



The following article features consumer information from Columbia University College of Dental Medicine. All information is intended for your general knowledge only and isn't a substitute for medical advice or treatment for specific medical conditions. Talk to your doctor about what's best for you.

## Diabetes

### Oral effects

Diabetes means that you have too much glucose (sugar) in your blood. No matter what type of diabetes you have, this can lead to serious health issues. Diabetes can affect the entire body. Whether your diabetes affects your mouth and gums depends on how well you are able to control your blood sugar. If your diabetes is under control, it should have little effect on your oral health. However, if your diabetes is not under control, the oral effects can be dramatic.

People with diabetes can have:

- Periodontal (gum) disease that gets worse rapidly
- Gum inflammation (gingivitis)
- Dry mouth (xerostomia)
- Poor healing in the mouth
- Oral candidiasis (thrush)
- Burning mouth and/or tongue

Uncontrolled diabetes hurts your white blood cells, a main defense against infection. Periodontal disease is a bacterial infection, so people with uncontrolled diabetes are more likely to have it. Their gum disease also is likely to be more severe. If you have severe periodontal disease, you need to get treatment. Successful treatment also can help improve diabetic control. Any type of infection may cause blood sugar levels to rise. This includes periodontal disease. If the infection is treated successfully, your blood sugar may go down, and you may need less medicine to control your diabetes.

The most important part of controlling periodontal disease is your follow-up home care. If you don't brush and floss daily, your disease will not improve and will most likely get worse. This will make controlling your diabetes more difficult.

Dry mouth (xerostomia) can increase your risk of tooth decay (cavities). Saliva normally washes away sugars and bits of food that are fuel for decay-causing bacteria. These bacteria can cause more decay in a dry mouth. People with uncontrolled diabetes may have decreased flow of saliva. However, it's not clear whether diabetics have more or less tooth decay than non-diabetics. You must brush twice a day and floss every day to prevent decay. If you have dry mouth, you may want to ask your dentist or physician about artificial saliva or other means of moistening your mouth. Fluoride rinses or gels should be used to help prevent decay.



If you have uncontrolled diabetes, you may have problems healing quickly after oral surgery or other dental treatment. There are several reasons for the slow healing, including poor blood flow to the site. You also may be at risk of a fungal (yeast) infection called thrush or oral candidiasis. This condition is treated with antifungal medicine. Thrush can cause a burning sensation and/or a bad metallic taste in the mouth. Other conditions related to diabetes also can cause a burning sensation in the mouth. Your dentist or a specialist can examine you and determine whether you have thrush or a different condition.

### **At the dentist**

While most oral conditions should be treated in the same way for people with or without diabetes, it is important to note that people with diabetes do require more regular dental visits. Dental visits provide opportunities for prevention of periodontal infection and identification and treatment of periodontal disease. Oral infections in patients with diabetes should be aggressively treated and managed. A great emphasis should be placed on the need for prevention and on the importance of good oral hygiene.

No matter how well your diabetes is controlled, it's important to keep your dentist informed about your condition. Your dentist should become a part of your health care team. He or she should be kept informed about any changes in your diabetes condition. Your dentist needs to be informed of your current medications and allergies. This includes over-the-counter vitamins and supplements. Some medicines your dentist might use can interfere with the medications you take for diabetes. This makes it even more important that your dentist know the medicines you are taking and their doses. Tell your dentist about any changes in the type and/or amount of insulin you take. Also, be sure to tell your dentist about any reaction you have had to any medicine. This information will help your dentist provide dental treatment in the safest way possible.

Your dentist should have your physician's name and phone number, in case the need arises to consult on your care. Your dentist may want to know the results of some of your blood tests (for example, hemoglobin A1C and fasting blood glucose). This information helps your dentist to better understand your diabetes control. In general, diabetics with a hemoglobin A1C level of less than 7% are considered to be well controlled. Levels above 8% indicate poor control.

People with poorly controlled diabetes have higher risks of infection and poor wound healing. Because diabetes can affect your blood counts, always give your dentist a copy of your most recent blood tests.

If your diabetes is well controlled, you probably do not need any special dental care. This is true whether or not you require insulin to control your diabetes. People with poorly controlled or uncontrolled diabetes may need to take antibiotics before and after dental treatment that might put them at risk of a bacterial infection. An example would be periodontal surgery. This is even more important for diabetics who also have heart or kidney problems.



Take your insulin and eat normally before visiting the dentist. Your dentist may have a source of glucose, such as juice, available in case your blood sugar levels drop. But you should take a source of glucose with you to the dental office anyway. Glucose tablets are convenient to carry, but crackers, cookies or any carbohydrate will work. After dental treatment, resume your normal diet as soon as it is safe to do so. Your dentist will instruct you on what types of foods you may eat and when.

If you've had low blood sugar (hypoglycemic) episodes in the past, tell your dentist how often they have occurred and how severe they have been. Low blood sugar can occur when your insulin level peaks. If you take insulin, make sure your dentist knows when you last took insulin and ate food.

People with diabetes tend to heal more slowly than non-diabetics. They also are more prone to infection. Follow your dentist's instructions thoroughly after treatment. This will help you to recover as soon as possible. You should establish a more frequent recall schedule with your dental hygienist and dentist, such as every 3-4 months.

If you have braces on your teeth, contact your orthodontist right away if a wire or bracket is cutting into your tongue or mouth. You should get this fixed before a sore or ulcer forms. People with diabetes who have dentures or mouth appliances made of acrylic also may have an increased risk of developing a yeast infection in the mouth called thrush.

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## References

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