

Q: What is Periodontal Disease?

A: Periodontal disease affects the tissues that surround your teeth. There are three types of tissue that support the teeth and are affected by gum disease: the gums, the bone and the connective tissue (between the tooth and the bone/gums). Various conditions can affect the health of these tissues and **periodontal disease is the #1 cause of tooth loss in adults.** Proper periodontal care, early detection/treatment and periodontal maintenance (follow-up care) are key elements of periodontal health and the retention of teeth.

Healthy gums enhance the appearance of your teeth. Healthy supporting bone ensures the proper function and alignment of the teeth. Healthy connective tissues assure a natural seal against bacterial infection. When your gums are unhealthy they may recede or become swollen and red, while in the later stages of periodontal disease, the bone is destroyed causing the teeth to shift positions, loosen or even fall out. Periodontal disease not only affects your ability to chew and speak, but can affect your overall health and ruin your smile.

Q: How can I tell if I have gingivitis or periodontitis (gum disease)?

A: Four out of five people have periodontal disease and don't know it! Most people are not aware of it because the disease is usually painless in the early stages. Unlike tooth decay, which often causes discomfort, it is possible to have periodontal disease without noticeable symptoms. Having regular dental check-ups and periodontal examinations are very important and will help detect if periodontal problems exist.

Periodontal disease begins when plaque, a sticky, colorless, film of bacteria, food debris, and saliva, is left on the teeth and gums. The bacteria produce toxins (acids) that inflame the gums and slowly destroy the bone. Brushing and flossing regularly and properly will ensure that plaque is not left behind to do its damage.

Other than poor oral hygiene, there are several other factors that may increase the risk of developing periodontal disease:

- **Smoking or chewing tobacco** – Tobacco users are more likely than nonusers to form plaque and tartar on their teeth.
- **Certain tooth or appliance conditions** – Bridges that no longer fit properly, crowded teeth, or defective fillings that may trap plaque and bacteria.
- **Many medications** – Steroids, cancer therapy drugs, blood pressure meds, oral contraceptives. Some medications have side effects that reduce saliva, making the mouth dry and plaque easier to adhere to the teeth and gums.
- **Pregnancy, oral contraceptives, and puberty** – Can cause changes in hormone levels, causing gum tissue to become more sensitive to bacteria toxins.
- **Systemic diseases** – Diabetes, blood cell disorders, HIV / AIDS, etc.
- **Genetics may play role** – Some patients may be predisposed to a more aggressive type of periodontitis. Patients with a family history of tooth loss should pay particular attention to their gums.

Signs and Symptoms of Periodontal Disease

- **Red and puffy gums** – Gums should never be red or swollen.

- **Bleeding gums** – Gums should never bleed, even when you brush vigorously or use dental floss.
- **Persistent bad breath** – Caused by bacteria in the mouth.
- **New spacing between teeth** – Caused by bone loss.
- **Loose teeth** – Also caused by bone loss or weakened periodontal fibers (fibers that support the tooth to the bone).
- **Pus around the teeth and gums** – Sign that there is an infection present.
- **Receding gums** – Loss of gum around a tooth.
- **Tenderness or Discomfort** – Plaque, calculus, and bacteria irritate the gums and teeth.

Good oral hygiene, a balanced diet, and regular dental visits can help reduce your risk of developing periodontal disease.

Q: Can You Prevent Gum Disease?

A: Research has shown that adults past the age of 35 lose more teeth to periodontal disease than they do to cavities. **3 out of 4 adults are affected by gum diseases at some time in their life.** The best method for preventing periodontal disease is using good home care (daily brushing and flossing) and regular professional examinations and cleanings. In some individuals, however, periodontal disease can develop even with the most diligent home care. Once periodontal disease starts, professional intervention is necessary to stop its progression.

Q: What does heart disease and other medical conditions have to do with periodontal (gum) disease?

A: *Many people are unaware that having periodontal disease (the destruction of gum tissue and bone that hold our teeth in place) can affect your overall health. Periodontal disease is one of the most common infections; often more prevalent than the common cold! **Periodontal disease is not only the number one reason people lose teeth; it can also affect the health of your body!***

Periodontal disease is a bacterial infection, and in its earliest stages, it's called gingivitis. It starts when an accumulation of plaque (a colony of bacteria, food debris, and saliva) is NOT regularly removed from the gums and teeth. The bacteria in plaque produce toxins/acids that irritate and infect the gums and eventually destroy the jaw bone that supports the teeth. ***When periodontal disease is not treated it can eventually lead to tooth loss!***

There are numerous studies that have looked into the correlation between gum disease and major medical conditions. These studies suggest people with periodontal disease are at a greater risk of systemic disease and indicate that periodontal disease may cause oral bacteria to enter the bloodstream and travel to major organs and begin new infections. Research suggests that periodontal bacteria in the blood stream may:

- Contribute to the development of heart disease
- Increase the risk of stroke
- Compromise the health of those that have diabetes or respiratory diseases
- Increase a woman's risk of having a preterm, low-birth weight baby

Researchers conclude there is still much research to be done to understand the link between periodontal disease and systemic diseases, but enough research has been done to support that infections in the mouth can play havoc elsewhere in the body.

To ensure a healthy, disease-free mouth, we recommend the importance of regular dental check-ups and cleanings, which include a periodontal evaluation. Also, diligent home care and a proper diet can help reduce the plaque and bacteria in the mouth.

Remember....the mouth body connection! Taking care of your oral health may contribute to your overall medical health!

Q: How often should I brush and floss?

A: Brushing and flossing help control the plaque and bacteria that cause dental disease.

Plaque is a film of food debris, bacteria, and saliva that sticks to the teeth and gums. The bacteria in plaque convert certain food particles into acids that cause tooth decay. Also, if plaque is not removed, it turns into calculus (tartar). If plaque and calculus are not removed, they begin to destroy the gums and bone, causing periodontal (gum) disease.

Plaque formation and growth is continuous and can only be controlled by regular brushing, flossing, and the use of other dental aids.

Toothbrushing – Brush your teeth ***at least twice a day*** (especially before going to bed at night) with an ADA approved soft bristle brush and toothpaste.

- Brush at a 45 degree angle to the gums, gently using a small, circular motion, ensuring that you *always* feel the bristles *on the gums*.
- Brush the outer, inner, and biting surfaces of each tooth.
- Use the tip of the brush head to clean the inside front teeth.
- Brush your tongue to remove bacteria and freshen your breath.

Electric toothbrushes are also recommended. They are easy to use and can remove plaque efficiently. Simply place the bristles of the electric brush on your gums and teeth and allow the brush to do its job, several teeth at a time.

Flossing – ***Daily flossing*** is the best way to clean between the teeth and under the gumline. Flossing not only helps clean these spaces, it disrupts plaque colonies from building up, preventing damage to the gums, teeth, and bone.

- Take 12-16 inches (30-40cm) of dental floss and wrap it around your middle fingers, leaving about 2 inches (5cm) of floss between the hands.
- Using your thumbs and forefingers to guide the floss, gently insert the floss between teeth using a sawing motion.
- Curve the floss into a “C” shape around each tooth and under the gumline. Gently move the floss up and down, cleaning the side of each tooth.

Floss holders are recommended if you have difficulty using conventional floss.

Rinsing – It is important to rinse your mouth with water after brushing, and also after meals if you are unable to brush. If you are using an over-the-counter product for rinsing, it's a good idea to consult with your dentist or dental hygienist on its appropriateness for you.

Q: What should I do if I have bad breath?

A: Bad breath (halitosis) can be an unpleasant and embarrassing condition. Many of us may not realize that we have bad breath, but everyone has it from time to time, especially in the morning.

There are various reasons one may have bad breath, but in healthy people, the major reason is due to microbial deposits on the tongue, especially the back of the tongue. Some studies have shown that simply brushing the tongue reduced bad breath by as much as 70 percent.

What may cause bad breath?

- **Morning time** – Saliva flow almost stops during sleep and its reduced cleansing action allows bacteria to grow, causing bad breath.
- **Certain foods** – Garlic, onions, etc. Foods containing odor-causing compounds enter the blood stream; they are transferred to the lungs, where they are exhaled.
- **Poor oral hygiene habits** – Food particles remaining in the mouth promote bacterial growth.
- **Periodontal (gum) disease** – Colonies of bacteria and food debris residing under inflamed gums.
- **Dental cavities and improperly fitted dental appliances** – May also contribute to bad breath.
- **Dry mouth (Xerostomia)** – May be caused by certain medications, salivary gland problems, or continuous mouth breathing.
- **Tobacco products** – Dry the mouth, causing bad breath.
- **Dieting** – Certain chemicals called ketones are released in the breath as the body burns fat.
- **Dehydration, hunger, and missed meals** – Drinking water and chewing food increases saliva flow and washes bacteria away.
- **Certain medical conditions and illnesses** – Diabetes, liver and kidney problems, chronic sinus infections, bronchitis, and pneumonia are several conditions that may contribute to bad breath.

Keeping a record of what you eat may help identify the cause of bad breath. Also, review your current medications, recent surgeries, or illnesses with you dentist.

What can I do to prevent bad breath?

- **Practice good oral hygiene** – Brush at least twice a day with an ADA approved fluoride toothpaste and toothbrush. Floss daily to remove food debris and plaque from in between the teeth and under the gumline. Brush or use a tongue scraper to clean the tongue and reach the back areas. Replace your toothbrush every 2 to 3 months. If you wear dentures or removable bridges, clean them thoroughly and place them back in your mouth in the morning.
- **See your dentist regularly** – Get a check-up and cleaning at least twice a year. If you have or have had periodontal disease, your dentist will recommend more frequent visits.
- **Stop smoking/chewing tobacco** – Ask your dentist what they recommend to help break the habit.
- **Drink water frequently** – Water will help keep your mouth moist and wash away bacteria.

- **Use mouthwash/rinses** – Some over-the-counter products only provide a temporary solution to mask unpleasant mouth odor. Ask your dentist about *antiseptic rinses* that not only alleviate bad breath, but also kill the germs that cause the problem.

In most cases, your dentist can treat the cause of bad breath. If it is determined that your mouth is healthy, but bad breath is persistent, your dentist may refer you to your physician to determine the cause of the odor and an appropriate treatment plan.

Q: How often should I have a dental exam and cleaning?

A: You should have your teeth checked and cleaned *at least twice a year, though your dentist or dental hygienist may recommend more frequent visits if you have periodontal disease.*

Regular dental exams and periodontal maintenance cleaning visits are essential in preventing dental problems and maintaining the health of your teeth and gums. At these visits, your teeth are cleaned and checked for cavities. Additionally, there are many other things that are checked and monitored to help detect, prevent, and maintain your dental health. These include:

- **Medical history review:** Knowing the status of any current medical conditions, new medications, and illnesses, gives us insight to your overall health and also your dental health.
- **Examination of diagnostic x-rays (radiographs):** Essential for detection of decay, tumors, cysts, and bone loss. X-rays also help determine tooth and root positions.
- **Oral cancer screening:** Check the face, neck, lips, tongue, throat, tissues, and gums for any signs of oral cancer.
- **Gum disease evaluation:** Check the gums and bone around the teeth for any signs of periodontal disease.
- **Examination of tooth decay:** All tooth surfaces will be checked for decay with special dental instruments.
- **Examination of existing restorations:** Check current fillings, crowns, etc.
- **Removal of calculus (tartar):** Calculus is hardened plaque that has been left on the tooth for sometime and is now firmly attached to the tooth surface. Calculus forms above and below the gum line, and can only be removed with special dental instruments.
- **Removal of plaque:** Plaque is a sticky, almost invisible film that forms on the teeth. It is a growing colony of living bacteria, food debris, and saliva. The bacteria produce toxins (poisons) that inflame the gums. This inflammation is the start of periodontal disease!
- **Teeth polishing:** Removes stain and plaque that is not otherwise removed during toothbrushing and scaling.
- **Oral hygiene recommendations:** Review and recommend oral hygiene aids as needed (electric toothbrushes, special cleaning aids, dental floss, fluorides, rinses, etc.).
- **Review dietary habits:** Your eating habits play a very important role in your dental health.

As you can see, a good dental exam and cleaning involves quite a lot more than just checking for cavities and polishing your teeth. We are committed to providing you with the best possible care, and to do so will require regular check-ups and periodontal maintenance cleanings.

Q: Why is it important to use dental floss?

A: Brushing our teeth removes food particles, plaque, and bacteria from all tooth surfaces, *except* in between the teeth. Unfortunately, our toothbrush can't reach these areas that are highly susceptible to decay and periodontal (gum) disease.

Daily flossing is the best way to clean between the teeth and under the gumline. Flossing not only helps clean these spaces, it disrupts plaque colonies from building up, preventing damage to the gums, teeth, and bone.

Plaque is a sticky, almost invisible film that forms on the teeth. It is a growing colony of living bacteria, food debris, and saliva. The bacteria produce toxins (acids) that cause cavities and irritate and inflame the gums. Also, when plaque is not removed above and below the gumline, it hardens and turns into calculus (tartar). This will further irritate and inflame the gums and also slowly destroy the bone. This is the beginning of periodontal disease.

How to floss properly:

- Take 12-16 inches (30-40cm) of dental floss and wrap it around your middle fingers, leaving about 2 inches (5cm) of floss between the hands.
- Using your thumbs and forefingers to guide the floss, gently insert the floss between teeth using a sawing motion.
- Curve the floss into a "C" shape around each tooth and under the gumline. Gently move the floss up and down, cleaning the side of each tooth.

Floss holders are recommended if you have difficulty using conventional floss.

Daily flossing will help you keep a healthy, beautiful smile for life!

Q: What affect does tobacco have on periodontal disease?

A: Even though most people are aware of the links between tobacco use and lung cancer/heart disease, many are not aware that tobacco use can have a significant impact on the health of your gums! Many studies have documented the following relationships between tobacco use and periodontal diseases:

-Tobacco is a well established risk factor for periodontal disease.^{1,3,6}

-Increased severity of periodontal disease and associated bone loss is found in individuals who smoke when compared to those who don't smoke.^{5,8}

-Smokers tend to have deeper periodontal pockets than non-smokers.⁵

-The rate of periodontal disease progression is faster in smokers than non-smokers.²

-The prevalence of more severe forms of periodontal disease is higher in smokers than non-smokers.³

-Smokers with periodontal disease experience a greater rate of tooth loss.⁴

Fortunately the effects of smoking on periodontal disease can be reversed by smoking cessation!⁷ We are committed to helping you quit by working side by side with your physician and utilizing numerous state sponsored Quit Assistance programs. Just ask us at

your next appointment, we are committed to helping you quit for the health of your mouth and your overall health.

References

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- 3) Haber J, Wattles J, Crowley M et al: Evidence for cigarette smoking as a major risk factor for periodontitis. *Journal of Periodontology* 1993; 64:16.
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Q: How does periodontal disease affect women?

A: Fluctuations in hormonal levels during puberty, pregnancy and menopause can affect your periodontal health. Special care and professional treatment may be necessary during the course of a woman's life.

Puberty

During puberty, there is an increased production of sex hormones, which may lead to increased gum sensitivity and a greater reaction to plaque accumulation. The gums can become swollen, red and tender.

Menstruation

A similar situation can appear several days before menstruation. The bright red bleeding of the gums may clear up once the period has started as the amount of sex hormones decrease.

Pregnancy

The gums and teeth can be affected by pregnancy. Between the 2nd and 8th month, your gums may swell, bleed, and become red or tender. Some individuals may develop large lumps due to the accumulation of local irritants, however, these growths are generally painless and not cancerous. Occasionally these lumps require professional removal, but most resolve after pregnancy.

In individuals with pre-existing periodontal conditions, pregnancy can greatly worsen these conditions. Regular professional care and gum treatment before, during and after pregnancy is the most prudent course of action. The safe time to have elective periodontal care is during the second trimester (4-6 months of pregnancy).

The best way to prevent any pregnancy related periodontal infections is to practice diligent oral hygiene at home and have professional periodontal monitoring.

Oral Contraceptives

Oral contraceptives are made of synthetic sex hormones, and in some susceptible individuals, they can have a profound effect on the gums. Symptoms can include swelling, bleeding and tenderness.

It is important that you inform us when you are taking oral contraceptives prior to medical or dental treatment. There is a risk of drug interactions, such as antibiotics making an oral contraceptive less effective at preventing pregnancy.

Menopause

Many changes to the gum tissues can occur after menopause. Some individuals develop pain and burning sensation of the gum tissue and other tissues of the mouth. Others develop taste changes (salty, peppery, sweet).

Careful home care and professional cleaning may relieve these symptoms. Additionally the use of "saliva substitutes" can ease the effects of dry mouth associated with post-menopause.

Q: What are causes gum recession and can it be treated?

A: Receding gums can be caused by a variety of factors. Bone loss, hard toothbrushes and tooth grinding (bruxism) have all been implicated in causing gum tissue to recede. If not managed, recession can lead to cold and hot sensitivity, increased rate of cavities, unsightly appearance of the gum and tooth and in the worst cases, tooth loss!

Fortunately there are several modern techniques available to the periodontist to correct these conditions and help you maintain healthy teeth and gums for a lifetime. Come in for a consultation and we will create a treatment plan customized to your esthetic and functional goals.

Q: What are dental implants?

A: Dental implants are designed to replace missing teeth. They function, feel and look like natural teeth. Dental implants are titanium posts that mimic the natural roots of teeth. Once the implant is placed and allowed to heal, it bonds so tightly with the bone that it allows the artificial tooth to behave like a real tooth during function. Additionally dental implants also help to preserve facial structure and prevent the bone loss that occurs where teeth are missing. Unlike more traditional tooth replacements (i.e. bridges), an implant tooth can be flossed and brushed just like any other normal tooth!

Dental implants are not a new concept and the accumulated research has shown that they **are an excellent long term solution to tooth loss**. They can change the way you live, allowing for comfort, confidence and an enhanced quality of life. Our doctors have extensive training in the placement and maintenance of dental implants. We work closely with your general dentist to provide top notch treatment planning and restorative solutions to even the most complicated cases. Ask us if implants are the right solution for your missing teeth!