

# The Heart of Dental Health

February has been proclaimed American Heart Month by the American Heart Association. To maintain good heart health, our physicians tell us to exercise frequently, watch our diet, and quit smoking. But did you know that good brushing and flossing and frequent checkups with your dentist could also keep your heart healthy? There is clear evidence today of a link between gum disease and cardiovascular disease. In fact, people with periodontal disease are almost twice as likely to have cardiovascular disease.

So, what is periodontal disease? It is a condition in which the bone surrounding the tooth root gradually deteriorates. When left untreated, the bone deteriorates so much that the teeth can actually become loose and fall out. Periodontal disease originates because dental plaque accumulates in a small crevice between the gums and the teeth. Dental plaque is largely composed of bacteria, and when very specific types of bacteria are present, a chronic infection begins. In the early stages of periodontal disease, the infection is usually pain free. The body and its immune system, however, recognize the infection and mount an immune response and inflammation toward it. It is the immune response and inflammation that cause the jawbone to deteriorate. So, in actuality, the bone loss seen in periodontal disease is the body's way to clear the infection.

The bacteria that cause periodontal disease and the resulting inflammation are what are believed to contribute to cardiovascular disease. Each year there are more deaths from heart disease than from cancer. Atherosclerosis, the most common cardiovascular disease, is the progressive hardening of the arteries due to the formation of plaques (not the same as dental plaque) within the arteries. When the size of the arteries carrying blood to the heart gets narrower or pieces of the plaque break off, the result can be

a deadly heart attack or stroke.

It is not known exactly why periodontal disease has a link to heart disease. One theory is directly related to the bacteria. Experts know that bacteria from the mouth can enter the bloodstream through inflamed gums. These same bacteria have been found clumped in artery plaques. It is thought that these bacteria stick to the fatty plaques in the bloodstream, directly contributing to blockages. Researchers are also looking at the process of inflammation. In the presence of bacteria and infection, the body produces inflammation. Inflammation is seen in gingival tissue in the presence of bacteria, and it is possible that as the same oral bacteria travel through your body, they trigger a similar response, causing the blood cells to swell. This swelling could then narrow an artery and increase the risk of clots.

Medical doctors for years have known how to decrease the risk of heart disease. Routine exercise, smoking cessation, and healthy eating habits can all reduce the risk of heart attacks and stroke. Now we know that reducing the levels of bacteria and inflammation in the mouth can also lessen the risk of heart disease.

Oral health begins with a thorough examination with your dentist. A periodontal examination must be a part of any routine exam. If periodontal disease exists, treatment to arrest the disease and reduce the inflammation is imperative. Treatment by a periodontist, a dentist who specializes in the treatment of periodontal disease, may be necessary depending upon the severity of the condition. Oral health continues with effective home dental hygiene, which includes brushing your teeth and gums for a minimum of two minutes twice daily and flossing at least once daily.

The inflammation caused by periodontal disease has also been linked to other widespread systemic medical problems. For more information

PHOTO: THOMAS BALSAMO



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on these problems including heart disease, you can visit the American Academy of Periodontology's Web site at [www.perio.org](http://www.perio.org) or ask your dentist at your next cleaning. U