

A Qualitative Study of Nutrition-Based Initiatives at Selected Food Banks in the Feeding America Network

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ABSTRACT

Food banks are the foundation of the US emergency food system. Although their primary mission is to alleviate hunger, the rise in obesity and diet-related diseases among food-insecure individuals has led some food bank personnel to actively promote more nutritious products. A qualitative interview approach was used to assess nutrition-related policies and practices among a sample of 20 food banks from the national Feeding America network. Most food bank personnel reported efforts to provide more fresh produce to their communities. Several described nutrition-profiling systems to evaluate the quality of products. Some food banks had implemented nutrition policies to cease distributing low-nutrient products, such as soda and candy; however, these policies were more controversial than other strategies. The obstacles to implementing strong nutrition policies included fear of reducing the total amount of food distributed, discomfort choosing which foods should not be permitted, and concern about jeopardizing relationships with donors and community partners. Empirical research is needed to measure how food bank nutrition policies influence relationships with food donors, the amount of food distributed, the nutritional quality of food distributed, and the contribution of food bank products to the food security and nutritional status of the communities they serve.

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FOOD INSECURITY OCCURS WHEN HOUSEHOLDS HAVE limited access to sufficient safe and nutritionally adequate food “without resorting to emergency food supplies, scavenging or stealing.”¹ In 2010, 17.2 million Americans experienced food insecurity, one of the highest levels recorded since 1995.² This crisis highlights the importance of the emergency food system in the United States, including food banks. Food banks serve as central collection centers for canned, fresh, and frozen food and beverage donations. These items are distributed to food-insecure households through partner agencies (eg, soup kitchens and food pantries).³

The mission of Feeding America, a network of >200 food banks, is to feed those who are hungry and engage in advocacy to fight hunger.⁴ The current food supply contains excess foods and beverages that are both nutritionally empty and energy-dense.⁵ There is growing evidence that food-insecure individuals are more likely to suffer from nutritionally deficient diets compared with people who are food secure,⁶⁻⁸ despite adequate caloric intake.⁹ This suggests that food insecurity in the United States is not just about too few “calories,” but a lack of healthful caloric intake and adequate nutrition.¹⁰

To date, some members of the food bank system have taken on the challenge of meeting the nutritional needs of their clients. For example, a direct goal of Feeding America is to obtain

1 billion pounds of fresh produce by 2015.⁴ At the local level, researchers working with the Oregon Food Bank developed a nutrition-profiling system to measure the foods distributed in terms of MyPyramid days.¹¹ Other food banks offer nutrition education programs, such as training kitchens.³ Notably, in 2004, the leadership of the Food Bank of Central New York implemented a nutrition policy of “no soda, no candy,” and refocused their efforts to procure nutritious foods.¹² This policy was supported in a survey of pantry clients in central New York. Clients preferred to receive meat, poultry, fish, vegetables, and fruit instead of soda, candy, and snack foods.¹³

The paradigm shift to emphasize the distribution of healthy products at food banks has the potential to address both food insecurity and malnutrition in vulnerable populations. This also presents a new opportunity for anti-hunger advocates and nutrition advocates to work together toward a common goal. To date, however, there is minimal published scholarly research about nutrition-based initiatives at food banks, and research needs have not yet been identified. The aim of the current qualitative study is to understand the range of current nutrition-based initiatives used by a purposively selected sample of food banks, identify the influences and barriers related to the implementation of different policies and practices, and suggest future research opportunities.

Introduction: The interview to follow will focus on understanding the current situation, development, and acceptance of nutrition-based initiatives at food banks. As a reminder, nutrition-based initiatives typically fall under the following categories: A nonacceptance policy for certain food products or a food rating system to help agencies understand which products have the most nutritional value.

1. What role do you think food banks should have in providing nutritious food to clients in the community?
2. As an entity that provides food to supplement what individuals are able to buy in the supermarket, what foods do you feel are most important for your clients?
3. In the food bank community, different opinions exist about whether or not food banks should distribute products with low nutritional value, such as soda and candy. What are some opinions you have heard regarding this topic of conversation?
4. What types of nutrition-based initiatives have been implemented by your food bank?
5. What catalyzed the discussion of nutrition-based initiatives at your food bank?
6. What was the original response among food bank staff about establishing nutrition-based initiatives?
7. What concerns arose regarding donor reactions toward the changes?
8. Which entities were invited to contribute to the development and implementation of the nutrition-based initiatives?
9. What challenges did your food bank overcome throughout the process of implementing the nutrition-based initiatives?
10. Please describe any feedback you have received from individuals throughout the community regarding the changes in food options.
11. To your knowledge, what other food banks are integrating nutrition standards into their programs?
12. What do you feel is the best way to measure the success of a food bank?

Figure 1. Sample questions from semi-structured interviews with management personnel from selected Feeding America food banks.

METHODS

This study focused on Feeding America food banks because of this organization's prominence in the US emergency food system. In order to capture the diverse context, influences, and barriers related to nutrition-based initiatives, 49 food banks were selected purposively from the Feeding America website to ensure variation in size (indicated by pounds of products distributed in 2009), geographic location (determined by US Census regions) and use of nutrition-based initiatives.^{14,15} Participants were recruited in two manners. Primarily, electronic invitations were sent to food bank directors or chief executive officers, who were invited to participate in the interview themselves or select another staff member with more subject-matter expertise to take part in the study. In addition, some specific individuals and food banks with nutrition-based initiatives were targeted for participation through snowball recruitment.¹⁴ The final sample included directors, chief executive officers, and staff in charge of nutrition, programs, and procurement. Data collection was concluded after interviewing staff from 20 small, medium, and large food banks from around the country. At that point, a wide range of views had been expressed and the interviewer believed that continued data collection was unlikely to reveal new information.

Given the lack of published research on this topic, the interview questions were open-ended, exploratory, and designed to elicit responses about the role of nutrition at food banks. Specifically, interview questions asked about facilitators and barriers to implementing nutrition-based initiatives, as well as details about different systems (Figure 1). Data were collected in-person or by phone by one of the authors (B.N.H.) from June to October 2010. All participants granted verbal consent and permission to record their conversations. Inter-

views ranged from 30 minutes to 2 hours, and participants received a \$25 gift card. The Yale University Internal Review Board approved the protocol.

Interviews were transcribed verbatim, deidentified, and entered into MAXQDA10 software (2010, VERBI GmbH) for analysis. Thematic Analysis¹⁶ was conducted and involved reading and annotating the data to identify 85 inductive thematic issues. Two researchers independently coded the same subset of interviews and compared results to ensure consistency. Discrepancies were resolved by consensus and the 85 code definitions were refined. Following this, one researcher recorded the entire dataset.

MAXQDA10 software was used to search the data by each theme, identify nuances, and conduct cross-case comparisons. This process revealed differences in nutrition practices and perceptions. Potential interpretation bias was reduced by validating results using the concept-indicator model, examining negative cases, and referring back to transcripts to ensure findings are grounded in data.¹⁷ Verbatim quotes from study participants are presented to illustrate key issues.

RESULTS AND DISCUSSION

The pervasiveness of obesity and chronic disease in the United States is a salient issue for food banks. Interviewees described considerable dialogue about this within their organizations among staff, board members, and community partners. One participant explained:

Back then, food banking was more of let's just get food out to low-income families. Now it's more like, we've got the food, now let's change up what they're getting because we're noticing a lot more low-income individuals suffering a lot more diseases and health disparities. . . .

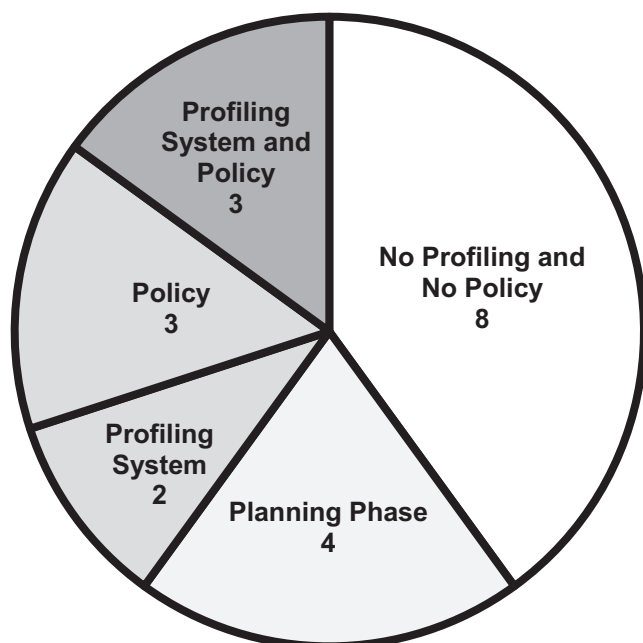


Figure 2. Proportion of food banks that have or are planning nutrition-profiling systems and nutrition policies regulating which foods are accepted and distributed in a selected sample of Feeding America food banks (n=20). Count=total number of food banks out of 20.

Two potential changes that were discussed were setting up nutrition-profiling systems and establishing nutrition policies. Figure 2 depicts the proportion of respondents who reported current or planned use of each of these strategies.

Nutrition Profiling

Several interviewees described using ranking systems or algorithms to quantitatively score the nutritional value of the foods distributed. Three food banks used similar ranking systems based on data from Nutrition Facts labels to designate whether the item should be eaten regularly, moderately, or occasionally. Foods were then labeled with numbers (eg, 1, 2, 3) or colors (eg, green, yellow, red) on agency ordering menus with the goal of guiding their choices. An additional food bank devised an algorithm to rank products. A 10-point scale provided a relative value for each pound of food and reflected the notion that not all pounds are equally valuable. The factors evaluated nutritional value, availability, economic worth, and client preference. Each rank was then weighted to either enhance or discount the value of each pound of the product.

An alternative manner of profiling, conducted by one food bank, measured the organization's ability to broadly provide seven key nutrients to food insecure households. The goal was to ensure the total distribution of each targeted nutrient equated to the amount necessary to supply the reference daily intake for the total population receiving products over a selected period of time.

Some participants voiced concern that these systems require extensive nutrition expertise to be sustainable. One participant suggested Feeding America should develop a system for all food banks to use, so even those without personnel trained in nutrition could evaluate their inventories. Users of

ranking systems, however, noted that any employee could be trained to run the nutrition analysis, which is easily completed on a computer. Staff assigned to address the daily tasks ranged from chief operating officers to nutrition directors to warehouse receivers. A systematic plan to ensure products are analyzed and returned to the warehouse was noted as a way to increase efficiency.

As charitable organizations, food banks rely on the generosity of donors to meet the needs of food-insecure households. Some participants viewed nutrition profiling as an advantageous way to inform funders about their commitment to providing nutritious food. One participant noted, "We knew qualitatively that we carry a lot of healthy food, but you have to be able to show that to a funder." Another participant noted his food bank received funding to create a profiling database and interface program because the donors were impressed with the organization's nutrition-related plans.

Nutrition Policies

Nutrition policies guide efforts to eliminate specific products, such as soda, candy, or other unhealthy products, from food bank distribution systems. Occasionally, policies emerge from local regulations (eg, one food bank was influenced by a city-wide ban that restricted *trans*-fat products in food establishments), but most nutrition policies were set by the food bank and restricted the distribution of specific foods. These policies were controversial because of the perception that they can jeopardize donor relationships and limit client choice. Major food companies often offer food banks a mixture of healthy and unhealthy options. Participants noted that food bank management believes stipulating acceptable products can alienate or offend donors, perhaps causing them to end their relationship with food banks. One food bank described mitigating this concern by educating donors:

For the mixed donors [those that offer products with a range of nutritional quality], I think it was having our staff, our food resources staff, be more proactive in terms of their conversations with the food donors Overall I think from those donors, they've embraced . . . the message, but it took some effort.

Policy implementers did not seem very concerned about losing donors. One participant claimed no donors were lost after instituting a no soda policy, while another noted, "We've lost a lot of donors, but we've also gained a lot of new ones that have more of the nutritious stuff we're looking for." One food bank received a call for a soda donation the day it instituted a no-soda policy. The donor simply offered to take the organization off the carbonated beverage list and asked if it wanted to continue receiving tea and lemonade.

Even if food banks retain all donors, eliminating soda can drastically affect the total weight of products allocated during the year. Given that annual distribution is a key measure for success, policy implementers have partnered with new donors and purchased staple foods to close the weight gaps. One interviewee noted:

A smart but not necessary mission-driven food bank could move a lot of soda and move a lot of pounds. When we made a conscious decision to really cut the amount of soda we move, our pounds dropped, and we really had to explain to a lot of people, it's soda that we stopped carrying.

Food banks that limit client choice by instituting a nutrition policy were periodically described as “nutrition police” or “food police.” One participant shared, “People should have choices, and our job is to make sure they have healthy things to choose from. Then, if they want to supplement it with pop, cookies, . . . then that needs to be their choice.” Another individual felt that although soda and sweets lack nutritional value, “there’s a need for it, especially for the underprivileged. Why should Johnny and Sally be able to have a candy bar when Ricky and Sue can’t?” Two participants presented the idea that people will buy soda and candy elsewhere if food banks do not offer them, so providing these items allows end-clients to use their money for other necessities. Alternatively, a participant suggested, “The less [soda] we give . . . the less that’s available. In some cases, people won’t utilize that product.”

Representatives of food banks that implemented nutrition policies acknowledged sentiments about choice but believed that soda and candy were already more available than healthy products in low-income communities, so they should prioritize providing nutritious resources. “We’re not eliminating it [candy] completely from anyone’s diet, though I’m sure some people would say that. If they’re going to get that sweet candy bar just because they feel like they want [it] . . . well at least we gave them the fruits and vegetables for their week.”

Supportive leadership was essential for implementing nutrition-based initiatives; in some cases board members or senior staff actually provided the catalyst for them. Participants noted that leaders who encouraged innovation and new programming fostered the environment necessary for productive nutrition discussions. Alternatively, lack of leadership support hindered change. “The food bank leadership is not for it. I have sort of investigated their thoughts and feelings on that, and it is not something that they’re interested in.”

Fresh Produce

The importance of providing more fresh produce was discussed by many interviewees. Reasons for this were the relatively high cost of produce and the concern that food-insecure households might only consume fresh fruits and vegetables intermittently. In addition, individuals living in communities that lack mainstream grocery stores might not have regular access to fresh produce.

In addition to its health benefits, food banks have focused on fresh foods in response to diminishing donations of non-perishable dry foods by the food industry. Donors are:

. . . looking at their bottom line, zero waste. There’s not the same type of production over-runs, or mistakes, or mislabeling, the kind of things that were the bread and butter of food banks years ago. As they’re going away, we’re seeing that produce is a good potential [way] to make up for this other food that we’re losing access to.

A food bank in the Midwest experienced the noted abundance of produce when it received six semi-truckloads of apples after simply asking an apple growing organization what happens to the end-of-season crop.

Participants also noted barriers associated with allocating perishable products; specific challenges noted included investing in new product-sourcing approaches, building community partner capacity, and increasing the effectiveness of

distribution methods. Frequent contact between donors and food banks is necessary, as well as a financial investment in trucks and fuel. A few food banks had outgrown their cold-storage space and needed to relocate or refurbish their warehouses. One participant noted another added cost to distributing more produce was hiring staff to train the extra volunteers needed to properly process these products.

Many participants felt that distributing food through partner agencies was a necessary and mutually beneficial component to the emergency food system. However, partner agencies might not be equipped to move the large quantities of perishable goods:

What food banks across the country are finding in the last couple of years is that the agency network, which is traditionally based, often volunteer-run and generally resource-poor, has a hard time moving large amounts of food, especially perishable food that needs to be refrigerated or frozen. So where food used to be the limiting constraint, now it is sometimes the distribution system.

In an effort to circumvent these limitations, food banks have invested in new or better distribution methods. Food banks nationwide use mobile pantries to allocate perishable items directly to those in need. One food bank works with its partners to facilitate “just in time” deliveries of fresh products, thereby eliminating the need for refrigeration. In addition, two participants mentioned their food banks help select partner agencies obtain refrigerators, but another participant explained that the associated energy costs make organizations hesitant to use them.

CONCLUSIONS

This qualitative study reveals how some food banks are effectively altering their operational strategies to address concerns about poor nutrition. The next phase of research on this topic should examine the characteristics of the food banks that are able to make these changes, and identify key factors for success (such as the size of the food bank, having a registered dietitian on staff, and geographical location).

Nutrition-profiling systems are gaining popularity at food banks and are a valuable way to educate staff and partner agencies about the quality of food available. Research is needed on how to best implement nutrition-profiling systems and document their effectiveness as educational tools. The results from such studies could help Feeding America develop a single, national nutrition-profiling system.

The most controversial issue that emerged was whether or not food banks should have policies regulating the nutritional quality of foods they distribute. Data from this study challenge the notion that eliminating specified products will harm food banks because mixed donors were willing to fulfill requests for healthier items, new donors were found, and donor education was effective. It will be important to monitor ongoing reactions to these nutritional policies from multiple stakeholders, including end-clients and the food industry. Future research can address whether or not food banks that set new policies lose important donors and become less effective in communities, and measure how the organizations’ nutrition policies influence relationships with food donors, the amount of food distributed, and the nutrition quality of foods. Studies can also assess whether clients who no longer obtain soda and

candy from food pantries purchase replacements or just decrease their consumption. Focusing exclusively on pounds as a benchmark for success penalizes food banks that choose to eliminate these heavy, yet empty, calories. Instead, a national nutrition-profiling system that enables food banks to submit nutrition-based reports to Feeding America would provide an alternative way to monitor the achievements of these organizations.

Many food banks in the study supported increasing fresh produce distribution as a way to fill the nutritional gaps that put food-insecure individuals at risk for malnutrition and diet-related diseases. At the same time, interviewees noted that these changes incur costs. Assistance in overcoming the logistical challenges inherent in perishable food is needed. In addition, research to assess the impact of these efforts on the nutritional quality of the end-user's diet will be important to justify the added cost of distributing these products.

Clearly, the world of food banking is evolving in response to the poor food environment and the health challenges facing food-insecure individuals in the United States. Efforts by Feeding America food banks to adapt and meet the nutritional needs of vulnerable individuals are to be commended. Additional research on the leaders within this movement is needed to guide the development and dissemination of best practices throughout the country.

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STATEMENT OF POTENTIAL CONFLICT OF INTEREST

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