

Patient Education Book



**A Guide to a Healthier
and Happier Oral
Hygiene Care**



Healthy gums contain uniformly pink, shades of pink or pigmentation. It is firm to cementum and bone. The papilla fills the interdental space.

A healthy smile creates a positive cycle where if someone feels confident in their smile, they smile more; and when people smile more, they feel more confident!!!



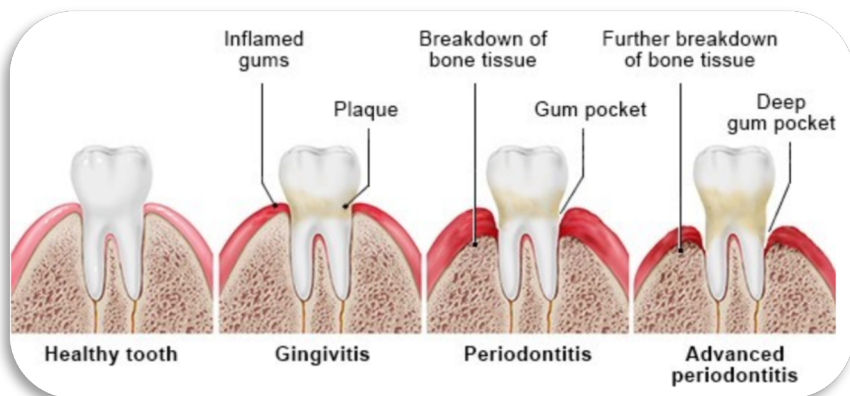
What is Gingivitis and Periodontitis?

❖ Gingivitis is Gum Inflammation

- Many people have inflamed gingiva every now and then.
 - It may not cause any major problems at first, but it may spread to other parts of the periodontium and cause damage there.

❖ Periodontitis is Periodontium Inflammation

- The soft tissue and bone responsible for keeping our teeth firmly anchored.
 - Over time, periodontitis can lead to tooth loss.



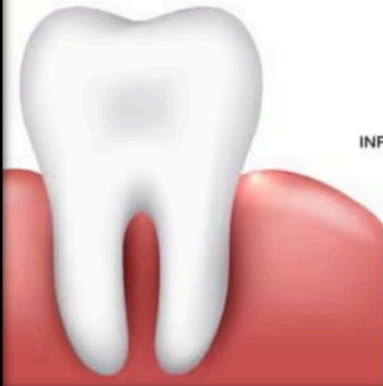
❑ Good oral hygiene can help to prevent gingivitis. Only if you clean your teeth properly can dental treatment stop – or at least slow down – the progression of periodontitis.



❑ It's also very important to carry on taking good care of your teeth after receiving treatment, in order to prevent disease from getting worse.

DENTAL BIOFILM (PLAQUE)

HEALTHY TOOTH



TOOTH WITH DENTAL BIOFILM
(PLAQUE)

PLAQUE
INFLAMMATION

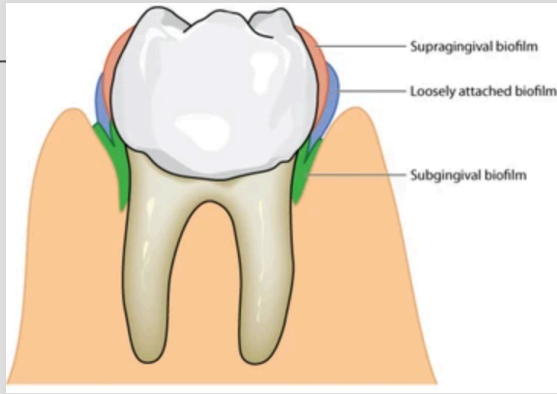


Dental plaque is the community of microorganisms found on a tooth surface as a biofilm, embedded in a matrix of host and bacterial origin.



- ❖ Dental plaque is structurally and functionally organized biofilm.
- Plaque forms in an ordered way and has a diverse microbial composition that, in health, remains relatively stable over time.

Supragingival and subgingival calculus have the same classification as being a cellular and mineralized layer created by microorganisms in oral biofilms.



Supragingival calculus

- Found above the free-gingival margin.
- Usually white or yellowish-white in color but may be stained darker.
- The mineral source for supragingival calculus is saliva, gingival crevicular fluid, and inflammatory response.

Subgingival calculus

- Found below the free-gingival margin.
- Occurs most frequently in the interproximal spaces since these areas are difficult to clean.
- Unlike supragingival calculus, subgingival calculus is more likely to appear dark green-brown-black color owing to the absorption of blood pigments from the gingival sulcus or diseased periodontal pocket.

STAGES OF TOOTH DECAY



STAGE ONE:
WHITE SPOTS



STAGE TWO:
ENAMEL DECAY



STAGE THREE:
DENTIN DECAY



STAGE FOUR:
INVOLVEMENT OF PULP



STAGE FIVE:
ABSCESS FORMATION



STAGE SIX:
TOOTH LOSS

Tooth Decay is the Process of Enamel Softening Caused by Acids

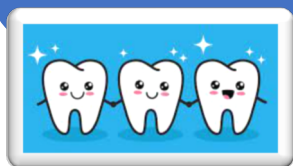
- It is one of the most common causes of tooth pain and can also be prevented with the right oral care routine.
 - The enamel is the outermost layer that helps protect your teeth from damage often caused by plaque bacteria.
 - The dentin lies right underneath the enamel, when exposed, is prone to sensitivity.
- Tooth decay begins when the enamel starts to break down, creating pockets of decay on the surface of the teeth.



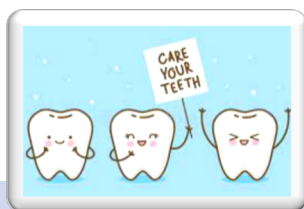
Periodontal Debridement and Oral Prophylaxis

Periodontal debridement is the removal (or disruption) of plaque biofilm, its byproducts (such as the acid bacteria produces), and biofilm retentive calculus deposits from the tooth surfaces.

- Periodontal debridement is practiced to the extent needed to re-establish normal periodontal health, as well as restoring the natural balance between the bacterial flora and the host's immune responses.



Oral prophylaxis is a type of scaling that combines both supragingival and subgingival scaling with stain and biofilm removal.



- This procedure is considered to be preventive in nature. Usually, the dental hygienist performs prophylaxis when periodontal health (or biofilm induced gingivitis) is diagnosed.

Scaling and Root Planning

Scaling is the removal of plaque biofilm and calculus off the root surface.

Root planning on the other hand is a treatment procedure that is designed to remove diseased cementum that is contaminated with microorganisms and the toxins they produce.

SCALING AND ROOT PLANING



Scaling removes plaque and tartar from below the gumline.



Root planing smooths the tooth root and helps the gums reattach to the tooth.

NOTE

Ultimately, the main goal of scaling and root planning is to remove as little root structure as possible while simultaneously returning adjacent tissues back to normal health.



Let's Talk About Floss!

The choice of floss is influenced by the following:

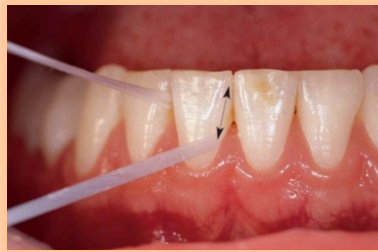
- ✓ The tightness of the contact area.
- ✓ The contour of the gingival tissue.
- ✓ The roughness of the interproximal surface.
- ✓ The client's manual dexterity and preference.

Conventional dental floss



A **dental tape** or ribbon is wider and flatter than conventional dental floss

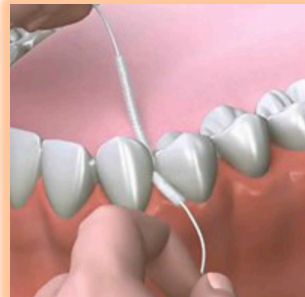
- The flat-sided surface of dental tape is preferred by some, particularly when the surface area to be flossed is large.



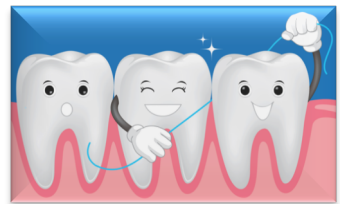
C-shape always recommended

A **tufted dental floss** (variable-diameter), is equally as effective as waxed or unwaxed dental floss for removing plaque biofilm.

- Studies have shown that there is no difference in the effectiveness of unwaxed versus waxed dental floss.



Dental floss is recommended for ALL people, even with healthy and normal gingiva



Floss Technique

Dental **floss holders** have plastic handles that aid in holding the floss strand.

- Use of floss with proper use of a floss holder reduces gingivitis as effectively as use of string floss.

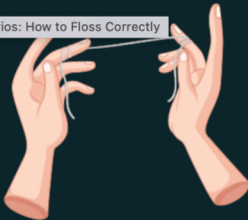


Steps to use a floss holder:

1. Tightly stringing floss on holder following the manufacture's recommendation.
2. Follow **spool method** of flossing.
3. To move to a new area of floss, the holder must be unwrapped, the floss advanced, and the holder rewrapped.

Spool Flossing Method

© Urszula Barrios: How to Floss Correctly



step 1

Get yourself a piece of floss the same length as your arm (from hand to shoulder). Wrap the floss around your middle or index finger on each hand, so there is a space of about two inches between your fingers.



step 2

Gently slide the floss between your teeth and down towards your gums. Wrap it in a "C" shape around the base of your tooth and just under the gum line. Be sure to move the floss up and down from the bottom to the top of your tooth two or three times. Never saw back and forth.



step 3

Move the floss to the next tooth, being sure to get both sides of each tooth, including the molars at the back of your mouth. Use a new piece of the floss as it picks up particles of food.



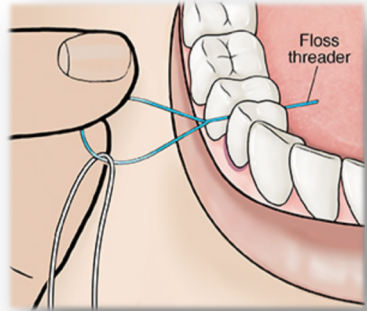
step 4

There may be some bleeding when you first start flossing. If the bleeding doesn't stop after a few minutes, or if your gums still bleed following repeated flossing, see a dentist.

More About Floss

Floss Threader:

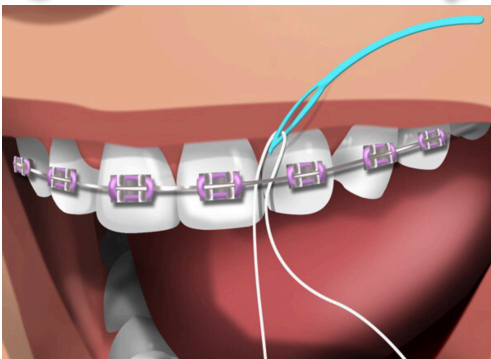
- Can either consist of a stiff end of the floss that can be threaded or a separate device to use that is like sewing a needle and thread.
- Assists in introducing floss between an abutment tooth used for the support of a fixed bridge and a pontic, the artificial tooth that replaces a missing natural tooth.



Steps to Use a Floss Threader:

- Break off a piece of floss 4-6 inches long from the spool.
- Thread floss through eye of floss threader, overlapping floss 1-2 inches.
- Grasp threader with thumb and index finger of one hand.
- Insert tip of threader from the facial surface through an open interproximal area.
- Pull floss threader toward the lingual side until threader has passed completely through the interproximal space.
- Slide the floss threader off the floss and remove from mouth.
- Move floss back and forth several times.
- Remove floss by letting go with the hand that is on the lingual side and pulling floss toward the buccal side.

Great for Ortho Patients





Dental Water Jets

- A water flosser such as WaterPik, produces pulsating streams of fluid to reduce plaque biofilm, bleeding, gingivitis, pocket depth, pathogenic microorganisms, and calculus.
- Patients with fixed orthodontics, implants, crowns and bridges, gingivitis, and those in a periodontal maintenance program benefit from a water flosser.



The purposes of toothbrushing include:

- Removal of plaque biofilm and disturbance of plaque reformation.
- Removal of food, debris, and stain from the oral cavity.
- Stimulation of gingival tissues.

Manual Brushing Techniques

How to Brush

MOTION

Hold the brush at a

45°

angle to the gum and
make very short back-
and-forth movements.

DURATION

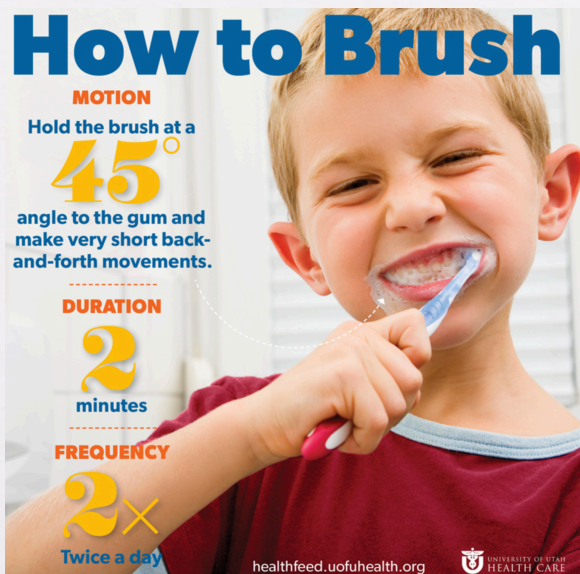
2

minutes

FREQUENCY

2x

Twice a day



healthfeed.uofuhealth.org



The most commonly recommended method is the **Modified Bass technique**, which involves holding the toothbrush at an angle so that the bristles point at your gum line and making short back-and-forth strokes, followed by sweeping the brush from under the gum toward the edge of your tooth.

- Other techniques include making up-and-down motions across your teeth and sweeping circular motions. They have names like **Stillman, Charter, Rolling, Fones** and **Scrub**.

Classification of Brushing Techniques

Vertical

- Rolling
- Modified Bass
- Modified Stillman

Horizontal

- Charter

Circular

- Fones

Vibratory

- Bass and Stillman

Others: Occlusal, Scrub, Smith



Remember to change your manual toothbrush every 2-3 months

Manual Toothbrushes

❑ According to the **ADA**, the structure of the toothbrush and softness of the bristles are significant to choosing the best toothbrush for you.

- Multi-leveled or angled bristles remove plaque better than flat-cut bristles.
- **Soft bristles are still preferable to medium bristles** — medium bristles can remove biofilm, but they may contribute to gingival abrasion.



Curvex Toothbrush

This brush has a unique shape: The head is convex and curves the brush away from the palate, which can help the brush hit your back molars and **reduce gagging**. The bristles vary in length, with the longest ones in the middle and shortest at the top and bottom, which helps the bristles stay in contact with your teeth.



Colgate Enamel Health Sensitive

The Colgate 360° extra soft toothbrush has 48% softer bristles (vs. an ordinary soft manual toothbrush) to help protect enamel surfaces and gums. This extra soft toothbrush features a raised cleaning tip that helps get into hard-to-reach areas, polishing whitening cups that gently remove stains for a bright smile, and the unique **cheek & tongue cleaner** that helps remove odor-causing bacteria.



Radius Flex Toothbrush

This adult toothbrush has an ergonomic handle similar to the Kidz Brush and adults can choose between the left- and right-handed version. The neck is made from rubber, which is **flexible** to allow the brush to hit hard-to-reach places.



Electric Toothbrushes

Electric toothbrushes are recommended to any individual, but particularly those with:

Fixed orthodontic appliances

Decalcification

Uncontrolled oral biofilm and periodontal disease

Extensive prosthodontics or dental implants

Dexterity and motivational challenges

Gingival recession or non-carious cervical hard tissue lesions

Caregiver responsibilities



Burst: uses 33,000 sonic vibrations per minute. Tapered multi-length charcoal-infused black bristles that removes plaque without damaging your gums.



Philips Sonicare: bristles vibrate side to side or up and down with high amplitude and high frequency; sound waves cause fluid motion.



Oral B: the entire brush head rotates in one direction and then the other. Some models also pulsate in and out.



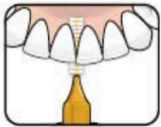
Most powered toothbrush manufacturers do not recommend a specific **brushing method**, however, some guidelines for using the powered brush are available:

- ✓ It is recommended that the brush be position slightly differently for each surface of the tooth.
- ✓ Each tooth and corresponding gingival areas to be brushed separately, always with the light, steady pressure.
- ✓ Pressure should **never** be exerted on the bristles of a powered toothbrush because this could damage the tissues.

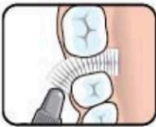
Additional Self-Care Tools

Evidence suggests that interdental cleaning with **interdental brushes** is the most effective method for interdental plaque removal and reduction of inflammation.

- They are available in various sizes and shapes, with the most common brushes being cylindrical or conical/ tapered, and designed to be inserted into a plastic, reusable handle that is angled to facilitate interproximal adaptation.



Interdental cleaning.



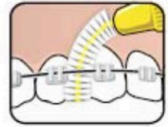
Missing tooth.



Furcations.



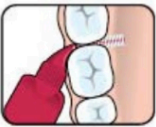
Implants.



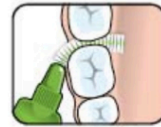
Orthodontic appliances.



Sizes 0-3: Curve the flexible neck for improved access between the posterior teeth.



Sizes 4-7: Curve the wire for improved access between the posterior teeth.



End-Tuft Toothbrushes

AKA: Single-Tufted or Uni-Tuft

Ideal for cleaning areas of the mouth that are hard to reach, including areas around orthodontic appliances, crown, bridgework, implants and difficult-to-reach areas.



Are Toothpicks Good?



A household toothpick has **no oral health benefit** beyond removal of food impacted between the teeth.

- Safe use requires sufficient available interdental space, otherwise, they may cause trauma to or blunting of the papilla.



Rubber Tip Stimulator Provides Gingival Stimulation but NOT Plaque Control

- The rubber tip, attached to the end of a metal or plastic handle that is used primarily to stimulate the gingiva and to remove plaque biofilm by rubbing it against the exposed tooth surfaces.
- Massaging the gingiva with a rubber tip can lead to improved circulation, increased keratinization, and epithelial thickening.

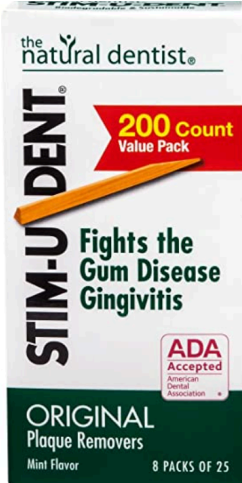


Dental Gauze Floss

- Ideal for wide spaces between teeth and implants.
- Wide gauze 'ribbon' floss efficiently cleans under bars and around back teeth.
- Also for diastemas, tilted teeth and patients with partial dentures.
- Coarse texture grabs the plaque and excellent cleaning.

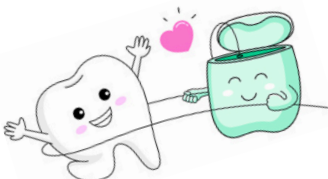


Stim-U-Dent Plaque Removers are accepted as an effective cleaning tool which reduces gingivitis as part of oral hygiene to **supplement** the regular professional care required for optimal oral health.



Studies suggest that **tongue scraping** can remove bacteria and improve bad breath more than brushing.

- Tongue scraping devices made from plastic, copper or stainless steel are available at most drug stores and generally cost under \$10.



Toothpaste

ALL
TOOTHPASTES
HELP REMOVE
PLAQUE!!!

Extensive testing has been done with fluoridated toothpastes and mouth rinses, demonstrating that they are effective, and their use should be encouraged.

Prescription fluoride toothpaste contains a higher concentration of fluoride (5,000 parts per million) than over-the-counter (OTC) toothpaste (1,000 parts per million).

- OTC toothpaste reduces cavities by approximately 23%. Prescription toothpaste reduces cavity risk even more, estimated to be a **42%** reduction.



Most prescribed toothpastes have similar properties:

- Dental caries preventive.
- Helps strengthen enamel.
- Helps reverse white spot lesions.
- Used once daily (usually at night).
- Can be used as regular toothpaste.
- Do not swallow it.
- Do not use in children, unless specified by doctor.



Fluoride Treatments

A **fluoridated liquid gel** is effective in caries prevention. It can reach the interproximal surfaces and deep grooves of the teeth

- Apply gel with a toothbrush. It is ideal for 60 second to 4-minute treatments.



A **fluoride varnish** treatment is a professional strength application of fluoride provided by your dental professional usually right after a dental cleaning.

- It is a fast and easy way to provide protection.
- The varnish is a clear liquid that is applied to your teeth and exposed roots with a small brush every 3 to 6 months.



60-Second Fluoride Foam Dosage and Administration in Dental Office

Shake can thoroughly for at least 10 seconds before each use. Hold can completely upside down to dispense. Point can toward applicator tray and slowly press nozzle to fill tray. Dry tooth surface and insert tray(s) into mouth.

- Bite down for 1 minute or up to 4 minutes.
- Remove tray(s) and expectorate excess.
- Do not to eat, drink, or rinse for 30 minutes.

Do not exceed 4 treatments a year



Hypersensitivity



Sensitive teeth are typically the result of worn tooth enamel or exposed tooth roots

- However, tooth discomfort may be caused by other factors, such as a cavity, a cracked or chipped tooth, a worn filling, or gum disease.

Symptoms

Includes a sharp pain that worsens with pressure on the exposed tooth or when drinking hot or cold beverages.

Treatment

Includes desensitizing agents, fillings, or sealants to reduce sensitivity and pain.



Mouthwashes

Mouthwash freshens bad breath, helps reduce plaque and gingivitis, as well as fight tooth decay and prevent cavities.



Mouthwash Can Really Help Improve Your Oral Health!



Colgate Optic White Whitening Rinse

Active ingredients:
Water, Glycerin,
Propylene Glycol,
Sorbitol, and others.



Listerine Total Care Anticavity Fluoride Mouthwash

Active ingredient: sodium fluoride.



Biotene Oral Rinse for Dry Mouth

Active ingredients: water, glycerin, xylitol, sorbitol, propylene glycol, poloxamer 407, sodium benzoate, and others.



Listerine Zero Alcohol-Free Mouthwash

Active ingredients: Water, Sorbitol, Propylene Glycol, Poloxamer 407, Sodium Lauryl Sulfate, Eucalyptol, Benzoic Acid, Sodium Benzoate, and others.



Crest Gum Care Mouthwash – Anti-gingivitis

Active Ingredients:
Cetylpyridinium Chloride
0.07%

Dry Mouth and Smoke Cessation

Xerostomia. What is it?

An unusually dry mouth, often caused by medication.

- ❑ Not drinking enough fluids, smoking, sleeping with mouth open, dry hot weather, and eating dry foods may also lead to xerostomia.



Treatment

Frequently sipping water or other sugar-free fluids, chewing sugar-free gum, and using over-the-counter artificial saliva products may help keep the mouth moist. A room humidifier may also help. Avoid hot, spicy and acidic foods



Smoking Can Impact Your Oral Health

People who smoke are at a higher risk of developing mouth cancer (oral), gum problems, losing teeth, decay on the roots of teeth, and complications after tooth removal and gum and oral surgery.



smokefree.gov

I Want to Quit

My Quit Day

I Recently Quit

Staying Quit

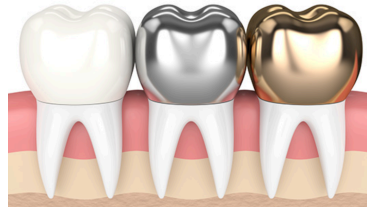
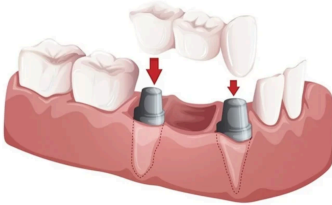
Restorations

A **filling** is used to treat a small hole, or cavity, in a tooth.



A dental **implant** is a fixture- typically titanium- that is surgically implanted into the jaw,.

A **dental bridge** is a prosthetic tooth that is stabilized by teeth on either side of it, or that 'bridge' the tooth.



A **dental crown** is a cap that is bonded over a tooth to improve its appearance, while also enhancing its stability and strength.

A **denture** is a removable replacement for missing teeth and surrounding tissues.



Dental **Veneers** are thin coverings, usually comprised of porcelain or a resin composite, that is laid over your natural teeth.



Remove your dentures



Clean them manually



Clean your gums



Rinse your mouth



Soak your dentures

Oral Health is Overall Health



Your teeth and gums hold important clues to other health issues. Research shows that poor oral health can be a sign of heart disease, stroke, diabetes, premature births, and osteoporosis. So if you're interested in maintaining good overall health, as well as your smile, visit your dentist for a checkup and cleaning at least twice a year.



Patients with inadequate blood sugar control appear to develop periodontitis more often and more severely and lose more teeth than those who control their diabetes. And because diabetes reduces the body's resistance to infection, the gums are among the tissues likely to be affected.

Heart Disease and Stroke

Did you know that the bacteria in dental plaque that develops on your teeth can affect other parts of your body, such as your heart and lungs? A potentially fatal disease called bacterial endocarditis—a condition in which the lining of the heart and heart valves becomes enlarged—is also linked to plaque, as is chronic obstructive pulmonary disease, more commonly known as COPD. People with periodontal (gum) disease are nearly twice as likely to suffer from heart disease, according to the American Academy of Periodontology.



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