

Diabetes and Periodontal Disease: A Two-Way Relationship

The American Diabetes Association defines diabetes as a serious disease in which the body does not produce or properly use insulin, a hormone that is needed to convert sugar, starches, and other food into energy needed for daily life. Approximately 23.6 million Americans have diabetes; however, 5.7 million of them have not yet been diagnosed.

If you or someone you know has diabetes, you already understand the importance of keeping the disease under control. However, you may not know that good oral health not only keeps the mouth and gums free from periodontal disease, but also might have a significant impact on the control of diabetes. Periodontal disease is an inflammatory response to a bacterial infection that, if left untreated, may cause damage to the tissues and bone surrounding the teeth and may even lead to tooth loss. People with diabetes are three to four times more likely to develop periodontal disease, which, like any other infection in the body, can impair their ability to process and/or utilize insulin. Additionally, people with diabetes tend to have more severe levels of bone loss, and often experience more aggressive disease activity. This can ultimately lead to tooth loss, which can make chewing and digesting food difficult. For people with diabetes, this can have a devastating impact on the ability to maintain proper nutrition and control blood sugar levels.

Just as diabetes can increase a patient's chance of developing periodontal disease, research suggests that periodontal disease may make it more difficult for people who have diabetes to control their blood

sugar. Periodontal disease increases the body's systemic inflammatory signals that serve to increase blood sugar. This contributes to increased periods of time when the body functions with an unhealthy blood sugar level. Consequently, it is important for people with diabetes to treat periodontal disease to eliminate the infection for optimal metabolic control.

Periodontal disease is a leading complication of diabetes; therefore, it is important for people with diabetes to know their treatment options. If detected early, a periodontist can provide treatment that can stop the gum disease and bring the gums back to a state of health, preventing additional bone or tooth loss. In fact, periodontal treatment has been shown to improve blood sugar levels in people with diabetes, suggesting that treating patients' periodontal disease could decrease insulin requirements.

If diabetes is well controlled, treatment will be similar to the treatment of someone who doesn't have diabetes. In the early stages of gum disease, treatment usually includes scaling and root planning, a procedure in which plaque and calculus are removed from the pockets around the tooth and near the gums. People with diabetes may want to schedule their dental appointments early in the morning after they have eaten a normal breakfast in order to stabilize and prevent a severe or sudden drop in blood sugar levels. Upon determining a treatment plan, your periodontist and physician will work together to help you control both your diabetes and gum disease.



Questions your periodontist may ask

Be sure to know the answers to the following questions that your periodontist may ask at your next visit:

- When were you diagnosed with diabetes?
- What type of diabetes do you have?
- Do you take any medications?
- If not, how is your diabetes being managed?
- Are you insulin-dependent?
- What is your baseline sugar level?
- What method do you use to measure your blood sugar level?
- How often do you measure your blood sugar level?
- What is the name, address, and telephone number of your diabetes care provider?

The American Academy of Periodontology Patient Page is a public service of the AAP and should not be used as a substitute for the care and advice of your personal periodontist. There may be variations in treatment that your periodontist will recommend based on individual facts and circumstances. Visit perio.org to assess your risk and for more information on periodontal disease.