



## Periodontal disease and inflammation

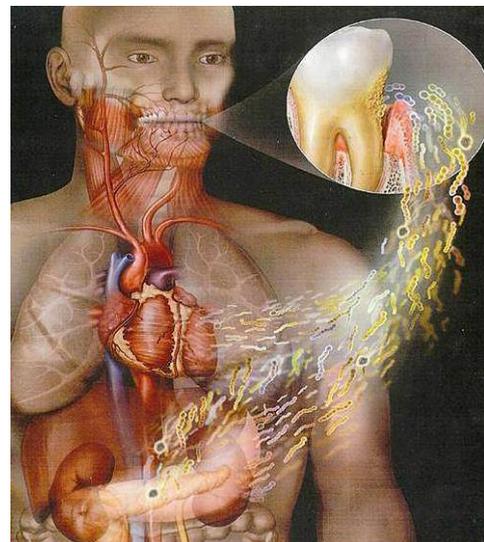
Most people know that maintaining healthy teeth and gums is a necessary step in achieving overall wellbeing. In fact, now not only dentists encourage brushing and flossing, but many physicians also promote oral hygiene as a way to help keep the rest of the body healthy. Several research studies have suggested that gum disease may be associated with other health issues, including heart disease, stroke, diabetes and several other chronic diseases. And with more and more research reinforcing the connection between periodontal and systemic health, scientists are beginning to understand *why* these links exist. One theory points to chronic inflammation as the main 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 red, swollen, bleeding gums, recession along 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 hypothesise 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 such as cardiovascular disease, kidney disease, diabetes, rheumatoid arthritis, chronic lung and airway disorders and even certain forms of cancer such as pancreatic 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 establish and 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 specialist 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.



### 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

