

# “Strategies for Improving Access to Food in the Rolling Bends Community”

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## Introduction

The objective of our project was to use a food procurement tool to identify challenges and resources around food in Rolling Bends. 94 self-reported surveys were administered over six weeks and one key informant interview was conducted. 50 survey questions covered topics including demographics, health and physical conditions, participation in food assistance, barriers to buying healthy food, transportation, shopping behaviors, food preferences, barriers to healthy eating, household food security, and opportunities for change.

## Analysis and Results

### **Demographics** (see Figure 1)

- 95.7% Black
- 79.8% Female
- Average age: 35 years
- 1.7 adults per household (average)
- 1.2 working adults in household (average)
- 2.2 children per household (average)
- 1.0 elder (over 65 y/o) per household (average)
- 3.6 people per household (average)

### **What does the average household look like?**

<b>Participant Characteristics (N=94)</b>	<b>%, mean <math>\pm</math> SD</b>
<b>Age (years)</b>	34 $\pm$ 14
<b>Female Gender</b>	79.80%
<b>Race (Black)</b>	95.70%
<b>Adults in Household</b>	1.70 $\pm$ 0.75
<b>Working Adults in Household</b>	1.20 $\pm$ 0.51
<b>Children in Household</b>	2.22 $\pm$ 1.53
<b>Elders in Household</b>	1.01 $\pm$ 0.35
<b>Average number of people in household</b>	3.58 $\pm$ 1.80
<b>Households Receiving Assistance</b>	75.5%
<b>Average \$ spent on groceries per household</b>	\$307.13 $\pm$ \$177.17

**Figure 1**

## Health and physical conditions

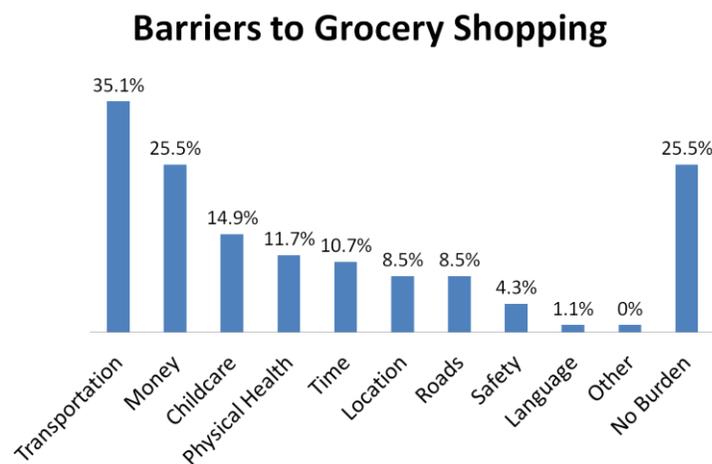
- 39.4% reported having high blood pressure
- 25.5% reported having asthma
- 20.2 % reported having diabetes
- 4.3% self-perceived obesity
- 6.4% of women were pregnant

## Participation in food assistance

- 75.5% of households are receiving at least 1 type of government assistance (WIC,SNAP/food stamps, free and reduced lunch) (see Figure 1)
- \$100 average dollar amount spent on groceries per person per month
- \$307.13 average dollar amount spent on groceries per household per month (see Figure 1)

## Barriers to grocery shopping (see Figure 2)

- 35.1% Transportation
- 25.5% Money
- 14.9% Childcare
- 11.7% Physical Health or Disability
- 10.7% Time
- 8.5% Location
- 8.5% Roads
- 4.3% Safety
- 1.1% Language
- 1.1% Other
- 25.5% No burden



**Figure 2**

## **Transportation**

- 28.7% Have vehicle
- 15-30 minutes average time spent to reach grocery store
- \$8.60 average round-trip cost to grocery store

## **Shopping Behaviors**

### ***Trips to grocery store***

- 39.4% 2-3 times per month grocery store trips
- 28.7% of participants went to grocery once a month or less

### ***Stores visited***

- 29.3% Wal-Mart
- 21.7% Buy-Lo
- 19.6% Super Giant Food
- 16.3% Kroger
- 5.4% AA Corner store
- 7.6% other

### ***Fast food visits***

- 67.7% 1-2 visits per week
- 19.4% 3-4 visits per week
- 3.2% 5-6 visits per week
- 2.2% 6 or more visits per week
- 7.5% Never visited

### ***Reasons for eating fast food***

- 51.1% Saves time
- 36.2% Convenient
- 11.7% Cost
- 8.5% Other (not wanting to cook, not knowing what/how to cook, low food in house, taste)
- 5.3% Do not purchase

## **Satisfaction**

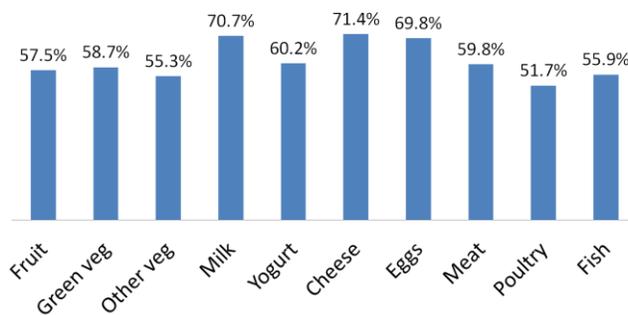
### ***Overall satisfaction with store***

- 53.2% Very satisfied with store
- 31.9% Somewhat satisfied with store
- 8.5% Neither satisfied nor dissatisfied with store

### ***Satisfaction with food items at store***

- 70.7% “Very satisfied” Milk
- 71.4% “Very Satisfied” Cheese
- 69.8% “Very Satisfied” Eggs
- 60.2% “Very Satisfied” Yogurt
- Fruit, vegetables, meat, poultry, fish < 60% “very satisfied”; 51.7% “Not satisfied” poultry

### **With what were they “Very Satisfied”?**



**Figure 3**

## **Barriers to healthy cooking**

- 47.9% No barriers
- 17.0% Cannot cook
- 8.5% No time
- 7.4% Do not like taste of healthy food
- 7.4% Do not know how to cook using fruits/vegetables
- 5.3% Do not have tools/utensils

## **Household food security**

- 55.3% reported that they were worried that at least once in the past four weeks their household would not have enough food
- 34.0% reported that at least once in the past four weeks they or any household member were not able to eat the kinds of foods they preferred because of a lack of resources
- 36.2% reported that at least once in the past four weeks they or any household member had to eat a limited variety of foods due to a lack of resources
- 37.2% reported that at least once in the past four weeks they or any household member had to eat some foods that they really did not want to eat because of a lack of resources
- 35.1% reported that at least once in the past four weeks they or any household member had to eat a smaller meal than they felt needed because there was not enough food
- 36.2% reported that at least once in the past four weeks they or any household member had to eat fewer meals in a day because there was not enough food
- 30.9% reported that at least once in the past four weeks there was no food to eat of any kind in their household because of lack of resources
- 17.0% reported that at least once in the past four weeks they or any household member went to sleep at night hungry because there was not enough food
- 17.0% reported that at least once in the past four weeks they or any household member went a whole day and night without eating anything because there was not enough food

## **Opportunities**

- 70.2% “Very Likely” to shop at new neighborhood food market
- 74.5% Interested in receiving updates about efforts to bring healthy food options closer

## **Discussion**

Our objective for this study was to identify areas of concern for the residents of the community as well as areas of opportunity for improvement. Interestingly, we found that more than half of the survey participants were “very satisfied” with the overall store at which they shopped for groceries. One explanation may be that the residents do not have a frame of reference to compare their grocery shopping experiences, therefore limiting their perceptions as consumers. For specific food items, the participants were less satisfied with the fruits, vegetables and meat, fish and poultry products compared to dairy products and eggs.

Nutrition-related chronic diseases are also a concern at Rolling Bends. There is a high prevalence of diabetes in this community (20.2%) – almost double the national average of adults twenty years of age and older (11.3%) (ADA 2011). 39.4% of the survey participants

reported having high blood pressure, which is higher than the national prevalence of 33.3% for adults twenty years of age and older (although this number increases to 45.7% for non-Hispanic Black women, of which our sample is more representative) (AHA 2011). However, despite the high prevalence for these health issues, self-reported obesity was very low: only 4.3% of participants reported self-perceived obesity, compared to 35.7% of U.S. adults (CDC 2012). Furthermore, diabetes and obesity are related diseases, which often occur together, so we should expect the number to be somewhat higher. From our key informant interview we learned that many of the people in this community either do not perceive themselves as obese or are not as concerned about their weight. Other possibilities could include social and cultural norms, the negative stigma associated with being labeled as obese, or doctors failing to diagnose obesity as a condition, especially if people are under- or un-insured.

We ran additional analyses to test whether there were any significant correlations between relevant variables including severity of food insecurity, qualifying for assistance, frequency of visit to store, travel time to store, frequency of fast food, and money spent on fast food (data not shown). We found that those who do NOT qualify for assistance had significantly higher levels of food insecurity ( $\alpha=0.05$ ). This is a powerful argument which supports the need for EBT transactions at mobile markets (i.e. "those who are poor without assistance need food the most, therefore grants are needed to help keep prices affordable for those families"). Further, we found that the longer it takes them to travel to the store, the more frequently they eat fast food per week and, similarly, the more often they visit the store, the less they spend on fast food ( $\alpha=0.1$ ). In places where there are limited options for fresh food and markets, fast food becomes the more convenient option, even if it is not the most cost effective or nutritious.

There are several opportunities for improving access in the Rolling Bends community, especially in the space they use as a community center. In the short term, they could introduce cooking classes, which can start off as a part of the after school program with the children and later incorporate cooperative learning with parents/adults. Similarly, there can be nutrition & diabetes education to increase awareness of what they do have access to. There are already plans in place for a community garden, which could serve as an educational tool as well as a source for nutritious, locally grown fruits and vegetables. Another suggestion for a possible intervention would be to engage the adults in a "field trip" of sorts to visit stores outside of their neighborhood that have fresher produce, more variety, and that are cleaner and more organized. This will provide them with a frame of reference and increase awareness of what they *should* have access to so they can become motivated to mobilize their community. With these efforts, the community can become prepared for longer term opportunities like a community supported agriculture (CSA) program or a mobile market.

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