Oral Health Matters
from Head to Toe

Your Guide to Preventing and Treating Gum Disease for Overall Health

Gums and Overall Health

We all know that prevention is one of the keys to maintaining overall health.

We exercise and watch what we eat to help reduce our risk of heart attack, stroke and certain cancers. In much the same way, we should take good care of our oral (dental) health now to prevent gum disease and tooth loss later.

Why is this so important? The reasons are much more than cosmetic. While we once believed the worst outcome of gum disease was tooth loss, we now know that oral health matters from head to toe.

Like smoking, elevated cholesterol or obesity, periodontal (gum and bone) disease may be a risk factor for a number of serious health conditions. In recent studies, gum disease has been linked to:

- heart disease and stroke\(^{(1,2)}\)
- pneumonia and other respiratory diseases\(^{(3,4)}\)
- diabetes\(^{(5)}\)
- premature, low birth rate deliveries\(^{(6)}\)

How is this possible? For those with gum disease, the simple act of brushing the teeth or chewing gum can injure gum tissue, allowing bacteria to enter the bloodstream. It is believed that these bacteria may travel to other parts of the body, potentially worsening or causing other types of health problems.

What is Gum Disease?

_Gum disease begins with the formation of hard and soft deposits on the surface of the teeth. Over time, a build-up of bacteria called plaque collects at the gum line, eventually hardening on the teeth into calcium deposits called calculus (tartar)._\n
With poor oral care, these bacteria can cause inflammation of the gums (gingivitis), penetrate the gum line and finally spread into the underlying bone (periodontitis). If not treated, periodontal disease can lead to complete destruction of the tooth’s supporting tissues, abscesses and, ultimately, loss of the tooth.

The warning signs of gum disease include:
Red, swollen or tender gums
- Bleeding while brushing or flossing
- Gums that pull away from the teeth
- Persistent bad breath
- Loose or separating teeth
- A change in the way your teeth fit together

According to some estimates, as many as 75 percent of adults over the age of 30 may suffer from some degree of gum disease. But with proper oral care, gum disease can be controlled or even reversed.

Gum Disease and Your Heart

*Preventing gum disease may be good for your heart…*

New research suggests gum disease may put you at increased risk of heart disease and stroke. In fact, according to some studies, the presence of gum disease could be a significant risk factor, comparable to smoking, family history and elevated cholesterol.

Studies have suggested that bacteria from diseased gums may travel through the bloodstream, potentially contributing to the formation of artery-clogging plaques.

In one of more than five studies conducted recently into the potential links between gum disease and the heart, a group of 1,200 U.S. veterans was followed over a 35-year period. The group underwent extensive medical tests, including regular dental check-ups. The study found that men with moderate to severe gum disease were much more likely to suffer a stroke or from heart disease than those with healthy gums.

Researchers also believe that gum disease may contribute to infective endocarditis, a condition in which the interior lining of the heart and heart valves become inflamed, possibly due to a bacterial infection. If left untreated, this condition could lead to a fatal infection.

Gum Disease and Your Lungs

*Preventing gum disease may help you breathe easier…*

Traditionally, we have thought of smoking, advanced age, and the presence of other health conditions that weaken the immune system, as risk factors for lung disease. But scientists now believe that gum disease may also be a significant risk factor, increasing the risk of respiratory infections, and potentially worsening respiratory diseases such as pneumonia, bronchitis, emphysema and Chronic Obstructive Pulmonary Disease (COPD).
Bacterial respiratory infections are caused by the aspiration or inhaling of germs from the mouth and throat into the lungs. When these germs reach the lower respiratory tract, they may cause infections or worsen existing lung conditions.

Recent studies have found that bacteria found in the oral cavity can travel to the lungs and cause diseases such as pneumonia, particularly in people with gum disease.

**Gum Disease and Diabetes**

*Preventing gum disease may help you manage the conditions associated with diabetes…*

In recent years, we have learned that people with diabetes are more prone to a variety of bacterial infections, including gum disease, than people without diabetes. The latest research suggests the relationship between gum disease and diabetes may be even stronger. Having gum disease may in fact worsen an existing case of diabetes, or put you at increased risk for the complications associated with diabetes.

In one recent study, patients with diabetes required insulin treatment less often following treatment for their gum disease. In another study, it was found that severe periodontal disease may increase both blood sugar levels and the amount of time the body functions with high blood sugar, putting those with diabetes at increase risk for complications.

The results of these studies suggest severe gum disease may be an important risk factor in the progression of diabetes, and that people with both diabetes and gum disease should receive regular treatment from an oral health professional to reduce inflammation of the gums.

**What Can I Do?**

*If you have, or are at risk for one or more of these health conditions, it is particularly important to pay attention to you oral health.*

The good news is that with regular, proper oral care, gum disease can be controlled or even reversed.

**The Dental Hygiene Check-up**

Visiting your dental hygienist on a regular basis is one of the most important steps you can take to maintain or improve your oral health.

Here’s what you can expect from your dental hygienist:
1. He or she will start by reviewing your medical history with you to make sure there are no medical conditions that could influence your treatment.

2. The next step is assessing the condition of your head and neck region, followed by your gums, teeth and other areas of your mouth. Any areas of concern will then be referred to your dentist or physician.

3. You are then ready to have your teeth cleaned (called “scaling”) to remove plaque buildup. This is done using hand instruments or a vibrating ultrasonic instrument.

4. Your teeth may be polished to remove stains. If needed, you may receive a fluoride treatment to strengthen teeth, or other agents to desensitize them.

5. Based on the condition of your teeth and gums, your dental hygienist will customize an oral hygiene program for your care between visits and may advise on other matters relating to oral health, such as reducing sugar intake and smoking cessation.

**Between Visits**

It is important to make your personal oral hygiene program – developed together by you and your dental hygienist – a daily habit between office visits to control or reverse gum disease.

Less than five minutes, twice a day, is all it takes to maintain or improve oral hygiene. It’s never too late – or too early – to develop good habits.

Although your specific oral care program will vary according to a number of factors, and should be developed by you and your dental hygienist, there are some general guidelines for maintaining good oral health at any age:

**Infant Care**

- Give the infant plain water instead of milk or sweet juices at naptime
- Gently clean newly erupted teeth, gums and tongue with a gauze or washcloth

**Children**

- Familiarize children with oral cleaning habits
- Parents may wish to clean the child’s teeth before bedtime and allow the child to try brushing his/her own in the morning
- First visits to the dental hygienist are recommended at about age 2.

**Teenagers and Adults**

A thorough cleaning once or twice a day is sufficient.

**Brushing:** place your brush at a 45 degree angle to the junction between tooth and gum, applying gentle pressure as you move the brush away from the gums. Don't forget to brush your tongue (with or without toothpaste), where bacteria build up. You
should be spending about three minutes each time you brush.

**Flossing:** wrap 18 inches or floss around your middle fingers until you have a two-inch length between them. With the thumb and forefinger of each hand, guide the floss gently and carefully between each tooth, using a back-and-forth motion. Curve the floss around each tooth in a “C” shape and gently guide it up and under the gum line.

**Seniors**

- Seniors can still get cavities, especially around the roots of the teeth. Continue to brush and floss regularly.
- Even if you wear dentures, it is still important to clean your mouth and get regular check-ups to prevent oral health problems.

**References:**


For more information about oral health, contact your dental hygienist.

**Oral Health Matters from Head to Toe:**

Adapted from a brochure which was originally produced as an educational service by the College of Dental Hygienists of Ontario (CDHO).