

Family Time

Practical Living

Orally Speaking: Body–Mouth Connections

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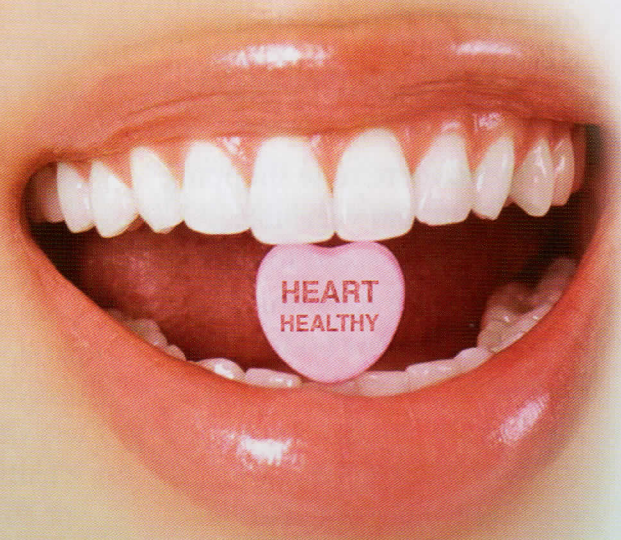
I hadn't seen Alicia in three years. She was a busy 41-year-old mother of two teenage boys and hadn't thought about dental care until her gums started bleeding when she brushed. Her weight had steadily crept up since the last time I had seen her, and she looked tired. In spite of the fact that she had developed diabetes, she did not exercise or watch her diet, so her blood sugar was not well controlled.

Alicia's oral examination reflected her health condition. Her gums were inflamed, tender, and infected. A comprehensive exam and X-ray revealed significant periodontal disease with bone loss. The first line of defense was to treat her gum disease and encourage more healthful lifestyle choices to help her get her diabetes under control. This combined approach reduced her inflammation by 97 percent and helped her save her teeth—and her health.

What is periodontal disease?

Oral health problems are common, costly, and painful. Because people are living longer, gum disease, also called periodontal disease, has overtaken tooth decay as the most common cause of tooth loss in adults. It affects every age group and about 8 out of 10 Americans over the age of 65.

Periodontal diseases are infections of the gum and bone that hold the teeth in place. Gingivitis



is a mild and common form of gum disease that is characterized by swollen, bleeding, and sometimes painful gums. It is easily treated with regular and proper flossing and brushing.

Poor brushing and flossing cause plaque—a gummy film of germs—to build up on teeth, potentially causing more serious gum disease. When gums become inflamed and bleed it means your immune system has stepped in to attack harmful bacteria. Smoldering inflammation can lead to periodontitis, a more serious form of gum disease. At advanced stages inflammation breaks down the connective tissue that anchors teeth in their sockets, pulling the gums away from the teeth and forming pockets of infection that can spread throughout the body.

There is a powerful connection between oral and body health.

Body—Mouth Connections.

Dentistry and medicine have traditionally been worlds apart. But Alicia's story and increasing evidence reveal that there is a powerful connection between oral and body health, and that they cannot be separated. Once harmful oral bacteria from gum disease leak into the blood they trigger the body's immune system to heighten inflammation in other areas of the body such as the arteries. According to Dr. Mark Herzberg of the Department of Dental Sciences at the University of Minnesota, chronic inflammation of the gums due to plaque may

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contribute to inflammation of the arteries that leads to plaque buildup. In addition, the bacteria in plaque are also linked to infective endocarditis, the inflammation of the sack around the heart; worsening diabetes; lung infections in people with chronic lung diseases; a weakened immune system; and a higher risk of delivering a baby prematurely.

Inflammation is a two-way street, however, as Alicia's story shows. Just as the condition of the mouth affects the health of the body, chronic conditions that create inflammation also affect the risk of gum disease and infection. Obesity, diabetes, and heart disease are among several inflammatory

conditions that ramp up the frequency and severity of infections throughout the body, including the mouth. This overall inflammatory response causes great tissue damage and can result in a serious deterioration of physical function and oral health.

Fit Body, Healthy Mouth.

To reduce the risk of gum disease, make the decision to add personal fitness goals to your oral hygiene routine. Type 2 diabetes, heart disease, high blood pressure, osteoporosis, and obesity are lifestyle-related conditions that respond to healthful choices and appropriate medical treatment where necessary. Choosing fresh fruits and vegetables, whole grains, beans, water, and healthful fats such as walnuts, other nuts, and olive oil instead of fried foods, burgers, sugary foods, and pop—begins to reduce inflammation at the systemic level and lower infection, reduce extra pounds, and improve blood sugar control. Add daily exercise—especially in the fresh air—stress management, positive relationships, adequate rest, and trust in God, and you will be on your way to a healthy body and a healthy, happy smile!



When gums become inflamed and bleed it means your immune system has stepped in to attack harmful bacteria.

Brushing Up on Oral Health

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Say *ahhh!* Taking care of your mouth means more than avoiding decaying teeth, swollen gums, and bad breath. An unhealthy, bacteria-laden mouth can contribute to low-grade chronic inflammation throughout the body.

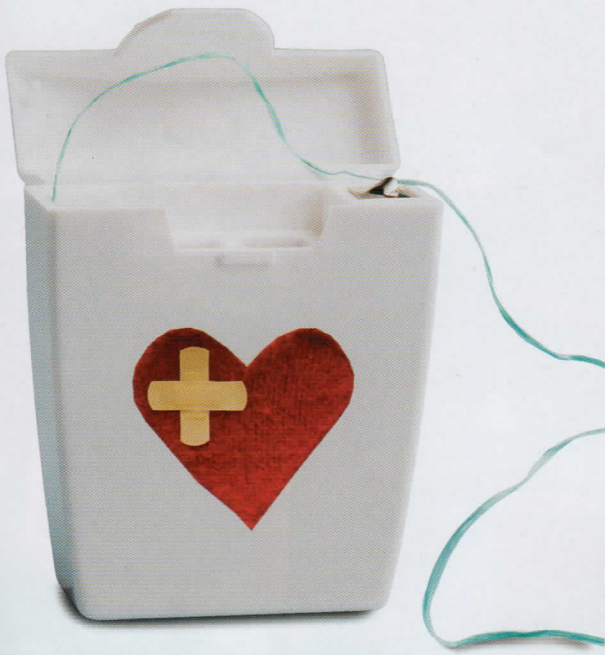
A growing body of research links gum disease—sometimes called periodontal disease—to worsening health conditions such as diabetes, obesity, heart disease, stroke, weakened immune health, and premature birth. This is because the bloodstream links organisms in the mouth with the rest of the body, causing a widespread inflammatory response.

Four out of five Americans suffer from some form of gum disease. This oral health fact sheet¹ will help you “brush up” on strategies for preserving your smile—and your health!

Common Symptoms of Gum Disease

- Red, swollen, tender gums
- Gums bleed during brushing and/or flossing
- Receding gums
- Loose or separating teeth
- Persistent bad breath
- Dentures that no longer fit
- Pus between the teeth and gums
- A change in bite or jaw alignment





Tips for Preventing Gum Disease

- **Take care of your teeth and gums.** Thorough tooth brushing and flossing are the first line of defense in preventing gum disease. Replace your toothbrush regularly.
- **Don't smoke.** Smokers have four times the risk of developing gum disease. Smoking also increases the risk for oral and throat cancer and oral fungal disease. Say no to cigarettes, pipes, cigars, and chewing tobacco.
- **Avoid alcohol.** Alcohol increases the risk of oral cancer, and when coupled with smoking the risk is even higher. It is also a source of empty calories that contributes to obesity and chronic disease.

- **Eat smart.** A nutrient-rich diet of fresh fruits, vegetables, whole grains, and beans lowers chronic disease risk and provides antioxidants that fight infection and inflammation. Move away from refined sugars and low-fiber junk food.
- **Watch for dry mouth.** Certain medications or highly salted foods can cause dry mouth. Be sure to drink plenty of fresh water instead of cavity-promoting soda pop.

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If dry mouth is unavoidable, chew sugarless gum and avoid dehydrating drinks that contain caffeine and alcohol.

- **Control and treat chronic disease.** Oral health is a two-way street. While a healthy body reduces the likelihood of gum disease, regular exercise, good hygiene, good sleep habits, and a healthful diet reduce diseases (osteoporosis, heart disease, and diabetes) that affect the jaw, gums, and teeth.
- **Have regular checkups.** Your dentist can detect early signs of oral problems and help you establish a program of dental health care. Your dentist can also help minimize problems associated with cancer and radiation treatments that can cause damage to the teeth and gums.

Oh, and don't forget to brush and floss those pearly whites after every meal!

1. Adapted from the CDC information sheet: Oral Health: Preventing Cavities, Gum Disease, and Tooth Loss, 2009; and the Division of Oral Health, National Center for Chronic Disease Prevention and Health Promotion; and New York Presbyterian Hospital Newsletter, 2006.