

# Management of Early Childhood Caries: Foundational Articles and Consensus Recommendations, 2020

**American Academy of Pediatric Dentistry.** Caries risk assessment and management for infants, children, and adolescents. Reference Manual, 2019. Available at: [http://www.aapd.org/media/Policies\\_Guidelines/BP\\_CariesRiskAssessment.pdf](http://www.aapd.org/media/Policies_Guidelines/BP_CariesRiskAssessment.pdf). Accessed, Dec 1. 2019

**American Academy of Pediatric Dentistry.** Use of silver diamine fluoride for dental caries management in children and adolescents including those with special health care needs. 2017. Available at: [http://www.aapd.org/media/Policies\\_Guidelines/G\\_SDF.pdf](http://www.aapd.org/media/Policies_Guidelines/G_SDF.pdf). Accessed, Dec 1. 2019

**American Academy of Pediatric Dentistry.** Fluoride Therapy. Reference Manual, 2018. Available at: [http://www.aapd.org/media/Policies\\_Guidelines/BP\\_FluorideTherapy.pdf](http://www.aapd.org/media/Policies_Guidelines/BP_FluorideTherapy.pdf)

**Gao SS, Zhang S, Mei ML, et al.** Caries remineralization and arresting effect in children by professionally applied fluoride treatment: A systematic review. *BMC Oral Health* 2016;16: 12-21.

**Chaffee BW, Feldens CA, Rodrigues PH, V tolo MR.** Feeding practices in infancy associated with caries incidence in early childhood. *Community Dent Oral Epidemiol.* 2015; 43: 338-48.

**Giacaman RA, Munoz-Sandoval C, Neuhaus KW, Fontana M, et al.** Evidence-based strategies for the minimally invasive treatment of carious lesions: Review of the literature. *Adv Clin Exp Med.* 2018; 27(7): 1009-1016.

**Moynihan PJ, Kelly SA.** Effect on caries of restricting sugars intake: Systematic review to inform WHO guidelines. *J Dent Res.* 2014; 93(1): 8-18.

**Peres KG, Chaffee BW, Feldens CA.** Breastfeeding and oral health: Evidence and methodological challenges. *J Dent Res* 2018; 97(3): 251-258.

**Ramos-Gomez F, Crystal YO, Ng MW, Tinanoff N, Featherston JD.** Caries risk assessment, prevention and management in pediatric dental care. *Gen Dent.* 2010: 505-517.

**Urquhart O, Tampi MP, Pilcher L, Slayton RL, et al.** Nonrestorative Treatments for Caries: Systematic Review and Network Meta-analysis. *J Dent Res* 98(1): 14-26, 2019.

**Wright JT, Hanson N, Ristic H, et al.** Fluoride toothpaste efficacy and safety in children younger than 6 years. *J Am Dent Assoc* 2014; 145(2): 182-9.

**Xiao J, Alkhers N, Kopycha-Kedzierawski DT, et al.** Prenatal oral health care and early childhood caries prevention: A systematic review and meta-analysis. *Caries Res* 2019; 53: 411-421.

# IAPD Consensus Recommendations

Early Childhood Caries remains a highly prevalent world-wide disease that has high costs to society and has a major impact of parents' and children's quality of life. Approaches to reduce its prevalence include:

1. Management of the disease process should start in the first year of a child's life; and depending on the needs of the child includes primary, secondary and tertiary prevention.

**2.** Primary prevention for ECC includes: Prenatal oral health care, limiting sugar intake and frequency for children under two years; avoiding night-time bottle feeding with milk or drinks containing free sugars; bottle and breastfeeding after 12 months, especially if frequent and/or nocturnal optimize exposure to dietary fluoride delivered by fluoridated water, fluoridated salt, or fluoridated milk; brushing child's teeth twice daily with fluoridated toothpaste, containing at least 1,000 ppm fluoride and using an age appropriate amount of tooth paste on the brush; having a dental visit for comprehensive care in the first year of life; regular 5% fluoride varnish

applications for any child at caries risk.

**3.** Secondary prevention for ECC aims to arrest the progression of caries, prior to the cavitation of lesions. In addition to primary prevention, secondary prevention includes more frequent fluoride varnish applications, such as four times per year, and applying pit and fissure sealants to susceptible molars.

**4.** Tertiary prevention for ECC can involve both non-invasive and invasive preventive management when there are cavitated lesions. Besides primary and secondary prevention approaches, silver diamine fluoride can be used to arrest cavitated lesions. Conservative caries removal and tooth restoration may be necessary to prevent further tooth breakdown, pain and prevent unnecessary pulp exposures.

**5.** Interprofessional care to assure that all infants and toddlers have access to oral health care.

**6.** Collaborate with other dental, medical and government organizations to increase awareness of adverse effects of inappropriate sugar intake.