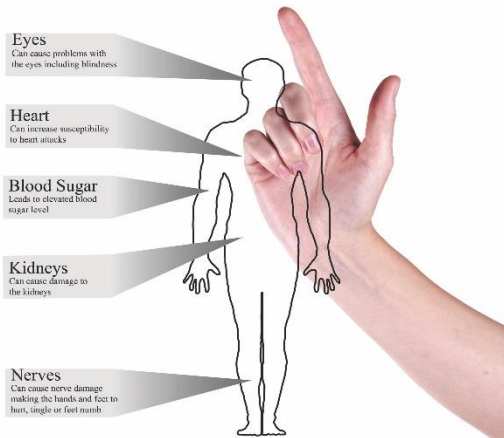


# The connection between Periodontitis and **DIABETES**

Emerging evidence supports an increased risk for diabetes onset in patients with severe periodontitis.

This may be due to elevated systemic inflammation (acute-phase and oxidative stress biomarkers) resulting from the entry of periodontal organisms and their virulence factors into the circulation.

## Effects of Diabetes



There is a direct and dose-dependent relationship between periodontitis severity and diabetes complications.

# Are you possibly at **RISK?**

- Do you experience **bleeding** when brushing?
- Have you noticed **receding gums** with increased **sensitivity**?
- Are you aware of a **bad taste** and **odor** coming from your mouth?
- Are you a **smoker**?
- Do you have a family history of **heart disease** or **diabetes**?



If you have answered **YES** to any of these questions, then you may have periodontal disease and be at risk for developing systemic health related complications.

Seek advice from your dentist or periodontist.

**PERIODONTAL HEALTH** is a key component of **ORAL** and **OVERALL HEALTH.**

# Do you have **BLEEDING GUMS?**



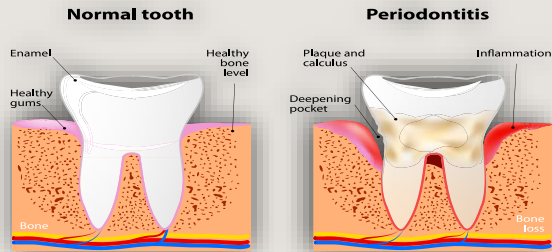
*As many as 50 % of adults have periodontal disease.*

**PERIODONTITIS** LEADS  
TO **HEART DISEASE**  
AND **DIABETES**

## What is

# PERIODONTITIS?

Periodontitis is a inflammatory condition which permanently destroys gum, connective tissue and bone that supports teeth.



Signs and symptoms include:

- bleeding gums
- swollen gums
- recession
- bad breath
- bad taste
- mobile teeth

## What **causes** Periodontitis?

It is primarily caused by plaque or bacteria but genetic predisposition and systemic factors such as diabetes as well as smoking may also have an effect. The capability of the body's immune system to fight off the bacterial infection are important and immune system fluctuation, may mark flair up of the disease.

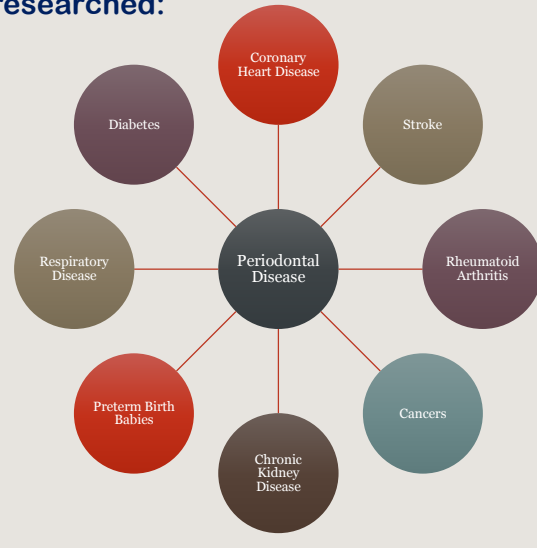


## Does **Periodontitis** affect my GENERAL HEALTH?

In periodontitis the bacteria on the tooth root and gum causes an immune inflammatory response resulting in swollen damaged gums. With brushing and eating the plaque enters the bloodstream and travel to distant sites throughout the body affecting the health of the internal organs.



Several **associations with periodontal disease** and other conditions has been researched:

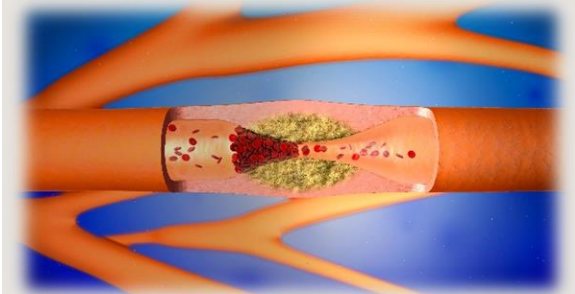


## The impact of **Periodontitis** on your

# HEART

Certain bacteria causing periodontitis are structurally equipped to attach and penetrate the blood vessel walls. Within the blood vessel wall, the bacteria can multiply, to elicit an inflammatory immune response and causes blood vessel cell death.

The result is hardening and narrowing of the blood vessel walls, called atherosclerosis.



- Atherosclerosis leads to heart attacks and strokes.
- It accounts for 29% of deaths worldwide.
- 2<sup>nd</sup> leading cause of death after infectious diseases and parasitic disease.