

WHAT'S IN YOUR GLASS?

TAP WATER SAFETY AND CONNECTION TO THE FLINT WATER CRISIS ASSOCIATED WITH BEVERAGE INTAKE AMONG LOW-INCOME MICHIGAN FAMILIES

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OBJECTIVE: To identify perceptions of tap water safety among low-income Michigan mothers and examine associations between these perceptions, mothers' beverage intake, infant feeding practices, and young children's beverage intake.

BACKGROUND

- Many Michigan communities have experienced threats to the safety of their tap water, the most well-known being contamination in Flint, Michigan.
- Distrust of tap water has been associated with an increased reliance on bottled water and increased sugar sweetened beverage intake among some populations.
- Little is about how Michigan families perceive their tap water or the extent to which beliefs about tap water influences their beverage choices.

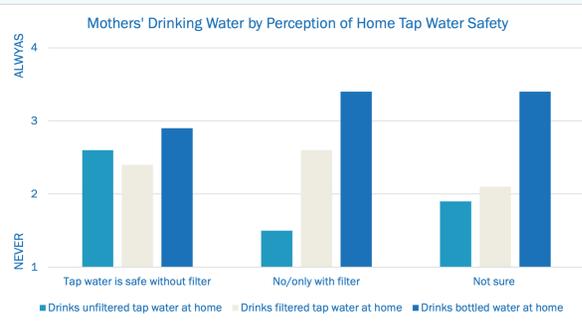
METHODS

- One time, online survey conducted in November/December 2020
- 3,881 Medicaid-insured women who had given birth at the University of Michigan hospital in the past 4 years invited to participate via email.
- 13% (N=500) responded, were eligible, and provided valid data.
 - 147 had infants
 - 417 had children 1-4 years old
- Bivariate analyses and multivariable regression used.

RESULTS



- 66% of mothers felt their water was safe
- 22% of mothers were unsure whether their water was safe
- Mothers experiencing food insecurity and without access to city water were less likely to feel their water was safe
- Mothers with unsafe drinking water spent \$5 more/month on bottled water



- Negative perceptions of tap water in general were strongly associated with the following, independent of perceptions of own tap water:
 - Bottled water use
 - SSB consumption among mothers
 - Fruit drink consumption in children
 - Using bottled water to mix infant formula
- Mothers and children with friends or family in Flint drank bottled water more frequently than those without.

CONCLUSIONS

- A large proportion of low-income mothers do not feel their drinking water is safe or are unsure whether it is safe to drink.
- Mothers who feel their drinking water is unsafe spend more money on bottled water, despite being more likely to be food insecure.
- Distrusting home tap water and distrusting tap water in general are related, but different, constructs, associated with different beverage consumption patterns.
- Negative messaging about tap water from friends, family, and the media may promote bottled water and SSB intake among mothers and young children.

Nutrition Educator Competencies:

- 2.1. Identify the primary dietary issues for each phase of the life cycle.
7.1. Describe the biological, psychological, social, cultural, political, and economic determinants of eating behavior, and the associated opportunities and barriers to achieving optimal health and quality of life.

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