

Barriers to Child Nutrition & Oral Health Among Families at an Upper Manhattan Head Start Program: A Community Needs Assessment

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INTRODUCTION & OBJECTIVE

- Previous studies have shown that pediatric populations of upper Manhattan have higher caries rates compared to New York City residents as a whole.¹
- Diet modifications and proper oral hygiene are crucial in preventing dental caries.²
- Although poor nutrition is a determined cause of dental caries and there is ample research regarding oral health disparities, there is a lack of research regarding parents' understanding and beliefs towards the impact of nutrition on their child's oral health.³
- The objective of this study is to assess the knowledge, attitudes, beliefs, and practices of parents/caregivers of children attending the Fort George Community Enrichment Center in Manhattan with regard to oral health and nutrition. Findings will inform the development of an educational workshop for parents at the Center.

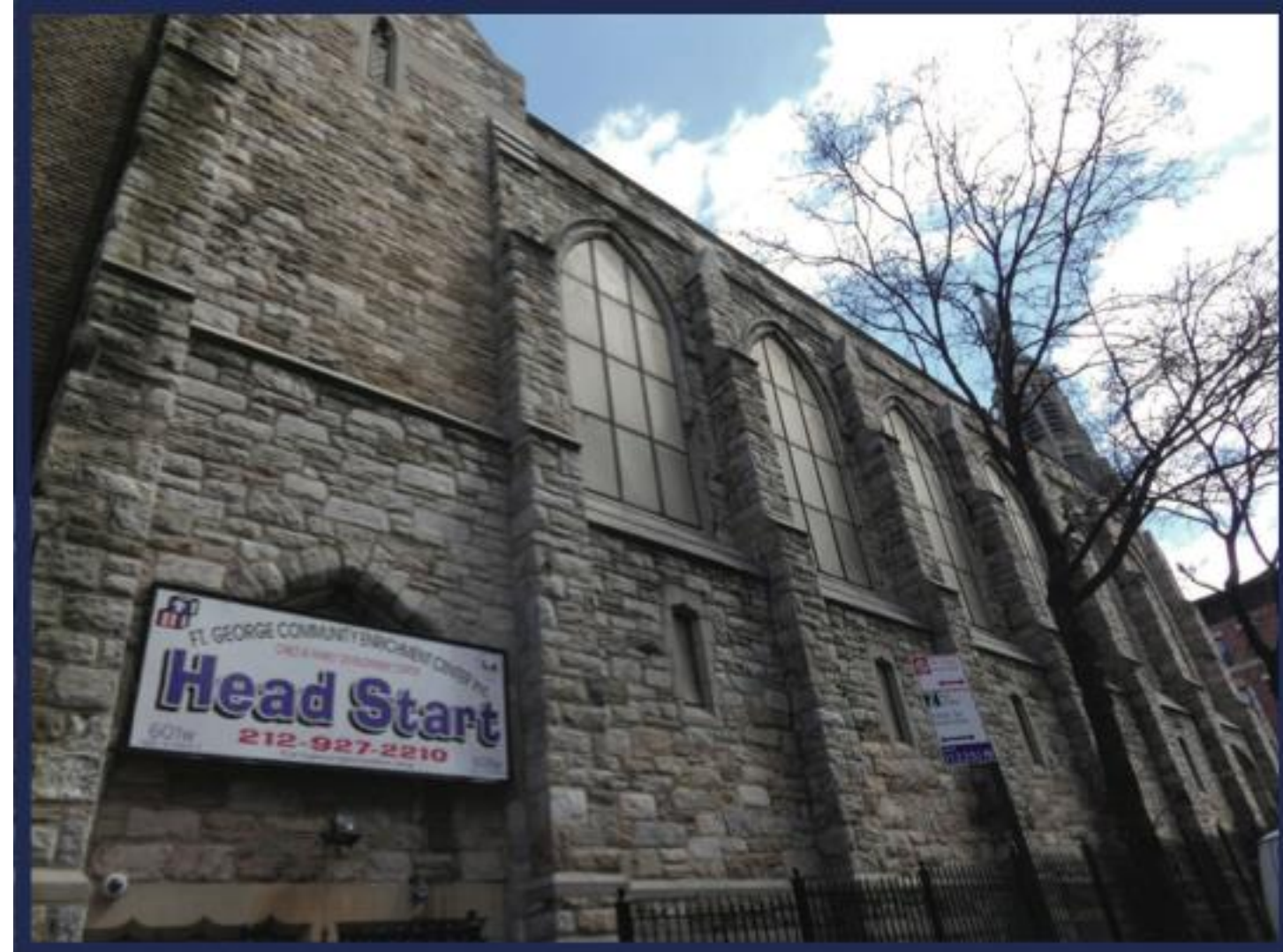


Figure 1: Ft. George Community Enrichment Center

METHODS

- A novel, paper survey was designed and administered to a convenience sample of parents at an annual health fair at the Center.
- Participants were free to choose a Spanish or English version of the survey.
- The survey included an assessment of intake of food groups per week. This was designed to address the well-documented issue of internal validity of 24-hour dietary recalls and considers that the participant is responding on behalf of another person (their child).⁴ Furthermore, using a longer time period in measuring food intake frequency may be more theoretically consistent with pathological mechanism of caries and thus more useful in assessing caries risk.
- Participants were observed as they completed the survey and could ask clarifying questions about the survey items.
- The data were coded and tabulated for analysis.

RESULTS

- Thirty-three parents participated in the survey.
- Participants who believe that their child has caries (18%) all rated their child's oral health as "good."
- 82% reported that their child has seen a dentist at least twice per year
- 6% could not read the survey in their native language and required assistance.
- Further analysis will examine the relationships between food group intake frequencies and oral health beliefs/practices.

Figure 2: Demographic Data

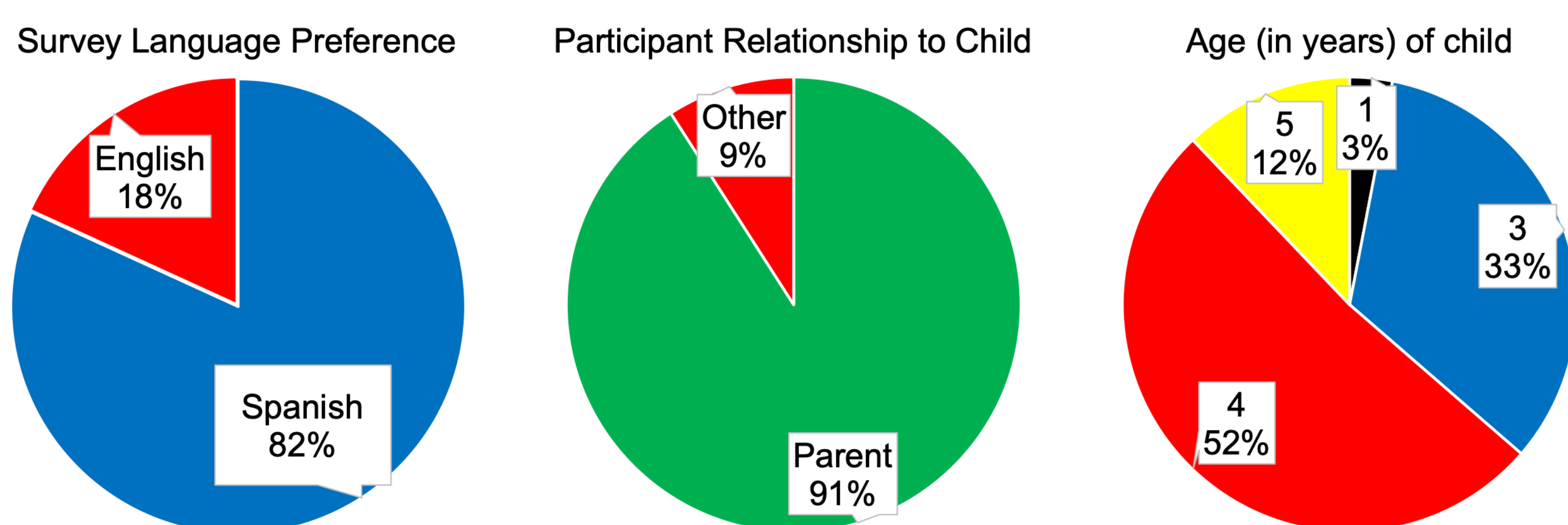
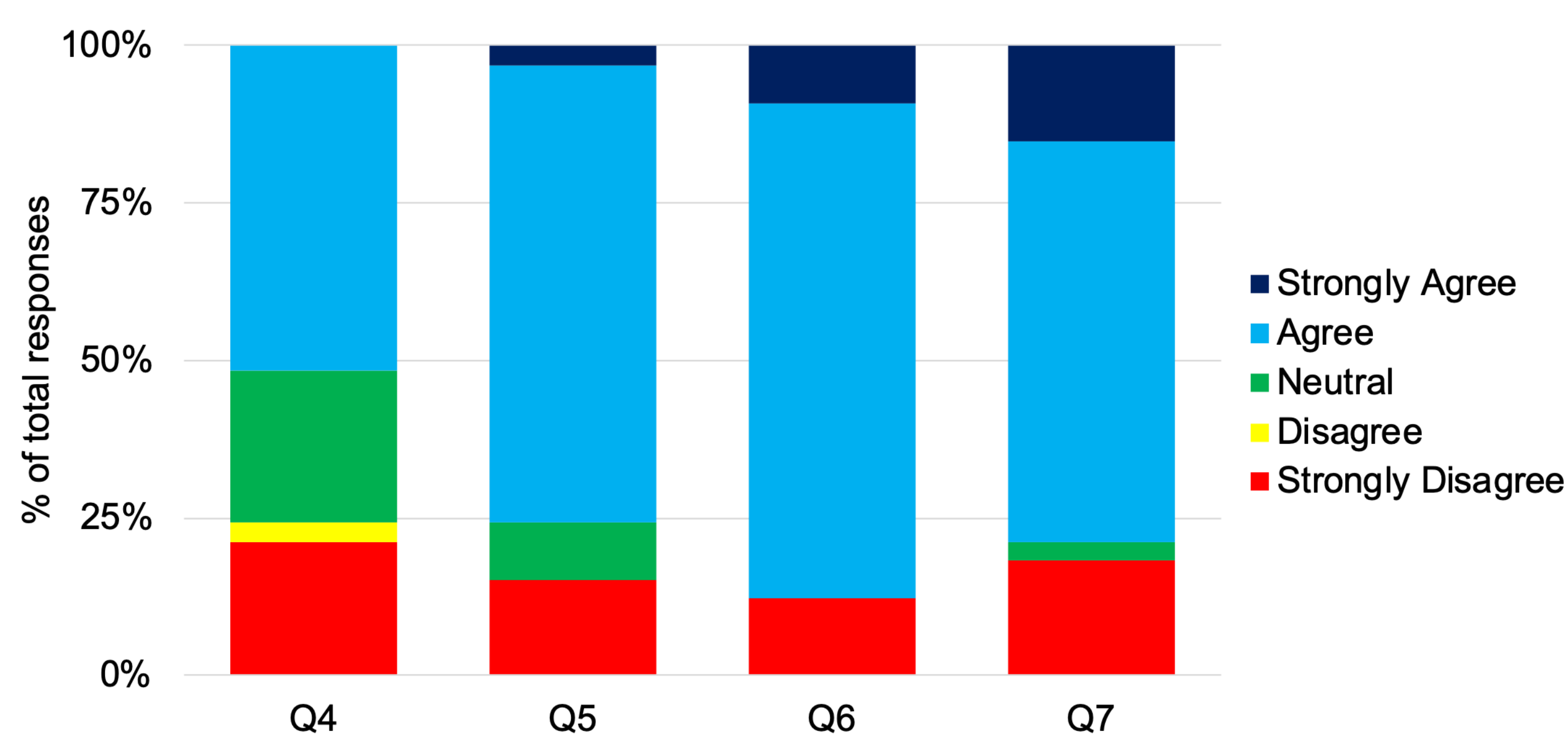
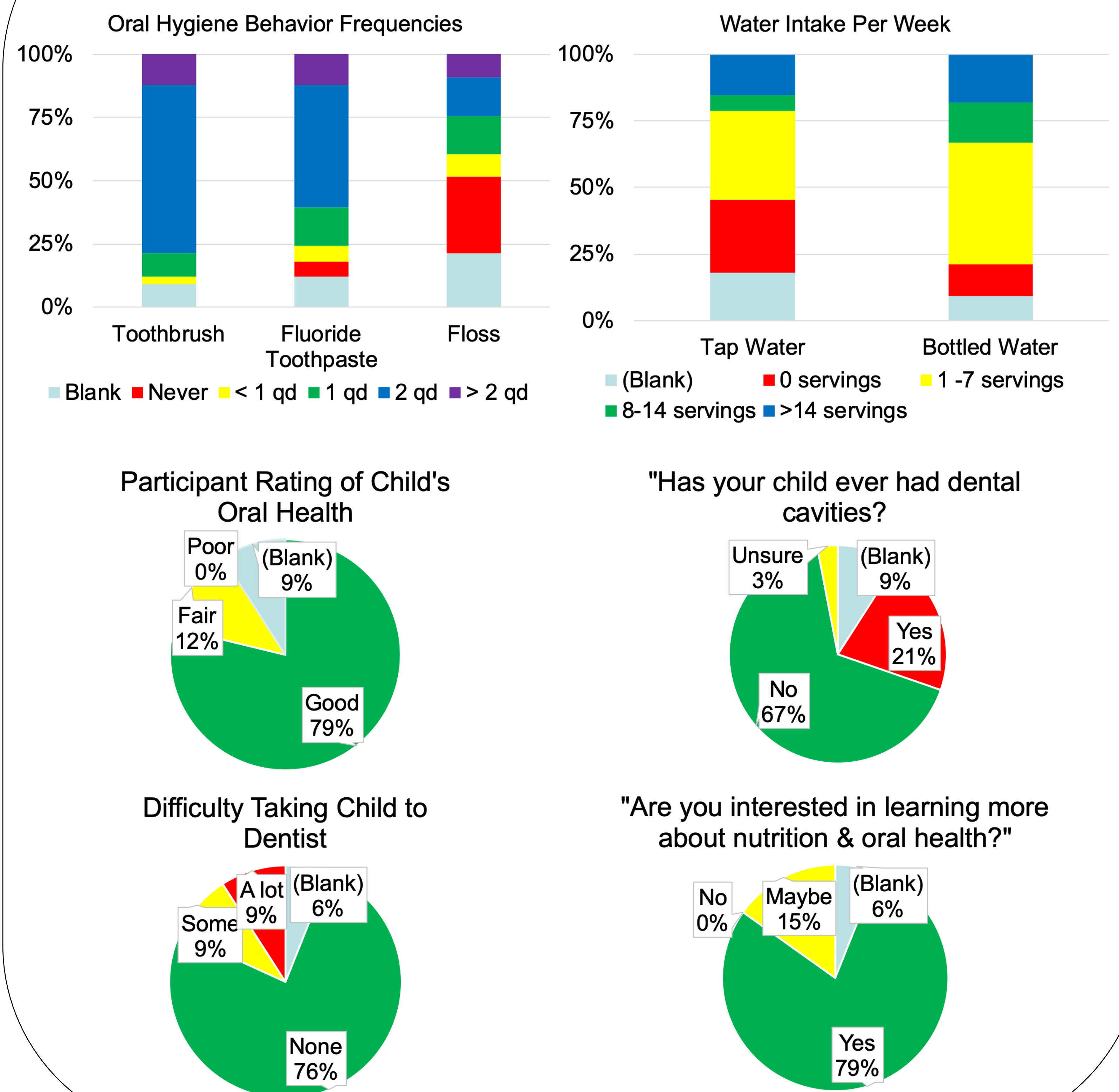


Figure 3: Likert-Scaled Attitude/Belief Responses



Q4: "I believe my child has a healthy diet."
Q5: "I can afford to buy the foods my child needs to be healthy."
Q6: "A healthy diet can help to prevent dental cavities."
Q7: "It is important for my child to go to the dentist for check-ups and cleanings."

Figure 4: Responses to Select Survey Items



CONCLUSIONS & DISCUSSION

- Although most of the children have seen a dentist regularly, many participants' beliefs about their child's caries status are inconsistent with their perceptions of their child's level of oral health. Therefore, adequate oral health knowledge is not being communicated to some individuals in this population.
- Because the lack of oral health knowledge in this population may be due to language/literacy barriers to obtaining health information, the educational workshop will include basic facts about oral health & nutrition, and it will be fully bilingual with all information spoken aloud.
- Most participants do not perceive a financial barrier to providing their children with adequate nutrition, so parents at Fort George are likely to be able to afford recommended diet modifications to improve child oral health.
- Some participants' avoidance of [fluoridated] tap water is consistent with reported community concerns about the safety of the water system in upper Manhattan.⁵
- Attitudes and beliefs about nutrition are likely influenced by Choosing Healthy & Active Lifestyles for Kids (CHALK) educational programming running concurrently at this site.
- Designing a survey instrument that could relate nutritional frequency data to oral health beliefs/practices proved to be theoretically and practically challenging. A similarly designed, validated instrument could not be found in the literature. Many participants chose not to answer some of the frequency assessment items as indicated by the "blank" responses in Figure 4. Some participants verbally commented that completing this portion was laborious, and thus some may not have responded thoughtfully.
- Future research should address local fluoridated water intake, language/literacy barriers in oral health care, and the validation of oral-health-relatable nutritional frequency instruments.

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