

# Vitamin D and childhood dental health

Recent research into vitamin D's link to childhood caries has concluded "Children with severe early childhood caries appear to have relatively poor nutritional health compared to caries-free controls and were significantly more likely to have low vitamin D..." (Schroth et al. BMC Paediatrics 2013)

The promotion and importance of vitamin D in relation to good oral health has long been overlooked by some members of society. Most people will have heard of vitamin D being referred to as the "sunshine vitamin" and know it is needed for healthy growth. However, few people are able to explain the role of vitamin D in the diet and fewer still will know about its integral links to positive oral health.

A recent case study carried out in children under five in Canada entitled "[Vitamin D status of children with severe early childhood caries](#)" (Schroth et al. BMC Pediatrics 2013) has given new scientific based insight into the role of vitamin D and its importance to good oral health. The research concluded "Children with severe early childhood caries appear to have relatively poor nutritional health compared to caries-free controls and were significantly more likely to have low vitamin D..." (Schroth et al. BMC Pediatrics 2013)

Most people are aware that calcium is necessary for growing and maintaining strong healthy bones and teeth, however few people realise that vitamin D regulates calcium levels in the body and it plays a critical role in oral health as it is key to forming enamel, dentine, oral bones as well as assisting production in our immune system to combat disease causing oral microbes.

As sunlight is the main source of vitamin D, children should have access to outdoor play; 20-30 minutes of sun exposure 2-3 times per week is recommended, however children should avoid the over use of sun creams but avoid burning.

Public Health England have recently published guidance recommending that **adults and children over 1 year of age** should take daily vitamin D supplementation (10mg) throughout the year, and particularly between the months October-March, to protect musculoskeletal health. **Infants under one year of age** that are breastfed or consuming less than 500ml formula milk/day are advised to take vitamin supplementation of 8.5-10mg/day. Children under 5 years of age should take vitamin drops containing vitamins A, C and D.

As part of the Healthy Smiles award, settings can promote the need for vitamin drops to families. Through the Healthy Smiles settings parents are provided with the information that they can access materials at [www.healthystart.nhs.uk](http://www.healthystart.nhs.uk) where further information on vitamins and whether they can qualify for Healthy Start vouchers can be found.

If you wish to read more about vitamin D's link to dental decay the article is available through the above hyperlink.