Fluoridation of community water systems is the single most effective public health strategy for preventing tooth decay. In response to high levels of childhood tooth decay in Clallam County, a coalition of citizens petitioned the Port Angeles City Council to provide the preventive benefits of water fluoridation to City residents. In May of 2006, Port Angeles residents joined the 170 million Americans who have access to fluoridated public water.

While fluoride has important health benefits, it can also be associated with a condition known as “enamel fluorosis”. Mild forms of fluorosis are difficult to detect and cause whitish areas within the teeth. Excess amounts of fluoride from toothpaste, supplements, foods, or drinking water appear to increase the risk of enamel fluorosis. For this reason parents are cautioned to use only small (pea or lentil sized) amounts of tooth paste when brushing the teeth of small children who are likely to swallow some of the toothpaste.

The role of fluoridated drinking water in increasing the risk of enamel fluorosis is unclear. Some scientific studies suggest it may be a risk factor, especially for very young children. Other studies fail to show any connection. In November of 2006, the American Dental Association responded to this uncertainty by issuing “Interim Guidance on Infant Formula and Fluoride”. This guidance document recommends that parents who are concerned about possible mild fluorosis and who are feeding their infant reconstituted formula may wish to use low fluoride bottled water to mix the formula. Water that is labeled purified, demineralized, deionized, distilled or reverse osmosis filtered water does not contain significant amounts of fluoride and may be used to reconstitute formula.

Not all oral health experts support these recommendations. The Academy of Pediatric Dentistry recommends fluoride supplements appropriate for age, including for infants, and does not feel parents need to be concerned about mixing formula with fluoridated water. The Centers for Disease Control does not have an official recommendation, encouraging parents to make their own decision. Virtually all public health experts agree that occasional use of fluoridated tap water to mix formula is not a cause of concern.

As Clallam County Health Officer, I support the addition of beneficial levels of fluoride to the Port Angeles public water system. In our nutritional programs for new mothers we strongly recommend breast milk as the ideal form of infant nutrition. For those who use reconstituted formula, it is uncertain whether fluoridated tap water increases the risk of mild enamel fluorosis. It is certain that mild fluorosis, at worst, is a cosmetic issue and that it does not impair the function of teeth or their resistance to decay. Until more scientific studies are completed, some parents may wish to use purified bottled water for their formula fed infants.

For more information please feel free to contact Clallam County Health and Human Services employees Cyndi Newman, Dental Hygienist 417-2408 or Pam Walker, Registered Dietitian at 417-2249.