy eating statements, 76704 CASPER,		
2015.		
It costs too much to eat healthy food (COST)	40.0%	
I don't have time to think about eating healthy (TIME)	16.0%	
There is nowhere to buy healthy food near me (LOCATION)	12.2%	
I do not have transportation to buy healthy food (TRANSPORTATION)	11.0%	
I do not know what healthy foods are (KNOWLEDGE)	6.0%	
I don't seem to have the skills to prepare or cook healthy food (SKILLS)	11.0%	
Most healthy foods just don't taste that great (TASTE)	27.0%	

Section 3. Physical Activity

Participants were asked to provide information about physical activity habits and barriers. Overall, 28% of households reported a gym or recreational facility (e.g., Golds Gym, YMCA) membership. Participants were asked to report about the types of physical activity that they,

any other adults in the household, and children want to do. This information is shown in Table 6 below.

Table 6. Proportion of children, adults, and participant who want to do each activity, 76704 CASPER, 2015.			
	Survey participant	Adults in house	Children (among
			31 households
			with a child)
Walking/Hiking	76.0%	45.0%	80.7%
Playing recreational sports	44.0%	22.0%	83.9%
Running/Jogging	31.0%	23.0%	74.2%
Lifting Weights	41.0%	22.0%	25.8%
Bicycling	45.0%	24.0%	61.3%
Group fitness (e.g., boot camps)	38.0%	19.0%	25.8%
Playing competitive sports	26.0%	15.0%	67.7%

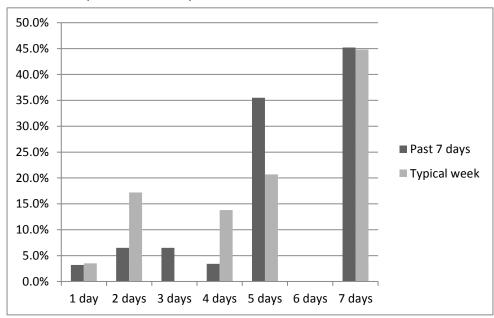
Participants were asked about their vigorous and moderate physical activity during the last 7 days. Vigorous activities refer to activities that take hard physical effort and "make you breathe much harder than normal," like heavy lifting, digging, aerobics, or fast bicycling. Moderate activities refer to activities that take moderate physical effort and "make you breathe somewhat harder than normal," like carrying light loads, bicycling at a regular pace, or doubles tennis. Participants were asked to report physical activities that they did for at least 10 minutes at a time. [Statistical note: The average, or arithmetic mean, is the sum of all the numbers in the set divided by the amount of numbers in the set. The median is the middle point of a number set, in which half the numbers are above the median and half are below. The median is sometimes reported instead of the average if there are extremely high or extremely low numbers that are skewing the average.]

For vigorous activities, the average number of minutes over the last 7 days was 316.1 minutes and the median over the last 7 days was 60.0 minutes; 42% of participants reported no vigorous activities for the last 7 days. For moderate activities, the average number of minutes over the last 7 days was 390.9 minutes and the median was 60.0 minutes; 34.3% of participants reported no moderate activities for the last 7 days. Participants were also asked about walking. Overall, 17.5% of participants reported no walking for at least 10 minutes over the last 7 days and the median number of minutes of walking over the last 7 days was 90.0 minutes.

Participants were also asked about sedentary behavior, or time spent sitting while at work, at home, while doing course work, or during leisure time. This included time spent sitting at a desk, visiting friends, reading, traveling on a bus, or sitting or lying down to watch television. During the last 7 days, participants reported sitting an average of 354.4 minutes (median=240.0 minutes) on a week day. During the last 7 days, participants reported sitting an average of 335.1 minutes (median=240.0 minutes) on a weekend day.

Participants were asked to report on how many days the oldest child living in the household was physically active for at least 60 minutes per day, both over the last 7 days and over a typical or usual week. Information on the oldest child in the household was reported for the 31 households with a child in Figure 3 below. Regarding sedentary behavior, participants reported that the oldest child spent an average of 265.2 minutes (median=240.0 minutes) sitting on a week day and 275.0 minutes (median=165.0 minutes) sitting on a weekend day.

Figure 3. Number of days the oldest child in the household was physically active for at least 60 minutes, 76704 CASPER, 2015.



Participants were asked about potential obstacles or barriers to physical activity, including cost, time, location, transportation, sidewalks, bicycle lanes, desire, skills, safety, and fatigue. Participants were read twelve statements and were asked to agree or disagree with each statement for themselves or for anyone in their household. The proportion of participants that agreed with each statement is presented in Table 7 below.

Table 7. Proportion of agreement with barrier to physical activity statements, 76704 CASPER,		
2015.		
It costs too much to be physically active (COST)	20.0%	
Physical activity takes too much time (TIME)	12.0%	
Places for me to be active are too far away (LOCATION)	17.0%	
There is no transportation to places to do physical activity (TRANSPORTATION)	10.0%	
The sidewalks are nice to use around my home (SIDEWALK)	62.6%	
There are bicycle lanes to use around my home (BICYCLE LANES)	35.0%	
The adults in the house don't want to be physically active (DESIRE)	32.0%	
I don't seem to have the skills to be physically active (SKILLS)	17.0%	
There are too few free places for me to be physically active (FREE)	30.0%	
The children in the house don't want to be physically active (CHILDREN)	14.6%	
My neighborhood is safe for physical activity (SAFETY)	70.7%	
I am fatigued by physical activity (FATIGUE)	54.6%	