



People with periodontitis are likely to develop diabetes mellitus – and vice versa

Diabetes mellitus

Diabetes mellitus is defined by **hyperglycaemia** and has two major forms.

Type 1 diabetes mellitus results from a lack of insulin because of an **autoimmune reaction in the pancreas**, whereas **type 2 diabetes mellitus** occurs as a consequence of **insulin resistance associated with chronically high blood-sugar levels**.

Periodontitis

Periodontitis is a common chronic inflammatory disease in humans, and it is defined by the **damage of tooth-supporting structures caused by inflammation** eventually leading to tooth loss.

Periodontitis is initiated by the **pathogenic dental-plaque biofilm** above and below the gum margin.

Patients with diabetes mellitus show a high prevalence of periodontitis.

Patients with periodontitis are more likely to develop type 2 diabetes mellitus.

Periodontitis and diabetes mellitus are both widespread conditions among the world's population

Diabetes mellitus

Approx. 415 million people

Prevalence: constantly rising



Periodontitis

Western countries, more than 50% of the population

750

Prevalence: 750 million people around the world with severe forms

Periodontitis and diabetes mellitus, a two-way relationship

What happens when you have **periodontitis and diabetes at the same time**

Diabetes mellitus increases prevalence, progression, and severity of periodontitis

Periodontitis

Increased risk

Diabetes mellitus

Periodontitis influences blood-sugar control in diabetes mellitus

Complications of diabetes

Stroke
Higher rate of cerebrovascular complications.

Retinopathy
Increased risk for larger retinal venular diameter and general diabetes-associated retinopathy.

Cardiovascular complications
Increased risk for coronary heart disease and dying from a heart attack (22% in 10 years).

Kidney failure and macroalbuminuria
Increased all-cause mortality risk (41% in 10 years).

Periodontitis & diabetes mellitus general facts

1 Diabetes and periodontitis are **chronic non-communicable diseases**, whose prevalence increases with age.

2 There is a **bidirectional (two-way) relationship** between periodontitis and diabetes.

3 If untreated, periodontitis causes **tooth loss**.

4 Periodontitis is **easily diagnosed and clinically controlled**. With regular high-quality supportive treatment, clinical results can be maintained.

5 People with sub-optimally controlled diabetes (both type 1 and 2) suffer from increased **inflammation/destruction/breakdown**.

6 People with periodontitis **have an elevated risk** of pre-diabetes or developing type 2 diabetes.

7 People with both diabetes and periodontitis have a **greater likelihood of more severe medical complications** (affecting eyes and kidneys) **and even death** than people with diabetes alone.

8 Periodontal treatment in people with diabetes **results in a significant reduction in glycated haemoglobin (HbA1c) levels** three months after periodontal therapy, with emerging evidence available also for six months.

9 **Early diagnosis, prevention and co-management (dentists and physicians)** of both diabetes and periodontitis is of utmost importance.

10 Successful periodontal treatment has a **clinically significant effect on general health** and should have a place in the treatment of people with diabetes.

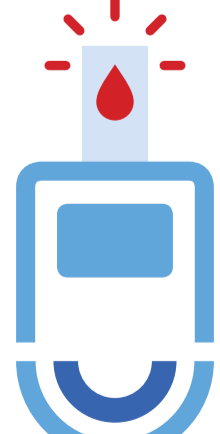
Take care of your gums, control diabetes.



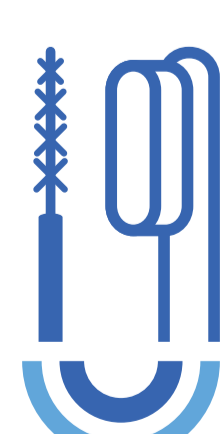
visit your doctor regularly



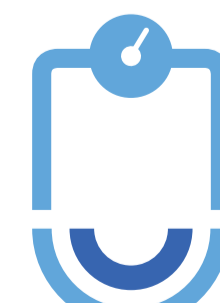
visit your dentist regularly



control your diabetes



clean your teeth twice a day



watch your weight



eat healthy foods, do not smoke