



# Diabetes & Dentistry YOU

## Diabetes and Periodontal Disease: What You Need to Know

No matter how long you have lived with diabetes, you must always be watchful. If kept in check, most diabetics can lead normal, healthy lives. Poorly managed diabetes, however, can result in infection, vascular heart disease, vision loss, and stroke. But did you know that it can also

school of dentistry) may have uncovered the precise reason why. Their study was made up of a group of 35 non-diabetics and diabetics with varying levels of periodontal health (from non-diabetics, who were perio disease free, to poorly managed diabetics with periodontal disease).

important risk factors.

**To help prevent gum disease, diabetics should follow these five steps:**

1. Manage your blood sugar closely
2. Get your serum triglycerides and cholesterol levels checked either by your medical doctor or by a diabetic dentist
3. Reduce cholesterol and triglycerides through diet and exercise
4. Find a dentist who is specifically trained in treating diabetic patients (your medical doctor may be able to refer you to such a dentist)

### **Is there a relationship between tobacco use and periodontal disease?**

Studies have shown that tobacco use may be one of the most significant risk factors in the development and progression of periodontal disease. Smokers are much more likely than non-smokers to have calculus form on their teeth, have deeper pockets between the teeth and gums and lose more of the bone and tissue that support the teeth.

The study found that poorly controlled diabetics respond differently to bacterial plaque at the gum line than well-controlled diabetics and non-diabetics, possibly due to elevated serum triglycerides. Poorly controlled diabetics have more harmful proteins (cytokines) in their gingival tissue, causing destructive inflammation of the gums. In turn, beneficial proteins (growth factors) are reduced, interfering with the healing response to infection.

lead to diseases of the mouth that result in mouth ulcers, cavities, tooth loss and even bone loss?

Study after study has linked periodontal disease to diabetes. But the latest study by researchers from Baylor College (renowned

What this means is that, while blood sugar control may be the single most important step in managing diabetes and preventing gum disease among diabetics, serum triglycerides are also

### **Is it normal for my gums to bleed when I brush my teeth?**

Bleeding gums are one of the signs of gum disease. Think of gum tissue as the skin on your hand. If your hands bled every time you washed them, you would know something was wrong. There are a number of other warning signs of gum disease.

## Diabetes and Oral Health:

Gum disease is common in people with diabetes, and nearly **one-third of diabetics have severe periodontal diseases** with significant loss of attachment between gums and teeth of five millimeters or more.

5. Request that your diabetic dentist and medical doctor share information about your care.

Requesting that your doctor and dentist share information about your care program is key to maintaining dental and overall health. In this way, all up-to-date information about medications, infections and inflammation points, that are key contributors to diabetic complications, will be kept up to date. And the risk of treatment errors reduced.

## Who is a diabetic dentist?

A diabetic dentist is trained specifically in the prevention, diagnosis and treatment of oral health disorders associated with diabetes. Periodontal disease is the most severe of dental disorders driven by diabetes. Diabetic Dentists are familiar with the latest techniques for diagnosing and treating periodontal disease. In addition, they can perform cosmetic periodontal procedures to help you achieve the smile you desire. Often, medical doctors refer their patients to a diabetic dentist at the first sign of complication, in order to prevent irreversible damage. However, you don't need a referral to see a dentist. You can contact one of your choosing for a consultation at any time during your diabetic care.

## How Periodontal Disease Happens

### What is Periodontal Disease?

Periodontal (gum) diseases, including gingivitis and periodontitis, are infections that occur below the gum line. Left untreated, they can lead to tooth and bone loss.

According to the American Periodontal Association, the word periodontal literally means "around the tooth." And that is where the disease occurs. Its key trait is chronic bacterial infection to the gum and bones that hold teeth in place.

Periodontal disease can be localized to one tooth, or it can affect the entire mouth.

### How Periodontal Disease Begins

Periodontitis comes from plaque (the sticky, colorless film that forms daily on teeth). More precisely, it is driven by the bacteria within the plaque.

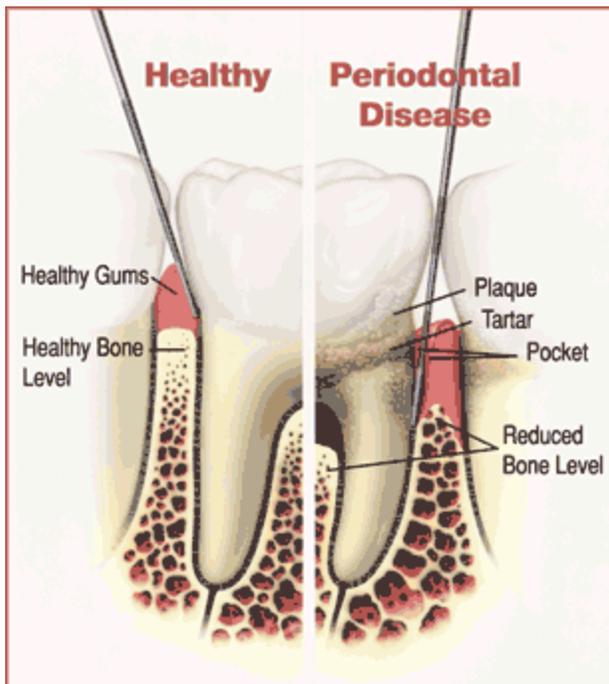
Gingivitis is the first step in the disease. The gums redden, swell and bleed easily, and it is normally

due to inadequate oral care. It is, however, completely reversible with proper, dental treatment and improved self care (including daily flossing and brushing 2-3 times per day).

Untreated gingivitis can advance to periodontitis. With time, plaque can spread and grow below the gum line. As the disease

progresses, the bacteria in the plaque irritate the gum, and then begin to eat away at both soft tissue and bone. When this happens, gaps (or pockets as they are called) form between the gums and teeth. These pockets continue to collect bacteria and eat away at the gum and bone beneath it. A vicious cycle of infection and destruction continues until there is not enough bone and gum tissue to hold the tooth in place. At that point, tooth loss can occur.

What may be most disturbing is that the symptoms of advanced periodontal disease are can be very mild, amounting to no more than mild discomfort. Before the patient is aware of the severity of the problem, he or she may have irreversible gum and bone damage, and tooth loss.



## Oral Health & Immune Response:

There is little difference between the bacteria present in the peridontium of diabetic patients with periodontal disease and perio bacteria in non-diabetics. Diabetic patients (both type 1 and type 2) contract gingivitis and periodontal disease at a much higher rate than non-diabetics — suggesting that the difference may lie in the inhibited immune response of diabetics.