USE OF QUALITATIVE METHODS TO LEARN MORE ABOUT FOOD INSECURITY AND OBESITY.
In 1996-97 we collected data on people using the Bread Basket in Manhattan, KS

- We found overweight and obesity was higher than the national norm in that sample of people
- Submitted a manuscript to Journal of the American Dietetic Association
- A reviewer questioned the findings and asked, “How is that possible?”
- It was converted to a “Brief” rather than an original research manuscript.

So how can food insecure people be obese?
The best way to answer this question is to use qualitative research methodology, coupled with quantitative methodologies.
Using qualitative methodology allows the investigator to:

- TALK with people about an issue
- Fill in gaps in the literature that are not caught through quantitative methodologies (surveys, measurements, etc.)
- It provides FORMATIVE data for survey development, marketing strategies, and designing intervention projects
Qualitative Methodology Most often used include:

- Person-to-person interviews
- Focus groups
Face-to-face interviewing:

- Good for gathering sensitive information
- Works well with children and adults and people from various ethnic backgrounds
- Be sure to include an ice-breaker...something to relax the participant (i.e., food models work well)
- Requires a skilled and trained interviewer
- Time consuming
Focus Group Methodology

- Groups should have 4-8 people, depending on the topics to be discussed and the depth of information that you want to collect.
- May need to be gender, race, or age-specific.
- Avoid having relatives in the same group.
- Moderator should be trained and skilled at keeping the conversation going and not allowing one individual to dominate the group.
- Always have 2 moderators present. This helps maintain objectivity.
- Use first names only and start with an ice-breaker.
Both methods use open-ended questions
When collecting qualitative data on food insecurity and obesity take your own heights and weights after the meeting (quantitative data)

Self-reported data is not recommended for low-income groups because of usual over- and under- reporting, but also because many do not own scales and don’t know their weights.
Example of quantitative question regarding food insecurity:

In the last 12 months, were you ever hungry but didn’t eat because there wasn’t enough money for food?

Yes

no
don’t know

It says “yes” or “no” but not “how” or “why”
Let’s go back to the food security question....and ask qualitatively

- Tell me about the food situation in your household. What happens when there isn’t enough money to buy food?

- What strategies do you use to feed yourself and your family when food is low in the home?

- How do you feed your children on days when food is short in the home? Where do you go? How do you select the meal site?
Data generated from a face to face child interview.

When children reported being hungry at night, we asked them to tell us what happened:

As one child reported, “…I go to sleep and I dream about food that I’m eating...I dream about ooh, ahhh, I dreamed about hamburgers and carrots and strawberries and everything else... and then it makes me full when I get up..it makes me, I get, like, and why do I have a tummy ache?!”

(Richards and Smith, Social Science Medicine: 2007:1577).
You can also ask questions about obesity or body size

- You’ve probably noticed that some people have larger bodies and others have smaller bodies….why do you think that happens?

- Or

- What do you think of your weight? What influences your body weight?

- Do you worry about your weight? Why? Why not?
“it scares me a lot, but it’s still kinda hard to watch what you eat…even though my brother and sister passed away, because of their weight. You know I don’t wanna watch my diet, it’s real hard to watch. I mean especially when you have a taste for something and I mean when your body wants it, you’re just gonna go get it. I start out with a little bit, then I’ll start eating and once I get into the routine of eating and it tastes good, then I just keep on eating. I’ll go OK, I gotta have some more, and then it’s like oh man, I’m done, I gotta have some more. I just keep going until I feel like I’m stuffed.”
Analyzing the data

- Remember that qualitative data cannot be analyzed in the same way as quantitative data...subjective vs. objective
- Qualitative data is an analysis of words, whereas quantitative data is an analysis of numbers.
- Be systematic and disciplined in your coding and have two researchers code; this decreases the subjectivity of the data.
- Code for ideas independently (you are extracting them from the discussion), then meet and resolve any coding discrepancies.
- Look for trends and patterns, identify themes and sub-themes.

- Achieve an appropriate “n”...saturation point

(Kruger, 1998)
Analyze the data

- Do your analysis in a timely manner.
- Analysis should be verifiable (someone else can come to the same conclusion).
- Organize the data using NVIVO or another ethnographic software. We use NVIVO.
- Examine the data by body mass index (BMI)/race/gender/age. Do heavy and lean children think about food/physical activity/weight in the same way?
A history of food deprivation can lead to overeating and obesity  
Current hunger can lead to overeating when tasty food is available (Smith and Richards, 2008; Richards and Smith, 2007)  
55% of homeless youth reported not enough and eat and 25% reported going to bed hungry (Smith and Richards, 2008)  
Homeless youth reported overeating, eating disliked food, eating anything, and eating at friends homes as strategies to cope with food insecurity (Smith and Richards, 2008)  
Many youth reported unhealthy eating behavior because of the types of foods available in the home (Dammann and Smith, 2010)  
Youth reported night eating. Buffets are favored type of restaurant. School lunches reported as “nasty” (Dammann and Smith, 2010).  
The National School Lunch program expedites acculturation for migrant children (Franzen and Smith, 2009).  
From focus group data, models were created (Franzen and Smith, 2009; Richards and Smith, 2007).
What we’ve learned over time about adults and food insecurity and weight issues:

- Parents try to make sure children eat first (Richards and Smith, 2006a and 2006b).
- Adults have developed strategies to increase food security including: using food assistance programs, shopping on Saturday when store food samples are plentiful, overeating when tasty food is availability, shopping smart and thrifty, stealing and dumpster diving when necessary, asking family and friends for cash/food, pawning items for cash, selling food stamps, and overeating on Friday evenings at Soup kitchens because many are closed on Saturday (Richards and Smith, 2006a and 2006b; Smith et al., 2010; Wiig and Smith, 2009; Eikenberry and Smith, 2005).
- Not all adults want to lose weight; especially true for African American males (Smith and Richards, in process)….so how can we work with this sample? They will be a challenge.
- Different samples view weight differently…older Hmong perceive weight as having money to eat, better survival in hard times…African Americans and Native Americans are accepting of larger body sizes….many define “big” differently from Whites (Mulasi-Pokhriyal and Smith, 2010; Franzen and Smith, 2009; Dammann and Smith, in press).
- Both the food environment and personal determinants are important influencers of food choice (Dammann and Smith, 2010; Dammann and Smith, 2009; Richards and Smith 2006a,b; Smith and Morton, 2009; Smith et al., 2010; Henderickson et al., 2006; Smith et al., 2009)
- Food policies at homeless shelters influence eating (Smith et al., 2010; Richards and Smith, 2010; 2007; 2006)
- Pop is not the only “problem” food, consumption of high fat meats, milks, and fried foods contribute excessive calories (Dammann and Smith, 2010; Smith and Richards, in process).
NOW USE THE DATA...DEVELOP SURVEYS, MARKETING PLANS, INTERVENTIONS...OR YOU NOW HAVE NEW QUESTIONS TO ASK
Quantitative Data

- Survey questions should be developed using formative data from focus groups or interviews.

- Example of questions created for a child’s survey (n=202 homeless youth 9-18 years) based on data from kid’s interviews (used a 5 pt Likert Scale..always true; kind of true; not sure; kind-of-not true; never true):

  - If I am hungry, I usually wait until the next meal to eat.
  - I overeat at mealtimes so I will not be hungry later on.
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  (Smith and Richards, Am J Hum Bio; 2008)
Publications on food insecure populations


Publications on food insecure populations


20. Lautenschlager L, Smith C. Beliefs, knowledge, and values held by inner-city youth about gardening, nutrition, and cooking. Ag and Hum Values. 2007;24 (2):245-258.

