FOR IMMEDIATE RELEASE

American Dental Hygienists’ Association Statement Regarding a Study Linking Maternal Fluoride Exposure during Pregnancy and the IQ Scores of Their Children

CHICAGO, August 29, 2019 – The American Dental Hygienists’ Association supports community water fluoridation as a safe and effective method for reducing the incidence of dental caries throughout the lifespan.¹ Research conducted over the past seventy years has consistently shown that fluoridation of community water supplies is a safe and cost-effective means to reduce the prevalence of tooth decay. Therefore, ADHA is commenting on a recent publication in the August 2019 issue of the *Journal of the American Medical Association (JAMA)* *Pediatrics* titled, “Association between Maternal Fluoride Exposure during Pregnancy and IQ Scores in Offspring in Canada” by Green et al. Findings from this study indicate an association between the levels of fluoride exposure during pregnancy and lower IQs in their children when measured at 3 to 4 years of age. The investigators concluded a possible need to reduce fluoride intake during pregnancy.

In reviewing this study, it is important to consider the following limitations identified by the authors:

- The timing of the urine sampling may not have precisely represented fetal exposure throughout the pregnancy.
- Maternal IQ was not taken into consideration.
- The reported fluoride intake did not measure the actual concentration in the tap water in the participant’s home. Fluoride concentration was estimated based on the postal code; some locations could be receiving water from multiple treatment plants.
- The estimated fluoride intake only considered beverages; dietary sources and oral hygiene products such as toothpaste were not considered.
- Information on the consumption of tap water and other water-based beverages was obtained via a self-report, non-validated questionnaire that may be subject to recall bias.
- The method for estimating maternal fluoride intake has not been validated.
- Post-natal fluoride exposure or consumption was not assessed.

The ADHA has long supported the need for evidence-based research to inform clinical recommendations and strongly encourages additional research to determine the validity and
reliability of the findings of this study. While it is important to continuously consider the impacts of fluoride exposure, its overwhelming benefits as a public health measure cannot be overlooked on the basis of a single study. Current evidence-based research demonstrates that water fluoridated at the recommended concentration of 0.7 mg/L is safe and has been shown to reduce tooth decay by 25% in both children and adults.

The ADHA remains committed to supporting the fluoridation of public water supplies to help reduce to risk of tooth decay and the overall burden of dental disease.


About the American Dental Hygienists’ Association

The American Dental Hygienists’ Association (ADHA) is the largest national organization representing the professional interests of more than 185,000 dental hygienists across the country. Dental hygienists are preventive oral health professionals, licensed in dental hygiene, who provide educational, clinical and therapeutic services that support total health through the promotion of optimal oral health. For more information about ADHA, dental hygiene or the link between oral health and general health, visit ADHA at www.adha.org.