FEATURE ARTICLE

New Research Suggests Poor Dental Health Linked to More Serious Health Issues

Research conducted in Connecticut and around the world is beginning to suggest that poor dental health is linked to several more serious health conditions.

Connecticut’s Oral Health

- An analysis of data showed that in Connecticut, between 2006 and 2007, about 75–85% of children between the ages of 15 and 18 had cavities.
- By age 2, one-third of children have cavities and 1 in 7 have 5 or more cavities. By the third grade, 41% had decay.
- According to Bruce Tandy, president of the Connecticut State Dental Association (CSDA), only 35–40% of people seek dental care.

Health Risks

Joanna M. Douglass, associate professor of pediatric dentistry at the University of Connecticut School of Dentistry, noted that studies are suggesting that gum disease is a chronic infection that aggravates diabetes, affects pregnancy, and may contribute to heart disease, cardiovascular disease, and stroke.

As the beginning of the digestive track the mouth is normally filled with a variety of bacteria like Streptococci and Lactobacilli, which contribute to caries. These bacteria metabolize sugars left by soda, candy, and other sugary or starchy foods, releasing byproducts that increase the acidity of the mouth. The low-pH environment gradually demineralizes teeth and the eventual result is a cavity.

- Inflamed maternal gums may be associated with premature birth and low birth weight, according to research published by Douglass and colleagues in the journal American Family Physician.
- During regular, semi-annual scaling as part of routine dental care, the dentist or hygienist can scrape and chisel off the plaque biofilm that otherwise hardens into a calculus of apatite, brushite, whitlockite and other minerals. When minerals and anaerobic bacteria begin to form and grow beneath the gums, the body’s immune system responds with inflammation. Cytokines, leukotrienes, prostaglandins, immunoglobulins and other proteins are released and spread through the blood stream.
  - Research suggests that these defensive proteins in the mouth can damage other parts of the body.
  - University of Minnesota researchers released a study in October concluding for the first time that gum disease contributes to rheumatoid arthritis.

Awareness and Access Critical Factors for Success

In Connecticut, state and local dentists and other healthcare providers are fighting to raise awareness of the importance of good oral health.

- “People don’t know when to start brushing,” said Ardell A. Wilson, head of the Connecticut Department of Public Health’s Office of Oral Health until her recent retirement. “You should start when the baby has two teeth. You must brush at least two minutes and do not leave the baby with a bottle in his mouth. Back teeth should be sealed.” Bruce Tandy, president of the Connecticut State Dental Association (CSDA), said education of young mothers is key.
- “Even when care is accessible, only 35–40% of people seek dental care,” Tandy said. “We’re looking to school-based programs to help with that.”
- Dentists like Douglass and others are working closely with doctors to educate them on the risks of poor oral health. “One reason oral health doesn’t get attention is because it is avoided. But there are new aesthetics that make most procedures practically painless,” she said.
- Since 2004 Connecticut has earmarked $2.5 million in state bonds to enhance or expand oral health facilities, established eight regional oral health collaboratives, and developed repayment methods for people on Medicaid or children in the state’s HUSKY insurance plan.
- Public health officials want to halt progression of oral health problems while children are still young. The state plans efforts to reduce caries and tooth loss, seal vulnerable molars, provide access to dental care for the general population and low-income.
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