

# **Impact of Diet, Stress, and Sociodemographic Factors in Pediatric Dentistry**

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## **Objective:**

Adverse Childhood Experiences (ACEs) are potentially traumatic events that can disrupt a child's neurodevelopment and trigger toxic stress (CDC, 2019). Prolonged activation of the stress response system has been associated with various physical, emotional, and behavioral health challenges across the lifespan. ACEs encompass experiences such as abuse, neglect, household challenges, food insecurity, and other forms of instability. Research indicates that parents experiencing financial hardship are more prone to stress, depression, and family conflict—factors that significantly heighten the risk of ACE exposure. There is strong evidence linking low socioeconomic status to ACEs and subsequent long-term health, educational, and social outcomes for children (Bucci et al., 2016). This study aims to deepen our understanding of how diet, stress, and sociodemographic factors influence the oral health of young children undergoing general anesthesia for minor surgical procedures.

## **Methods:**

This study seeks to examine the association between diet, stress, and sociodemographic factors by investigating a cohort of children aged 2-6 undergoing general anesthesia for routine elective surgical procedures at the University of Iowa Stead Family Children's Hospital. Legal guardians of eligible children will complete a questionnaire addressing health, diet, oral hygiene practices, sociodemographic variables, and psychological distress.

## **Conclusion:**

Current findings indicate notable trends between legal guardian education levels, household income, overall stress, and cariogenic dietary habits. As data collection progresses, this study seeks to further elucidate the relationships between diet, stress, and sociodemographic factors in shaping pediatric oral health outcomes. The findings are expected to highlight the critical role of early-life experiences and environmental influences in shaping oral health, underscoring the importance of addressing these factors in pediatric care. Ultimately, the study may inform strategies for improving oral health in at-risk populations, promoting healthier outcomes through targeted interventions and support for families facing socioeconomic or psychological challenges. Data collection, survey administration, and sample processing are currently ongoing.