



GROCERY STORE ACCESS, QUALITY, NUTRITION SELF-EFFICACY AND KNOWLEDGE OF OKLAHOMA FAMILY CHILD CARE HOME PROVIDERS

Childhood obesity has become an epidemic with global impact [1]. While access to healthful food stores often determines dietary quality, influence of grocery store access and quality on nutrition outcomes is unknown in family child care homes (FCCH). Nutrition self-efficacy is a measure of barriers and confidence when performing healthful nutrition practices [2], while nutrition knowledge consists of knowing facts and processes about performing various healthful tasks [3].

A study involving 49 FCCH serving 2-to-5-year-old children and 86 grocery stores within a 60-mile radius of Oklahoma City was conducted. The aim of the study was to determine if grocery store access, quality, self-efficacy, and knowledge influenced fresh fruits and vegetables served in FCCH. Service of fresh fruits and vegetables was determined by analyzing the Dietary Observations in Child Care (DOCC) form.

Grocery Store Access and Quality

Grocery Store Access

Access was measured by:

1. FCCH self-reported round trip distance to the grocery store they typically use.
2. Distance to the nearest grocery store determined by The Geographic Information System (GIS) tool.

Findings

- Mean round trip distance of 9.7 miles to the grocery store.
- Mean distance to nearest grocery store 1.8 miles.
- Mean number of grocery stores within five miles of each FCCH was 14.

Grocery Store Quality

Quality was measured by:

1. GIS estimating the square footage of the grocery store space dedicated to fresh produce.

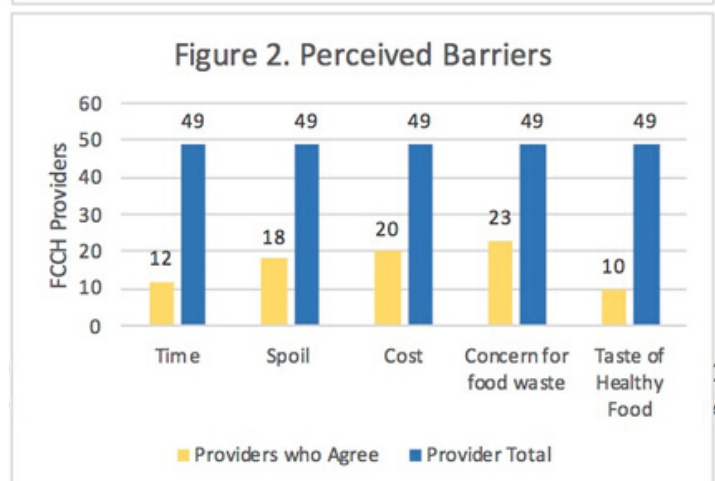
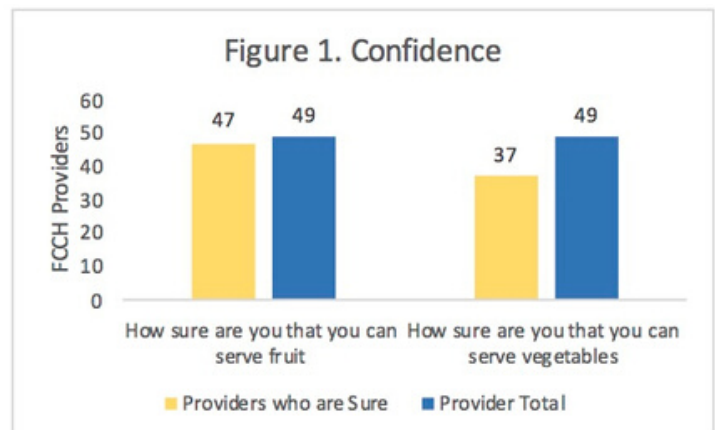
Findings

- Area of produce in the nearest grocery store had a mean of 690 square feet.
- Summed area of produce within five miles of FCCH was 9385 square feet.

Provider Nutrition Self-Efficacy

Self-efficacy was measured using a questionnaire. Figure 1. displays confidence and Figure 2. displays perceived barriers to serving fruits and vegetables.

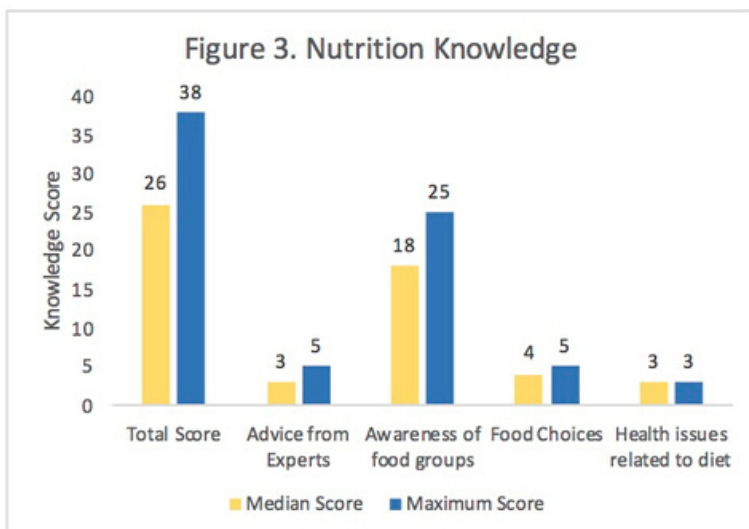
- Providers reported confidence in the ability to serve children fruit (95.9%) and vegetables (75.5%) two or more times per day.
- On average providers had low perceived barriers.



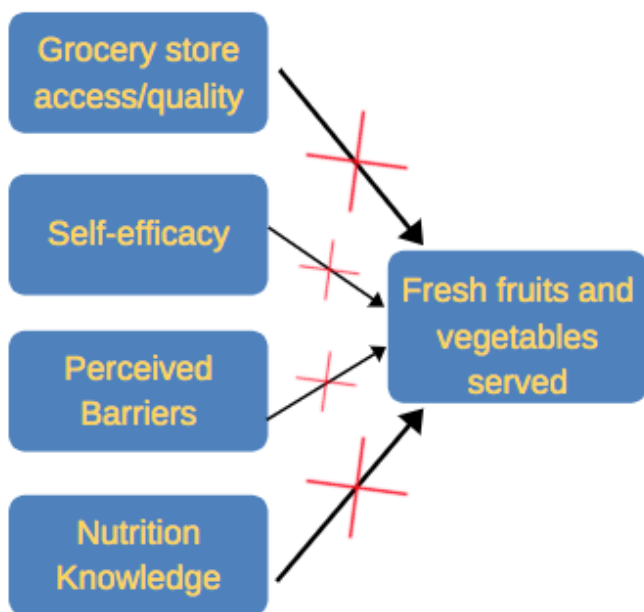
Provider Nutrition Knowledge

Nutrition knowledge was measured using a questionnaire with 38 questions. Figure 3. displays the median scores in each category.

- Providers scored on average 68.4% accuracy overall.
- Providers scored highest on health issues related to diet.
- Providers scored lowest on awareness of food groups.



Study Outcomes



Implications of FCCH grocery store access, quality, self-efficacy, and knowledge

While primary variables of interest were not significantly associated, baseline characteristics of our sample are novel and of value.

- The grocery stores assessed provide less space for produce.
- FCCH report more barriers to implementing nutrition best practices.
- FCCH have greater nutrition knowledge compared to the general public[8], however have room for improvement overall, particularly for awareness of food groups.
- FCCH serve fruits and vegetables are comparable to other childcare settings.

FCCH food access and procurement characteristics should be examined further to better understand the community nutrition environments around FCCH.

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