



Diabetes Research &
Wellness Foundation

Looking after gum health with diabetes

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Staying well until a cure is found...

What is periodontal disease?

New national guidance in 2022 from NICE (National Institute for Health and Care Excellence) recommends that everyone with a diagnosis of type 2 diabetes should have their gum health regularly checked by a dentist and if gum disease is found should be offered treatment. This is because gum disease can affect your blood sugar control as well as your teeth.

The purpose of this leaflet is to give you more information about diabetes and gum health to help you to manage the conditions.

Periodontal disease is the scientific name used to describe gum disease. There are two common forms of periodontal disease. The first is called gingivitis, which is mild inflammation of the gums. The other, more serious, form of gum disease is called periodontitis, in which there is more advanced inflammation of the gums, and the bone that holds the teeth in place begins to be gradually destroyed.

If you have diabetes you are more likely to have periodontitis. There is increasing evidence that periodontitis can also make it harder for you to control your diabetes. Reassuringly, treatment of periodontitis can improve this problem (*see links to NICE guidance in **More information***).



Figure 1 Healthy gums are pink and firmly attached to the tooth.



Figure 2 Gingivitis: inflamed gums that look red and swollen (particularly the part of gum next to the tooth), and may bleed on brushing.



Figure 3 Periodontitis: the gums are very inflamed, red and swollen. There is bleeding from the gums, and the gums around the lower teeth are receding.



Figure 4 Using a single tufted toothbrush to clean an awkward area with slightly overlapping teeth. The brush is cleaning the point where the gum meets the tooth.

Recognising the symptoms

The most certain way to find out if you have periodontal disease is to visit a dental professional. Healthy gums are pink and firm, are tightly attached to the teeth, and don't usually bleed when you brush your teeth (**Figure 1**).

Gingivitis develops when the teeth are not brushed effectively. Plaque builds up on the teeth, next to the gum, and causes the gums to become inflamed. As a result, the gums look inflamed and swollen (**Figure 2**), and may bleed when you brush your teeth. Gingivitis is reversible, and with good oral hygiene the gums can return to normal.

Periodontitis, the more serious form of gum disease, results from prolonged (over several years) inflammation of the gums as a result of long-term plaque build-up.

The gum inflammation becomes more and more advanced (**Figure 3**), and the gums start to detach from the tooth. This creates a space between the gum and the tooth called a 'pocket' which is measured by your dental professional with a probe. As the pocket gets deeper, the bone holding the teeth in place is gradually destroyed.

This process is typically painless, and usually progresses slowly. As periodontitis gets worse, teeth start to loosen and the gums may shrink away from the teeth (recede) making the teeth look longer. This may be the first indication to some people (if they don't regularly access dental care) that there is a problem.

Diabetes increases your risk of developing periodontitis

In the general population, around 10% of all adults have advanced periodontitis. The risk of developing periodontitis is approximately 2-3 times higher in people with diabetes, particularly if their diabetes is poorly controlled.

The precise reasons why people with diabetes are more likely to suffer from periodontitis are an ongoing area of research. There are several factors which are important, including:

- People with diabetes may be more susceptible to developing inflammation in the gums, thereby increasing the risk of periodontitis.
- Excess lipid tissue (body fat) in obese people with diabetes may produce chemicals which make the gums more likely to become inflamed.
- Wound healing is impaired in diabetes and, therefore, healing in the gums is also reduced.

The key thing to remember is that glycaemic control (of blood sugar levels) seems to be very important in determining how likely someone with diabetes may be to develop periodontitis. Research has shown that people with well-controlled diabetes are much less likely to be at risk of developing periodontitis compared to those with unstable diabetes control.



Periodontitis can affect your blood sugar control

As well as diabetes affecting your gum health, periodontitis can affect your diabetes. It does this by making it harder for you to control your blood sugars. The good news is that treating periodontitis can help to improve your diabetes control and contribute to reducing blood sugar levels.

Diagnosis and treatment

If your dental professional suspects that you may have periodontitis, X-rays of your teeth may be taken to check the health of the bone that holds the teeth in place. As with most diseases, prevention is better than a cure. Periodontal disease can generally be prevented by maintaining good oral hygiene (i.e. cleaning your teeth effectively).

Brush your teeth twice per day, for two minutes each time (which is longer than you think when brushing your teeth!). Be sure to brush every surface of the teeth, and particularly the point where the gum meets the tooth (**Figure 4**).

Clean between your teeth at least once per day, and do this before toothbrushing. Use the correct size of interdental brush (bottle brushes) if you have enough space, or dental floss if not, and ask your dental professional to help you with the right technique and type of oral hygiene product for cleaning between the teeth.

Summing up

It is very important for all people with diabetes to visit a dental professional regularly, so that any gum problems can be detected and treated before they become too severe. Your dental professional may also clean your teeth for you on a regular basis.

People with diabetes are more prone to gum disease, especially if their diabetes is poorly controlled. Good oral hygiene and regular dental check-ups are particularly important for people with diabetes, and periodontitis can make it harder for you to control your blood sugar levels.

Top tips for gum health

- As someone with diabetes, you may be more likely to develop gum problems. See your dental professional regularly.
- By keeping good control of your diabetes, and having good blood glucose control, you can reduce the likelihood of gum disease.
- Brush your teeth regularly, being careful to brush every part of the tooth (including between the teeth). If this makes the gum bleed, it may be a sign of gum inflammation. If you are concerned about bleeding gums, visit a dental professional.
- Even if you no longer have your own teeth, you should still see a dental professional periodically to check the health of your mouth.
- If you have had periodontal disease in the past, it is especially important to continue to attend for dental check-ups to make sure the disease does not return.
- Don't smoke. Smoking makes periodontal disease worse.

More information

For more information on dental health, please visit the NHS Choices website:
www.nhs.uk/conditions/gum-disease

Oral Health Foundation: **www.dentalhealth.org**

More information on gum health awareness for people with diabetes is available at the British Society of Periodontology website: **www.bsperio.org.uk**

Read the NICE guideline on periodontitis in *Type 1 diabetes in adults: diagnosis and management*:

www.nice.org.uk/guidance/ng17 and *Type 2 diabetes in adults: management*:
www.nice.org.uk/guidance/ng28/ifp/chapter/Gum-disease





The Diabetes Research & Wellness Foundation works towards educating, informing and reminding you of the best and healthiest choices to make.

If you would like to become part of our Diabetes Wellness community, visit our website for more details.

www.drwf.org.uk

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