



## Inflammation and Periodontal Disease

Most people know that maintaining healthy teeth and gums is a necessary step in achieving overall wellbeing. In fact, now not only dentists encourage brushing and flossing, but many physicians also promote oral hygiene as a way to help keep the rest of the body healthy. Several research studies have suggested that gum disease may be associated with other health issues, including heart disease, stroke and diabetes. And with more and more research reinforcing the connection between periodontal and systemic health, scientists are beginning to understand *why* these connections exist. One theory points to chronic inflammation as the culprit.

Inflammation is the body's natural response to harm, such as an injury or infection. For many years, dentists believed that gum disease developed as a result of a bacterial infection caused by the build-up of plaque between the teeth and under the gums. While plaque build-up is still a factor in the development and progression of gum disease, researchers now suspect that the more severe symptoms, namely swollen, bleeding gums; recession around the gum line, and loss of the bone that holds the teeth in place, may actually be caused by the chronic inflammatory response to the bacterial infection, rather than the bacteria itself.

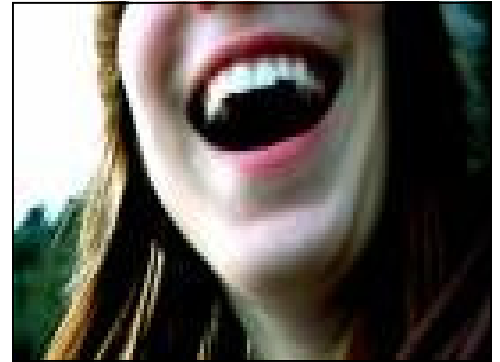
Scientists hypothesize that the chronic inflammatory response

mechanism may be the reason behind the periodontal-systemic health link. Many of the diseases associated with periodontal disease are also considered to be systemic inflammatory disorders, including cardiovascular disease, diabetes, rheumatoid arthritis, kidney disease and even certain forms of cancer, suggesting that chronic inflammation itself may be the basis for the connection.

More research is needed to pinpoint the precise biological mechanisms responsible for the relationship between gum disease and other disease states. However, since previous findings have indicated that gum disease sufferers are at a higher risk for other diseases, it is critical to maintain periodontal health in an effort to achieve overall health.

Dentists recommend daily oral care, including regular brushing and flossing, and routine visits to the dentist to avoid gum disease. If gum disease develops, consultation with a dental professional such as a periodontist can lead to effective treatment. A periodontist is a dentist with three years of additional specialized training in the prevention, diagnosis and treatment of gum disease.

For more information on the role of inflammation in oral health, tips on how to prevent or treat gum disease, to find out if you are at risk, or to find a local periodontist, visit [perio.org](http://perio.org).



### What is Inflammation?

Inflammation is the body's instinctive reaction to fight off infection, guard against injury or shield against irritation. Acute cases of inflammation are easily identifiable, and are often characterized by swelling, redness, heat and pain around the affected area. While acute inflammation initially intends to heal the body, over time, if left untreated, it can lead to chronic inflammation. Chronic inflammation can lead to dysfunction or destruction of the infected tissues, and potentially more severe health complications.

The American Academy of Periodontology Patient Page is a public service of the AAP and should not be used as a substitute for the care and advice of your personal periodontist. There may be variations in treatment that your periodontist will recommend based on individual facts and circumstances. Call 1-800-FLOSS-EM or visit [perio.org](http://perio.org) for more information on periodontal disease.