

Do You Think You Have Periodontal Disease?

You may have periodontal disease if you are experiencing any of these symptoms:

- Swollen gums that are shiny, bright red, or purple-red in appearance
- Bleeding gums during brushing
- Persistent bad breath (halitosis)
- Bad taste in the mouth
- Gum recession – appearance of lengthened teeth
- Formation of deep pockets between teeth and gums
- Pus between the teeth and gums
- Loose or shifting teeth
- Abscesses
- Loss of bone and tissue that hold teeth in place
- Gums that are tender when touched but are typically painless otherwise, unless a tooth abscess is also present

Diagnosis

The following tests and procedures may help you find out what is causing periodontal disease:

- **X-rays** – Full-mouth X-rays can help detect breakdown of bone surrounding your teeth.
- **Probing** – Periodontal probing determines how severe your disease is. A probe is like a tiny ruler that is gently inserted into pockets around teeth. The deeper the pocket, the more severe the disease.

Nutrient Deficiencies May Play a Role in Periodontal Disease

If you have periodontal disease, then you are more than likely deficient in essential vitamins, minerals, and amino acids. Without the proper amounts of these vital nutrients, your body's ability to heal from any chronic condition is severely impaired.

Natural Dietary Ingredients That May Help

These may work in conjunction with conventional medications, but always consult a healthcare professional about potential interactions before incorporating any of them into the diet.

- **Fish Oil, omega-3 essential fatty acids**
Note: Regularly taking heart-healthy omega-3 essential fatty acids can help reduce the risk for coronary heart disease. Omega-3 essential fatty acids have also been found to help reduce the internal inflammation that leads to many chronic conditions—heart disease, cancer, diabetes, autoimmune diseases, and more.
- **Amino Acids:** Alpha keto glutarate, glutamine peptides, L-5-hydroxy tryptophan (5-HTP), L-arginine, L-glycine, L-histidine, L-isoleucine, L-leucine, L-lysine, L-methionine, L-theanine, L-tryptophan, L-tyrosine, L-valine
- **Antioxidants:** Acai, blueberry, cranberry, grape seed, green tea, hesperidin, lycopene, mangosteen, pomegranate, quercetin
- **Antimicrobial/Antifungal Herbs:** Allicin (garlic), barberry, bee propolis, black walnut, cat's claw, cinnamon, clove, coriander, fennel seed, ginger root, goldenseal, grapefruit seed, holy basil, mint leaves, neem leaves, oregano, samento, silver, thyme, turmeric
- **Probiotics:** *B. bifidum*, *B. longum*, *L. acidophilus* DDS-1, *L. plantarum*, *L. rhamnosus*
- **Minerals:** Calcium, phosphorus, potassium, magnesium, sodium
- **Trace Minerals:** Boron, chromium, copper, iodine, iron, manganese, molybdenum, selenium, zinc
- **Systemic Enzymes:** Amla, amylase, bromelain, kinase, lipase, nattokinase, papain, peptizyme, protease, rutin
- **Vitamins:** A, B-1 (thiamin), B-2 (riboflavin), B-3 (niacin), B-5 (pantothenic acid), B-6 (P5P), B-9 (folic acid), B-12 (methylcobalamin), choline bitartrate, d-biotin, inositol, PABA, C, D-3, E
- **Other Ingredients:** Berberine sulfate, colostrum, flax seed, lactoferrin, virgin coconut oil, xylitol

Lifestyle Modifications that May Help You Feel Better

The quality of your health depends upon many pieces that not only include the health of your bodily systems, but also include a healthy diet, exercise, and spirituality.

Diet. Treatment of periodontal disease may center on developing general healthy dietary guidelines, in addition to

making some key adjustments in your relationship with food.

Dietary recommendations for periodontal disease include:

- Eat foods rich in vitamin C, like grapefruit, oranges, and tangerines. One study found that people who ate less than the RDA for vitamin C were one and a half times more likely to develop gingivitis.¹⁶
- Choose high-quality, organic, hormone- and antibiotic-free “grass-fed” meats.
- Increase your omega-3 essential fatty acids by selecting high-quality wild-caught salmon, minimal-mercury albacore tuna, fish oil, avocados, and sprouted walnuts.
- Eat raw, organic vegetables.
- Add high-quality fiber to your diet, such as ground flax seed.
- Add healthy saturated fats to your diet, such as organic virgin coconut oil.
- Choose sprouted, whole-grain products.
- Add nutrient-dense and unprocessed foods such as sprouted nuts and seeds to your diet.
- Eat limited fruits and fruit juices.
- Choose organic, cage-free eggs.
- Choose dairy items that have live, active cultures (probiotics), such as yogurt and kefir. It has been shown that regular consumption of yogurt can eliminate bad breath.
- Drink purified water throughout the day.

Foods to AVOID include:

- All simple or refined carbohydrates (white flour, white rice, white bread, pasta, cookies, cakes, crackers, processed snack foods, etc.)
- All foods containing refined sugar or artificial sugar-substitutes such as aspartame, Splenda®, etc. Choose a natural sweetener instead.
- Alcoholic beverages in excess since they hinder the functioning of the immune and digestive systems – A compromised immune system can lead to periodontal disease, because the body is not fully able to fight off bacteria in the mouth.
- Sweetened fruit juices, and candy – Sugary foods and drinks can accelerate tooth decay.
- Carbonated soft drinks that cause blood pH levels to become acidic – Mouth acidity can accelerate tooth decay.
- Bottom crawlers, such as oysters, clams, and lobster that may contain toxic levels of mercury
- Deep-sea fish such as tuna, mackerel, and swordfish that may contain toxic levels of mercury. Choose minimal-mercury albacore tuna instead.
- Farm-raised fish that contain PCBs and not enough omega-3 essential fatty acids, due to their land-based diets. Choose wild-caught salmon instead.
- Sodium nitrite found in processed foods such as hot dogs, lunch meats, and bacon
- Monosodium glutamate (MSG) found in many foods as a flavor enhancer
- Hydrogenated or partially hydrogenated oils found in many processed foods, deep-fried foods, fast foods, and junk food
- Excessive caffeine intake – Moderate amounts of caffeine may be beneficial. However, for people who are diabetic, caffeine can actually aggravate dry mouth symptoms, where the mouth doesn’t produce enough saliva to protect teeth from decay. The proper amount of saliva is essential for healthy teeth.¹⁷

Other tips to help fight/prevent periodontal disease:

- Brush your teeth twice a day.
- Don’t over-brush and use a soft-bristle toothbrush to avoid injuring gums.
- Floss everyday.
- Visit the dentist routinely for a check-up and professional cleaning.
- Eat a well-balanced diet.
- Don’t use tobacco products – Smokers lose more teeth than non-smokers. Smokers also tend to suffer more from the following problems: oral cancer, bad breath, stained teeth, tooth loss, bone loss, loss of taste, less success with periodontal treatment, less success with dental implants, gum recession, mouth sores, and facial wrinkling.¹⁸
- If you have “silver” dental fillings, get an evaluation from a mercury-free dentist who specializes in the safe removal of mercury amalgam fillings. Mercury in the mouth reacts with bacteria, causing the toxin to become even more potent and damaging to gum tissue.¹³

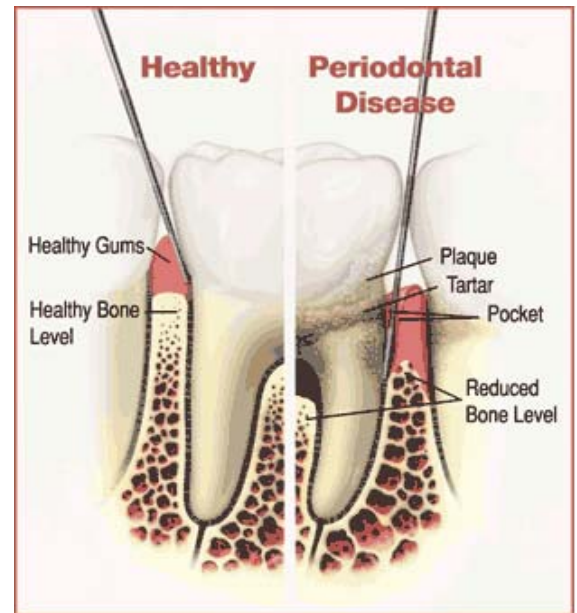
Exercise. Regular exercise improves general health, promotes healthy immune, cardiovascular, and digestive functioning, and is a potent tool for reducing inflammation. In fact, it may be one of the major mechanisms by which exercise prevents illness and prolongs life.

Background Information

An estimated 200 million American adults currently suffer from Periodontal (or gum) disease to varying degrees.² Periodontal disease is characterized by inflammation and bleeding of the gums in its most mild form (gingivitis), and eventually, loss of bone and tissue (the tooth-supporting periodontal ligaments) in its more severe or advanced form, periodontitis. Periodontal disease usually begins to develop during the 30s or 40s, and is the leading cause of tooth loss in adults.³ Interestingly enough, periodontal disease is typically not painful until it gets to the advanced stages, which is why the condition often goes untreated and is allowed free reign to do damage.⁴

Causes

More than 350 species of microorganisms have been found in the healthy mouth. Periodontal infections are linked to fewer than 5% of these species. Healthy and disease-causing bacteria can generally be grouped into two categories: the harmless or helpful bacteria called *gram positive aerobic bacteria* (which need oxygen to survive), and *gram negative anaerobic bacteria* (which do not need oxygen). In periodontal disease, the bacterial balance shifts over to this second category and causes inflammation and injury to develop.⁴



When plaque (the sticky, colorless film that constantly forms on your teeth) accumulates to excessive levels, it can harden into a substance called tartar (calculus). Both of these then grow below the gum line and serve as an excellent breeding ground for infective agents such as bacteria, fungi (mainly *Candida* yeast), and protozoa.^{5,6} Inflammation causes a pocket to develop between the gums and the teeth, which then fills with the plaque, tartar, and microorganisms. This causes the soft tissue to swell and traps the plaque in the pocket.^{5,7,8} Research shows that the toxins produced by these "bad bugs" stimulate the immune system to over-produce powerful infection-fighting agents called cytokines, which in excess can attack a person's own tissues and cells, leading to increased inflammation and damage.⁴

Other factors which can cause periodontal disease include:

- **Smoking/Smokeless Tobacco Use** – Recent studies show that this may be one of the most significant risk factors in the development and progression of gum disease.
- **Genetics** – Research shows that up to 30% of the population may be genetically susceptible to gum disease despite aggressive oral health care habits.
- **Female hormones** – Hormones released before menstruation, during pregnancy, with the use of oral contraceptives, and during and after menopause affect the gums and can cause symptoms of gum disease.
- **Stress** – Research demonstrates that the immune system has a much more difficult time fighting off infection in the presence of stress. This means that the mild form of gum disease—gingivitis—is much more likely to advance to periodontitis when stress is part of the equation.
- **Medications** – Nearly 20 drugs have been shown to cause gingival overgrowth. Most commonly these are phenytoin (Dilantin[®]), cyclosporine (Sandimmune[®]), and a short-acting form of the calcium channel blocker nifedipine (Procardia[®]).^{5,7}
- **Diabetes** – Those with diabetes are at higher risk for developing and having more severe infections and incidence of periodontal disease.⁵
- **Poor Nutrition** – Not only has research linked deficiencies of vitamin C, folic acid, coenzyme Q10 (CoQ10), and calcium to gum disease, but a diet low in nutrients can impair the body's immune system, making it much more difficult to fight infections.^{5,9} Additionally, the bacteria that cause periodontal disease thrive in acidic environments. Thus, eating sugars and foods that raise the acidity in the mouth also increases bacterial counts.
- **Viral Infections** – Certain herpes viruses are known causes of gingivitis, such as herpes simplex and varicella-zoster virus (the cause of chicken pox and shingles). Others, such as cytomegalovirus and Epstein-Barr, may also be contributing factors in the onset or progression of periodontal disease.⁴

There is also evidence (some of which comes from reports done by the "father of fluoridation" himself, H. Trendley Dean, D.D.S.) that fluoride causes a higher incidence of gingivitis, periodontitis, as well as oral cancer.^{10,11,12}

Interestingly, research has also shown that in those exposed to fluoride, *Candida albicans* was present (orally) in over 70% of cases, 80% of which showed a considerable intensification of periodontal disease.¹¹

Some pioneering research also links the presence of mercury (in dental amalgams) to intensification of periodontal disease due to the extremely detrimental chemical reactions which take place between the *gram negative anaerobic bacteria* associated with periodontitis and mercury. The study ventures to say that these adverse reactions may explain the high incidence of periodontal disease with seemingly unrelated diseases such as stroke and cardiovascular disease.¹³

Systemic Effects

The systems most affected by and involved in periodontal disease are the immune, cardiovascular, and gastrointestinal/digestive systems. All the systems of the body are interrelated. In other words, the proper functioning of each system is dependent upon the other systems performing their tasks efficiently and correctly. Therefore, a condition such as periodontal disease may lead to problems in many other areas of the body, or it may be a symptom itself of another underlying condition or combination of chronic conditions.

Related Conditions

Periodontal disease is commonly found in tandem with many other chronic conditions. Below is a list of related condition articles that you may find helpful:

- Adrenal Fatigue Syndrome
- Candida
- Chronic Fatigue Syndrome (CFS)
- Heart Disease
- Heavy Metal Toxicity
- Infection
- Inflammation
- Inflammatory Bowel Disease (IBD)
- Irritable Bowel Syndrome (IBS)
- Leaky Gut Syndrome
- Obesity
- Stomach Acid Imbalance
- Thick Blood

Other related conditions include: Diabetes, HIV Infection, Hormone Imbalance, Hypothyroidism, Multiple Sclerosis (MS), and Stroke.

Conventional/Prescription Medicines Used to Treat Periodontal Disease

Conventional medications used to treat periodontal disease may deplete nutrients or interfere with nutrient absorption, as well as potentially cause other adverse side effects. Following is a list of conventional medications that may be used for periodontal disease:

Antibacterial medications – Most often used to control and kill bacteria:

- **Chlorhexidine** (Peridex[®], PerioGard[®]) – Prescription antibacterial mouthwash frequently used to treat gum inflammation. Controls bacteria, resulting in less plaque and gingivitis.^{9,15}
- **Periochip[®]** – Tiny piece of gelatin filled with chlorhexidine. Used to control bacteria and reduce the size of periodontal pockets. Chip is placed in the pockets after root planning, where the medicine is slowly released over time.¹⁵
- **Tetracyclines** – This group of antibiotics deplete many good bacteria such as *B. bifidum* and *L. acidophilus*, as well as nutrients: biotin, calcium, inositol, iron, magnesium, vitamins B-1, B-2, B-3, B-6, B-12, and K. Common side effects of these depletions are diarrhea as well as yeast overgrowth in the intestines, mouth, and vagina. This overgrowth can further inhibit the digestion and absorption of nutrients and cause a weakening of the immune system. A depleted level of calcium causes osteoporosis, heart/blood pressure irregularities, and tooth decay. Depletion of magnesium causes cardiovascular problems, asthma, cramps, and PMS. A lack of iron leads to anemia, weakness, fatigue, hair loss, and brittle nails.¹⁵ The following medications are the most often prescribed:
 - **Atridox[®]** – Gel that contains the antibiotic doxycycline. Used to control bacteria and reduce the size of periodontal pockets. Placed in pockets after scaling and root planning. Antibiotic is released slowly over a period of about seven days.¹⁵
 - **Actisite[®]** – Thread-like fiber that contains the antibiotic tetracycline. Used to control bacteria and reduce the size of periodontal pockets. These fibers are placed in the pockets. The medicine is released slowly over 10 days. The fibers are then removed.¹⁵
 - **Arestin microspheres[®]** – Tiny round particles that contain the antibiotic minocycline. Used to control bacteria and reduce the size of periodontal pockets. Microspheres placed into pockets after scaling and root planning. Particles release minocycline slowly over time.¹⁵

- **Periostat**[®] – A low dose of the medication doxycycline that keeps destructive enzymes in check. Used to hold back the body’s enzyme response—if not controlled, certain enzymes can break down bone and connective tissue. This medication is in pill form. It is used in combination with scaling and root planning.¹⁵

Warning about Antibiotics: *Antibiotics, especially broad-spectrum antibiotics, will destroy all of the bacteria—both good and bad—in the intestinal tract. You should avoid antibiotics as much as possible and reserve their use for life-threatening situations only. For those times when you must take an antibiotic, you should supplement with heavy and extended use of probiotics (good bacteria) to recolonize the intestinal tract.*

Antifungal medications – Used if periodontitis is caused or amplified by the presence of a fungus:

- **Nystatin**[®] – A drug generally used to treat fungal infections of the intestinal tract. Most effective for fungal-related periodontal disease when taken systemically and topically. Rare side effects include diarrhea, upset stomach, stomach pain, and skin rash. It is not known to deplete any nutrients.^{14,15}
- **Diflucan**[®] – Considered by many doctors as the best overall antifungal medication. It can be taken intravenously or by mouth. It is not known to deplete any nutrients.¹⁵
- **Nizoral**[®] – Can be administered orally or topically and is not known to deplete any nutrients. However, Nizoral does interfere with the adrenal hormones, cortisol and DHEA, which may produce feelings of weakness and fatigue.¹⁵
- **Sporanox**[®] – An oral antifungal. It is not known to deplete any nutrients.¹⁵

Surgery – May be required in severe cases of periodontal disease.

Related Reading

- *WELLNESS PIECE BY PIECE* by Pat Sullivan
- *The Yeast Connection Handbook* by Dr. William G. Crook

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