



# Diabetes and Dentistry

A COMPLETE GUIDE



# Diabetes and Dentistry

The relationship between diabetes, oral and general health is an important focus here at Bite Dental.

Studies have shown the prevalence of diabetes in Australia is increasing, with one study finding it doubling since 1981. About 4% of Australians are diagnosed with diabetes at some time in their lives (National Health Survey 2007-2008).

*“Australia has a rapidly rising prevalence of diabetes. The prevalence of abnormal glucose tolerance in Australia is one of the highest yet reported from a developed nation”*

- The Australian Diabetes, Obesity, and Lifestyle Study

This is a huge problem for our health system as the complications of diabetes are fast becoming a dangerous burden on our hospital services. It might be hard to believe, but **prevention of diabetes includes adequate care of the teeth and gums.**



# What is Diabetes?

Diabetes is a chronic condition without a cure. For our bodies to work properly, we must convert glucose (sugar) from food into energy. A hormone called insulin is essential for the absorption of glucose into cells. In people with diabetes, insulin is no longer produced or not produced in sufficient amounts by the body.

When people with diabetes consume glucose in foods such as breads, cereals, fruit and starchy vegetables, it can't be converted into energy and absorbed. Instead, the glucose stays in the blood. This is why blood glucose levels are higher in people with diabetes; it is called hyperglycaemia.

Studies show ongoing hyperglycaemia both reduces the function of immune cells and increases inflammation. This means that people with diabetes have an immune response that doesn't work properly and is slow to react, leaving them more at risk to infections.

This process causes symptoms and complications of diabetes, which can be quite serious. Some of these include:

- Obesity
- Heart Disease
- Kidney Disease
- Vision and eye problems
- Painful sores in the feet and legs
- Skin and mouth infections

More recent studies consider gum disease the 6th major complication of diabetes.



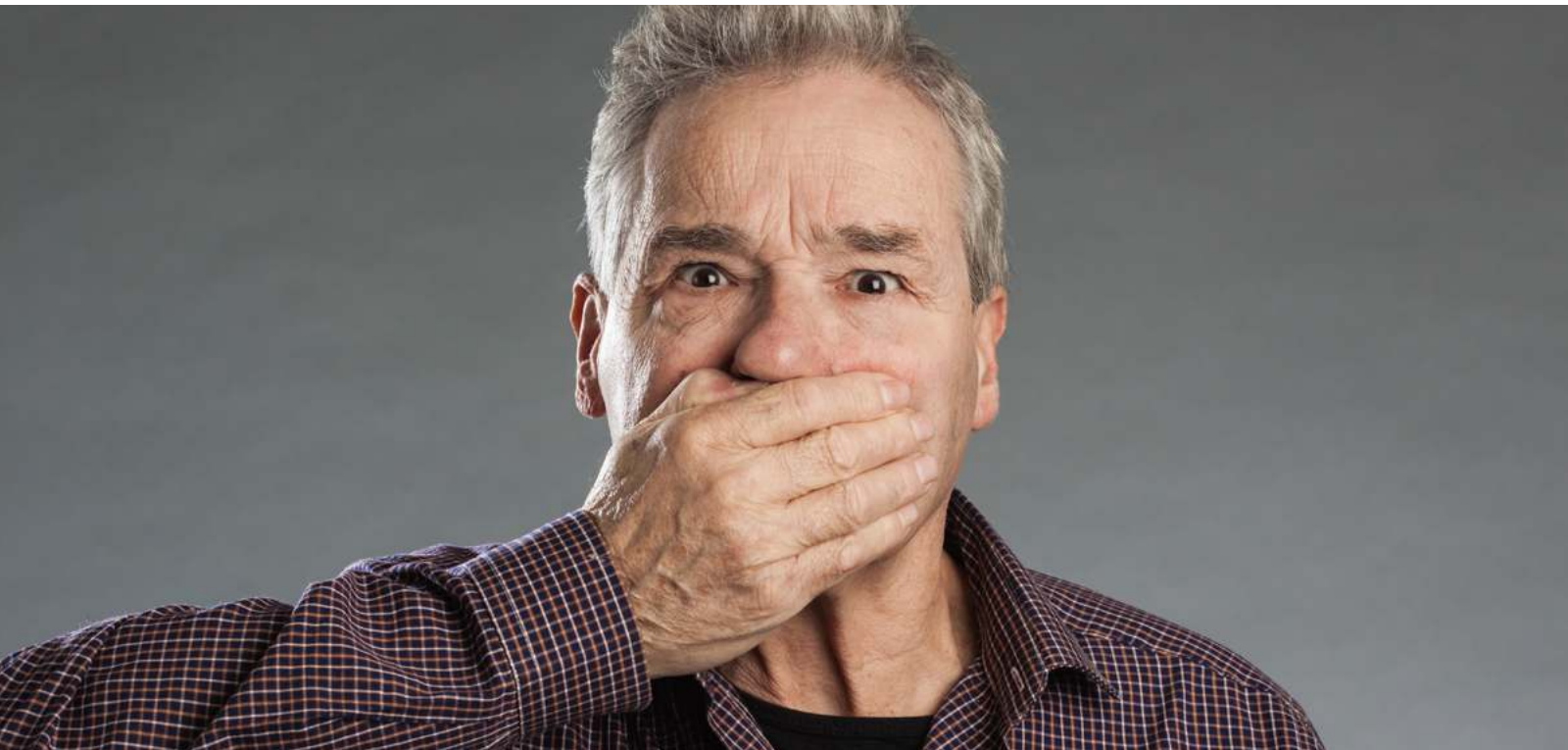
# What is Periodontal (Gum) Disease?

Gum disease is the leading cause of tooth loss in adults. It involves a deep bacterial infection of the gum that dissolves the bone around the teeth. Over time, this erodes the hold the gums have on teeth. If left untreated, patients notice their teeth becoming loose and falling out. Gum disease is irreversible and cannot be cured.

More often than not, gum disease is painless with no real symptoms – until it's too late. Studies have measured the ulcer size from gum disease and found it to be the equivalent area to the inside of your forearm, and still produce no pain or symptoms. Patients often seek help only after they have noticed some movement of teeth or have a painful gum abscess. By then it is often too late to save the teeth.

There is a genetic component to gum disease which can determine your susceptibility to the disease. Bite Dental conducts risk assessments for those wanting to know their likelihood of developing periodontal disease. As a diabetic, it is critical you know your own risk before the damage is done.

Diabetics experience more aggressive and severe gum disease than non-diabetics. Once the infection sets in it is often very hard to control. This means it usually results in tooth loss and dentures. Studies have reported up to 14% of diabetics will lose all of their teeth from gum disease.



# Connecting Diabetes and Gum Disease

More and more, evidence shows that people with periodontal disease are more likely to be diabetics than people with healthy gums. But researchers still aren't sure which comes first - does having diseased gums increase the chance of diabetes, or does having diabetes increase the risk of gum disease? Most sources suggest that they contribute to and perpetuate each other.

In a long-term study conducted at Columbia University in the United States found that individuals who had gum disease were more than twice as likely to develop diabetes as those who did not - even after adjusting for age, smoking, diet, and so on. An interesting twist, however, was that those subjects whose gum disease progressed to the point where they lost all of their teeth appeared to be at a lower risk for diabetes!

While no dentist would recommend losing one's teeth in an attempt to prevent diabetes, it appears that eliminating the toothy source of infection improved long-term risk.

Holistically, in a diabetic patient, the presence of any infection, including gum disease, makes it difficult to control blood glucose levels, thus making control of diabetes more difficult. It therefore seems that good oral hygiene and dental care, which help to prevent infections and gum disease, will also help with controlling diabetes. Yet another reason to visit your dentist regularly!



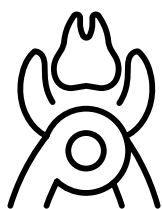
## Fast facts



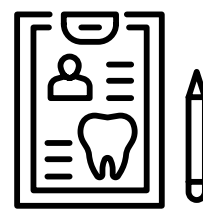
One in every two diabetics will develop gum disease



Gum disease is a bacterial infection of the gums which can cause your teeth to fall out



Diabetics have more than three times the risk of the disease and a much higher rate of tooth loss.



Diabetics with active gum disease are 2-3 times more likely to experience cardiovascular complications and 8-9 times more at risk of renal failure

## Your next steps

Are you concerned for your dental health as a diabetic? Here are a few steps to set you on your way to ensuring your dental health is cared for moving forward.

- Maintain a high standard of oral hygiene
- Conduct a risk assessment with Bite Dental
- Consult your dental professional often

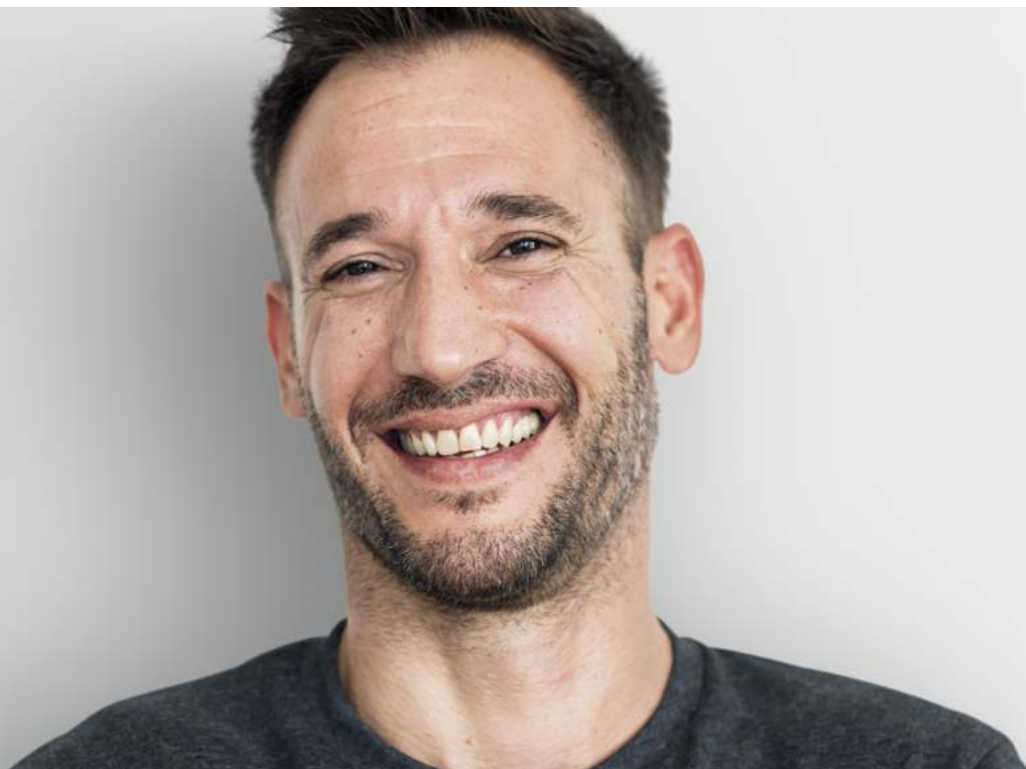




# Treatment options

Treatments for replacing teeth lost from gum disease can be limited. Ultimately, prevention and early diagnoses are key, and much easier and less expensive than the eventual treatment.

- Due to the bone being lost, the options for tooth replacement can be restricted to false teeth
- Implants, crowns and bridges can be done in some situations
- Bone grafts can be used but carry a high risk and require extra surgery and healing times, along with costs



# Bite Dental Risk Assessment Program

At Bite Dental Brisbane, we understand the importance of oral health care in the overall management of diabetes. That's why we have developed a free screening program for people diagnosed with diabetes. It aims to identify existing risk factors for gum disease and helps to guide a tailored preventive care plan that would best suit the patient and reduce their risk profile.

**The 20 minute consult includes an OPG radiograph, random BSL, detailed medical history review and a screening examination targeted at finding gum disease in diabetics.**

This does not constitute the start of dental treatment or replace a routine dental examination with a dentist.

At the end of the consult, the patient will receive a short report with the details of the findings and the recommendations for preventive care that they can take to their dentist, or if they desire, we can organise appropriate referrals for treatment.



# Act now before you become another statistic!

Call us today to arrange  
your complimentary  
gum disease risk-profile  
assessment.



## Bite Dental's commitment to your health

At Bite Dental we treat the whole person - not just their teeth. We understand the important connections between oral health and chronic disease. That's why, when you visit us, we take the time during our preventive visits to comprehensively review your general medical history and address your oral health as the integral part of your overall health that it is.

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