



Photo by Christina Stuart

# Health Starts in the Mouth

## The Oral Systemic Connection



*Haley Freymiller DMD is trained to treat patients who have complex medical conditions, as well as those with special needs. She has extensive experience in treating cancer patients and has a keen interest in the oral-systemic connection. Freymiller is well versed in how much oral health impacts body health.*

Why should you brush your teeth? Prevent cavities. Avoid bad breath. Keep your whole body healthy.

The body is a well-oiled machine that functions in harmony with good bacteria to keep it running smoothly. Significant infection and inflammation in one part of the body like the mouth disrupts the delicate balance and can cause inflammation and problems in other areas.

Periodontal disease is when there is inflammation and infection of the gums and bone supporting the teeth. If the inflammation and ulcers of periodontal disease were spread out, they would be the size of your palm. These inflamed ulcers allow bad bacteria to enter your blood supply, giving them full access to your body.

Strong scientific evidence supports that an unhealthy mouth has negative effects on the heart, brain, and blood vessels, which can increase your risk of developing disease.

### Blood Vessel Health

Keeping your mouth clean can also help maintain arterial health. There is a strong association between atherosclerosis and periodontal disease, as scientists have found the bacteria *S. mutans*, that also cause cavities, in atherosclerotic plaques.

Atherosclerosis is when gunk composed of bacteria, fats, and cholesterol build up on the inside of a blood vessel and leads to it narrowing and becoming stiff. When a blood vessel is narrowed, oxygen and nutrient carrying blood cannot pass through easily. Depending on which arteries are affected, atherosclerosis can lead to coronary artery disease, peripheral artery disease, high blood pressure and kidney problems. Clots that cause heart attacks and strokes are also associated with oral bacteria.

### Diabetes

There has been considerable scientific research linking periodontal disease and diabetes. When bacteria enter the bloodstream through areas of periodontal disease, it causes inflammation, and in people with diabetes, whole body inflammation increases the risk of heart attacks, kidney disease, limb loss, blindness, and nerve damage in the hands and feet. Studies have found that by treating periodontal disease, you are able to diminish the complications of diabetes.

Even if you do not have diabetes, periodontal disease can increase your risk of developing it.

### Heart Health

When bacteria and inflammation get into the heart, it can have dire consequences. Thirty to 40 percent of infective endocarditis, an infection of the inner lining or valves of the heart from bacteria in the bloodstream, is caused by a group of bacteria called viridans streptococcus. These germs, which come from cavities and gum infections, can get into your bloodstream by things as simple as chewing food, brushing and flossing, or using a water pick.

Good oral hygiene and regular dental check-ups keep your mouth healthy. This decreases the number of bad bacteria in your mouth and the chances of it entering your bloodstream. Who knew that something as simple as your toothbrush and dental floss could fight so many diseases?

For more information or oral care and overall health, visit [www.smiledesigncenter.us](http://www.smiledesigncenter.us). ■