

Putting Teeth into Health Care

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Introduction

- ▶ Relationship Between Oral Health and Systemic Diseases
- ▶ Medicine and Dentistry Working Together

Oral health is integral to general health

Oral Health in America: A Report of
the Surgeon General

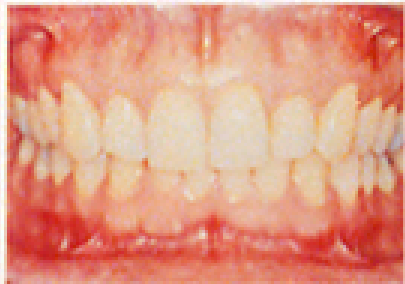
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<http://www.nidcr.nih.gov/sgr/oralhealth.htm>

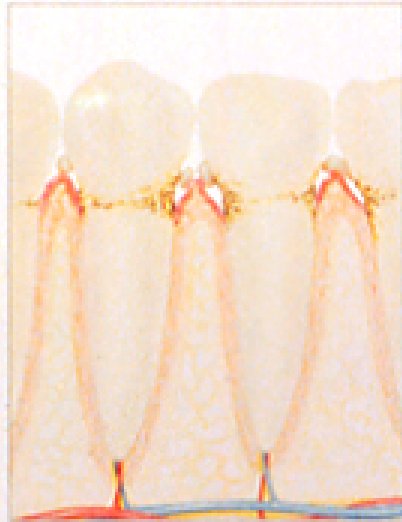
Research has demonstrated relationships between oral health and systemic diseases

- Diabetes
- Cardiovascular Disease
- Adverse Pregnancy Outcomes

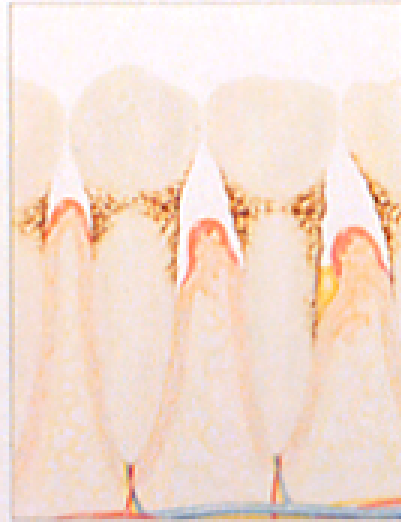
PROGRESS OF PERIODONTAL DISEASE



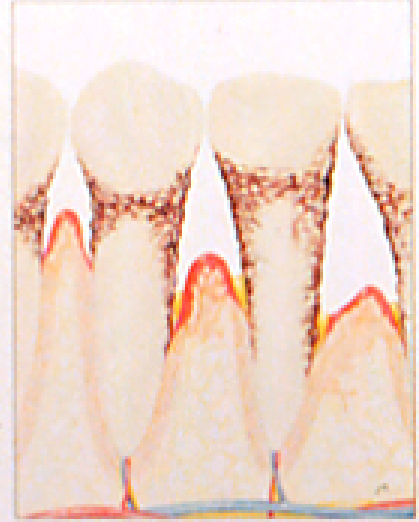
NORMAL, HEALTHY GINGIVA



GINGIVITIS



PERIODONTITIS



ADVANCED PERIODONTITIS

Diabetes and Periodontal Disease

- Persons with diabetes are at greater risk for periodontal diseases and experience a more destructive, aggressive form of the disease
- New research has suggested that chronic periodontal disease in persons predisposed to diabetes is a risk factor that will lead to the development of diabetes

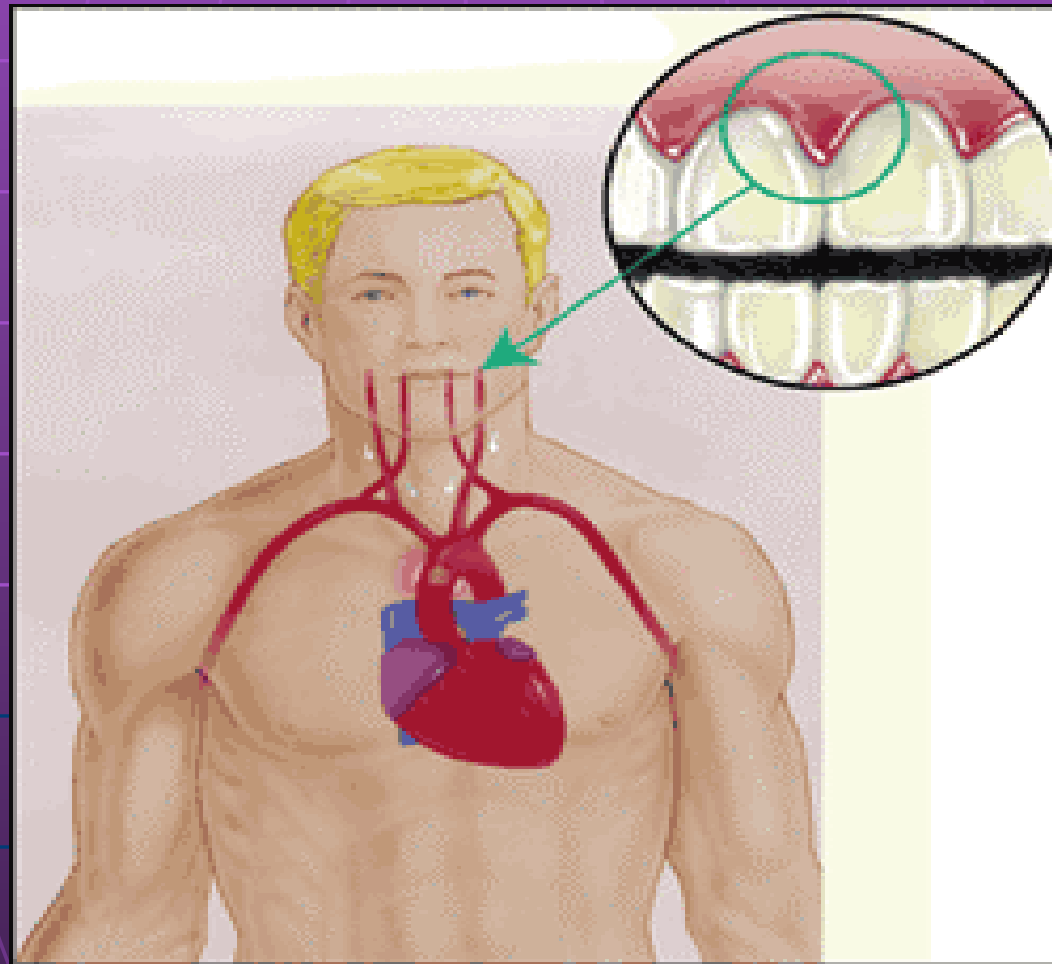
<http://www.perio.org/consumer/aapnidcrdiabetes.htm>

Diabetes and Periodontal Disease

Effective treatment of periodontal infection and reduction of periodontal inflammation is associated with a reduction and control of glucose blood levels.

<http://www.perio.org/resources-products/pdf/4-diabetes.pdf>

Cardiovascular Disease and Oral Health



Cardiovascular Disease

Researchers have found that people with periodontal disease are almost twice as likely to suffer from coronary artery disease as those without periodontal disease.

<http://www.perio.org/consumer/mbc.heart.htm>

Cardiovascular Disease

Several theories exist to explain the link between periodontal disease and heart disease:

- Oral bacteria can affect the heart when they enter the blood stream, attaching to fatty plaques in the coronary arteries (heart blood vessels) and contributing to clot formation.

Coronary artery disease is characterized by a thickening of the walls of the coronary arteries due to the buildup of fatty proteins. Blood clots can obstruct normal blood flow, restricting the amount of nutrients and oxygen required for the heart to function properly. This may lead to heart attacks.

Cardiovascular Disease

- The inflammation caused by periodontal disease increases plaque build up, which may contribute to swelling of the arteries
- Periodontal disease can also exacerbate existing heart conditions

<http://www.perio.org/consumer/mbc.heart.htm>

C Reactive Protein

CRP is an inflammatory marker — a substance that the body releases in response to inflammation

High levels of CRP in the blood mean that there is inflammation somewhere in the body.

C Reactive Protein

Researchers theorize that people living with a chronic infection such as gum disease may produce higher levels of C Reactive Protein, which could place them at higher risk of heart attack.

Stroke

Additional studies have pointed to a relationship between periodontal disease and stroke. In one study that looked at the causal relationship of oral infection as a risk factor for stroke, people diagnosed with acute cerebrovascular ischemia were found more likely to have an oral infection when compared to those in the control group.

<http://www.perio.org/consumer/mbc.heart.htm>

Perinatal Health

Studies from the University of North Carolina, Chapel Hill, concluded that "women with periodontal disease were seven times more likely to deliver low-birth weight babies prematurely."

Slavkin, Harold C, DDS, (January 1999) Does the mouth put the heart at risk? *Insights on Human Health*.

<http://www.health2k.state.nv.us/oral/SpecialFolder/page10.html>

Perinatal Health

It appears that periodontal disease triggers increased levels of biological fluids that induce labor. Furthermore, data suggests that women whose periodontal condition worsens during pregnancy have an even higher risk of having a premature baby.

<http://www.perio.org/consumer/mbc.baby.htm>

Perinatal Health

All infections are cause for concern among pregnant women because they pose a risk to the health of the baby. The American Academy of Periodontology recommends that women considering pregnancy have a periodontal evaluation.

<http://www.perio.org/consumer/mbc.baby.htm>

Osteoporosis

Researchers have suggested a link between osteoporosis and bone loss in the jaw. Studies suggest that osteoporosis may lead to tooth loss because the density of the bone that supports the teeth may be decreased, which means the teeth no longer have a solid foundation.

<http://www.perio.org/consumer/mbc.osteoporosis.htm>

Respiratory Diseases

Research has found that bacteria that grow in the oral cavity can be aspirated into the lung to cause respiratory diseases such as pneumonia, especially in people with periodontal disease.

Scientists believe that through the aspiration process, bacteria can cause frequent bouts of infection in patients with Chronic obstructive pulmonary diseases (COPD). Studies are now in progress to learn to what extent oral hygiene and periodontal disease may be associated with more frequent bouts of respiratory disease in COPD patients.

<http://www.perio.org/consumer/mbc.respiratory.htm>

Bureau of Primary Health Care Health Disparities Collaboratives*

- ▶ Reduce disparities in health outcomes for poor, minority, and other underserved people
- ▶ Evidence-based clinical practice
- ▶ Patient Centered Care

*<http://www.healthdisparities.net>

Bureau of Primary Health Care Health Disparities Collaboratives*

Diabetes Collaborative

Patients with Diabetes are treated in a team approach including Medical, Dental, Health Education and most importantly, themselves

Prevention Pilot

Patients of all ages are included and are tracked for dental disease prevention services, including fluorides, sealants and regular dental examinations

Perinatal Pilot – To be implemented in 2004

"You cannot be
healthy without
oral health"

Questions?