Gum Disease
A Guide to Periodontal Disease

At first, it's silent, practically invisible and sometimes even painless. But once periodontal disease strikes, it's only a matter of time until it makes its presence known with uncomfortable, unsightly and quite possibly irreparable side effects.

Periodontal disease, also known as gum disease, is the major cause of tooth loss in adults. There are several types and stages of the disease, all of which start with an infection of the gums that can move into the bones and ligaments that support the teeth. In the beginning stages, it is often detected by a dentist or dental hygienist during regular checkups. If left untreated gums and bone can become so seriously damaged, that teeth can fall out or have to be removed.

More than half of all adults, and three quarters of adults over 35, have some form of periodontal disease. Even young children can exhibit signs. If you plan to make your teeth last a lifetime, it's important to understand the causes, symptoms and best methods for treating and preventing periodontal disease.

What causes Periodontal Disease?
The major cause of periodontal disease is the interaction between the bacteria found in plaque—the sticky, virtually invisible film that collects on teeth every day—and the body's response to that bacteria. These bacteria create toxins that irritate and inflame the gums. This inflammatory process destroys the gums tissues and causes them to separate from the teeth. If left untreated, the disease advances to damage the underlying bone.

When plaque is not removed from the teeth regularly, it forms a hard, porous substance called calculus, or tartar. If calculus forms on the roots of the teeth below the gum line, it irritates the gums even further and contributes to even more plaque collection and disease. Only a dentist or dental hygienist can remove plaque and calculus from your teeth.

Once the bacteria in plaque have created inflammation and damage to the gum tissue occurs, a number of other factors can contribute to the severity of periodontal disease and the rate at which it progresses. Among them are:

- Smoking or chewing tobacco
- Poor oral hygiene
- Poorly fitting bridges
- Badly aligned teeth
- Defective fillings
- Food impacted between teeth
- Clenching or grinding teeth
- Poor diet
- Pregnancy or oral contraceptives
- Systemic diseases such as diabetes or AIDS
- Certain medications

What are the stages of Periodontal Disease?
Healthy gums are firm, pink and don't bleed. In the earliest stage of periodontal disease, called gingivitis, the gums begin to get red and puffy and may bleed during brushing or flossing. Plaque and tartar may build up at the gum line, but the bone that holds the teeth is still healthy and removing the irritants will restore tissue health.

The next stage of periodontal disease is called periodontitis. At this stage, the gums begin to separate from the teeth, the underlying bone is damaged, pockets form and, sometimes, the gums recede. Bacteria-laden plaque spreads into the pockets, making it more difficult to keep tooth surfaces clean and to control the disease process.

In advanced stages of the disease, pockets continue to deepen and there is further destruction of the underlying bone. Additionally, the bacteria that live in these deep pockets are more virulent and contribute even further to disease progression. Left untreated, teeth will eventually loosen and fall out.

What are the symptoms of Periodontal Disease?
While the early symptoms of periodontal disease can only be detected by a dentist, there are other indicators that start to appear as the disease progresses. Symptoms like:

- Red, swollen or tender gums
- Gums that bleed during brushing or flossing
- Teeth that have shifted or loosened
- Pus between teeth and gums
- Persistent bad breath
- Teeth that look longer because gums have receded
- Gums that have pulled away from the teeth
- Changes in the way teeth fit together when biting
- Changes in the way partial dentures fit

If you have any of these symptoms, you may have some form of periodontal disease and should consult your CDA member dentist. He or she will then measure the depth of the pockets between your teeth and gums and take X-rays to see if damage has occurred to the supporting bone. If, after this evaluation, your CDA dentist determines that you do have periodontal disease, there are a number of treatments he or she will suggest depending on the severity of your situation.

How can Periodontal Disease be treated?
If periodontal disease is diagnosed in the early stage of gingivitis, it can be treated with a thorough professional cleaning. If the disease has progressed beyond gingivitis to periodontitis, the treatment may involve a process called “deep cleaning” or “root planing,” which involves cleaning and smoothing of the root surfaces of the teeth to remove calculus and bacterial deposits below the gum line so that
the gums can heal around them. This procedure may require several appointments, depending on the extent of your periodontal disease.

In cases of advanced periodontitis, when deep pockets have formed between the teeth and gums, surgery may be required to allow the dentist to thoroughly clean the roots of the teeth and eliminate the pockets. When there’s not enough existing gum, a gum graft might be performed. In some cases of periodontal disease, when the gum and bone has been partially destroyed, certain surgical techniques can assist regeneration of these tissues.

New advances in medications for the treatment of periodontal disease also exist. Local delivery of antimicrobial or antibiotic medications, as well as medications that control the bodies’ response to disease producing bacteria, can help slow the progression of the disease.

**How can Periodontal Disease be prevented?**

The best way to prevent periodontal disease is to practice good oral hygiene. Brushing and flossing every day, eating a balanced diet and scheduling regular checkups with your CDA dentist are essential to keeping periodontal disease at bay. And by doing so, you’ll increase your chances of keeping your teeth for a lifetime.