



Current evidence and guidance on breastfeeding and dental health

Summary

- Dental teams should continue to support and encourage mothers to breast feed
- Not being breastfed is associated with an increased risk of infectious morbidity (for example, gastroenteritis, respiratory infections, middle ear infections)
- **Breastfeeding up to 12 months of age is associated with a decreased risk of tooth decay**
- Exclusive breastfeeding is recommended for around the first 6 months of life. Complementary foods should be introduced from around 6 months of age alongside continued breastfeeding.
- The prevalence of breastfeeding in UK is low with 34% of mothers still breastfeeding their child at 6 months with only 1% exclusively breastfeeding
- Further advice for dental teams can be found in [Health Matters: Child Dental Health](#) and [Delivering Better Oral Health \(2014\)](#)

Breastfeeding is the physiological norm against which other behaviours are compared; therefore dental teams should promote breast feeding and include in their advice the risks of not breastfeeding to general and oral health.

Policy advice with regard to breastfeeding and dental health has not changed. Dentists and their teams should support evidence based guidelines from the WHO and the UK government.

Since 2001 the WHO has recommended that mothers worldwide exclusively breastfeed infants for the first six months to achieve optimal growth, development and health. Thereafter, they should be given nutritious complementary foods as breastfeeding continues up to the age of two years or beyond. These guidelines were reiterated in the WHO's Global Strategy (WHO, 2003) and endorsed by the Scientific Advisory Committee on Nutrition (SACN) in 2001.

Despite this advice breastfeeding rates in the UK remain low with the [Infant Feeding Survey 2010](#) reporting that just over a third (34%) of mothers were still breastfeeding their child at 6 months with only 1% exclusively breastfeeding as recommended.

Current advice from PHE with regard to oral health and breastfeeding can be found in [Delivering Better Oral Health](#) and [Health Matters: Child dental health](#).

Health Matters: Child Dental Health (2017) states:

Health professionals, such as midwives and health visitors, should support and encourage women to breastfeed. Creating the right environment to promote this is crucial. The UNICEF Baby Friendly Initiative provides a robust evidence based framework to develop a whole-systems approach to breastfeeding.

The UK government recommends exclusive breastfeeding for around the first 6 months of life. Complementary foods should be introduced into the infant's diet from around 6 months of age alongside continued breastfeeding (or infant formula if the mother chooses).

Not being breastfed is associated with an increased risk of infectious morbidity (for example, gastroenteritis, respiratory infections, middle ear infections) and current evidence suggests that breastfeeding up to 12 months of age is associated with a decreased risk of tooth decay

Delivering Better Oral Health (PHE, 2014 updated content 2017) recommends that:

- *Breast milk is the only food or drink babies need for around the first 6 months of their life. First formula milk is the only suitable alternative to breast milk*
- *bottle-fed babies should be introduced to drinking from a free-flow cup from the age of 6 months and bottle feeding should be discouraged from 12 months old*
- *only breast or formula milk or cooled, boiled water should be given in bottles*
- *only milk or water should be drunk between meals and adding sugar to foods or drinks should be avoided*

The [SACN Subgroup on Maternal and Child Nutrition \(SMCN\)](#) is due to publish its report on 'Feeding in the first year of life' later this year. The draft report, published for consultation in July 2017, concluded that current evidence suggests that breastfeeding up to twelve months of age is associated with a decreased risk of dental caries. SMCN is due to commence work shortly on a report on 1-5 year olds which will include consideration of oral health and breastfeeding beyond one year of life.

Recent systematic reviews such as that by [Tham et al \(2015\)](#) included studies where children were breastfed beyond 12 months. When infants are no longer exclusively breast or formula fed, confounding factors, such as the consumption of potentially cariogenic drinks and foods and tooth brushing practices (with fluoride toothpaste), need to be taken into account when investigating the impact of infant feeding practices on caries development. Tham et al (2015) noted that several of the studies did not consider these factors and concluded that with regard to associations between breastfeeding over 12 months and dental caries 'further research with careful control of pertinent confounding factors is needed to elucidate this issue and better inform infant feeding guidelines'. Good quality evidence on breast feeding and oral health is an area with significant methodological challenges which have been outlined by [Peres et al. \(2017\)](#).

In 2017 a birth cohort study in Brazil was published by [Peres and co-authors](#). This study is notable in that it has used marginal structural modelling in an attempt to estimate the controlled direct effect of breastfeeding on dental caries and address some of the methodological challenges. The study reported that in comparison with children breastfed up to 12 months, those breastfed from 13-23 months (i.e. over 1 year) there was no effect on dental caries, however for those breastfed for over 2 years (24months) had a higher number of decayed missing and filled surfaces. However the authors recognise the studies limitations;

- no information was collected on other potentially cariogenic sources and the frequency of nocturnal breastfeeding, which may have led to residual confounding.
- the absence of information on dental caries experience before the age of 5 years did not permit a better understanding of the long-term effect of breastfeeding on dental caries experience in the earlier stages.
- Another limitation is related to the period when information regarding sugar consumption was collected (in the study it began at 24months) as patterns of consumption are established in early childhood.

This single study adds to the body of evidence that will be reviewed shortly by SMCN however would not prompt any change in policy or guidance. There is no evidence that from 12 months of age reducing breast feeding on demand and at night time will result in the prevention of tooth decay.

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