

## Diabetes Control and Periodontal Treatment

Periodontal disease may make it more difficult for you to control your blood sugar. Your body's reaction to periodontal disease can increase your blood sugar level. Consequently, it is important for patients with diabetes to treat and eliminate periodontal infection for optimal diabetes control. Periodontal treatment combined with antibiotics has been shown to improve blood sugar levels in patients with diabetes, suggesting that treating periodontal disease could decrease insulin requirements.<sup>1</sup>

### What Are the Warning Signs?

#### DIABETES

- Constant hunger or thirst
- Frequent urination
- Blurred vision
- Constant fatigue
- Weight loss without trying
- Poor wound healing (cuts or bruises that are slow to heal)
- Dry mouth
- Itchy, dry skin
- Tingling or numbness in the hands or feet
- Most people with diabetes do not notice any warning signs.

#### PERIODONTAL DISEASE

- Red and swollen gums that bleed often during brushing or flossing and are tender to the touch
- Gums that have pulled away from the teeth, exposing the roots
- Milky white or yellowish plaque deposits, which are usually heaviest between the teeth
- Pus between the teeth and gums accompanied by tenderness or swelling in the gum area
- A consistent foul, offensive odor from the mouth



## Diabetes and Oral Health

During the past 10 years, much research has been undertaken on the link between diabetes and periodontal disease. Periodontal disease is the sixth leading complication of diabetes. If you have been diagnosed with diabetes, you are 3 to 4 times more likely to develop periodontal disease, with a higher rate of more severe levels of bone loss and gum infection.<sup>1</sup>

### What Is Diabetes?

Diabetes is a serious disease in which the body does not produce or properly use insulin, a hormone needed to convert sugar, starches, and other foods into energy. Normally, insulin helps get sugar from the blood to the body's cells, where it is used for energy. When you have diabetes, your body has trouble making and/or using insulin, so your body does not get the fuel it needs and your blood sugar stays too high. High blood sugar sets off processes that can lead to complications, such as heart, kidney, and eye disease, or other serious problems.<sup>2,3</sup>

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*you are 3 to 4 times more likely to develop periodontal disease.*

### Are There Different Types of Diabetes?

It is estimated that more than 20 million adults and children in the United States have some form of diabetes—14 million having been diagnosed with the disease and 6 million being unaware they have it. There are different types of the disease: type 1, type 2, and gestational diabetes, as well as prediabetes. Most Americans (around 90%) who are diagnosed with diabetes have type 2 diabetes.<sup>2,3</sup>

### What Is Periodontal Disease?

Periodontal disease, or gum disease, is a bacterial infection of the gums, ligaments, and bone that support your teeth and hold them in the jaw. If left untreated, you may experience tooth loss. The main cause of periodontal disease is bacterial plaque, a sticky, colorless microbial film that constantly forms on your teeth. Toxins (or poisons) produced by the bacteria in plaque irritate the gums, causing infection.<sup>4</sup>

# IMPORTANT

## Physicians and Dentists Need to Work Together

It is important that your dentist be kept up-to-date on your diabetic condition and treatment and that your physician be kept up-to-date on your oral condition and treatment, so that they can work together to help you control your diabetes and prevent or control periodontal disease.<sup>1</sup>

### Keep your dentist up-to-date

*on your diabetic condition and your physician up-to-date on your oral condition.*

If your diabetic condition is well controlled, periodontal treatment would be the same for you as for a patient without diabetes. In early stages, treatment usually involves removing the plaque and calculus from the pockets around your teeth. If the periodontal disease is more severe or if your diabetes is not well controlled, treatment will be more specialized and tailored toward your specific condition. Your dentist may recommend more frequent oral prophylaxes (dental cleanings) involving scaling and root planing or may recommend periodontal surgery.<sup>1</sup>



### Reprints

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References are available at the *Contemporary Oral Hygiene* Web site.

## Diabetes and Your Mouth

Periodontal disease is not the only problem that can occur if you have diabetes. Although you might not be able to prevent these problems, you can minimize the trouble they cause you<sup>5</sup>:

- **Dry mouth:** Xerostomia occurs when your salivary glands don't produce sufficient saliva to keep your mouth moist, causing tissues in your mouth to become inflamed and sore. It can make chewing, tasting, and swallowing more difficult, as well as cause difficulty in eating, making it more difficult to control blood sugar.
- **Fungal infection:** *Candida albicans* is a fungus that normally lives inside the mouth without causing any problems. But when you have diabetes, deficient saliva in your mouth and extra sugar in your saliva allow the fungus to cause an infection called candidiasis (thrush), which appears as sore white or red areas in your mouth.
- **Burning mouth syndrome:** If you feel severe burning and pain in your mouth even though you don't see any problems causing it, you may have this syndrome.
- **Oral surgery complications:** If you need oral surgery, diabetes—particularly if poorly controlled—can complicate oral surgery. Diabetes retards healing and increases risk of infection. Your blood sugar levels also may be harder to control after oral surgery. Your dentist should work closely with your physician to minimize possible complications. If you need oral surgery, the American Diabetes Association recommends that you<sup>5</sup>:
  - Remind your dentist that you have diabetes and discuss any specific diabetes-related issues.
  - Eat before your dental visit so your blood sugar is within normal range.
  - Take your usual medications. Your dentist should consult with your physician about whether you can adjust your diabetes medications or take an antibiotic to prevent infection before surgery.
  - Plan for your eating needs after surgery. If you're having dental work that may leave your mouth sore, plan to eat soft or liquid foods that will allow you to eat without pain.
  - Wait until your blood sugar is under control. It's best to have surgery when your blood sugar levels are within your goal range. If your dental needs are urgent and your blood sugar is poorly controlled, talk to your dentist and physician about receiving dental treatments in a hospital.

### Disclaimer

*The content of this guide is for information purposes only. It does not substitute for the dentist's professional assessment based on the individual patient's case.*