

# Peri-dent \*

## Oral Care is our Business

To understand what happens when your teeth decay, it's helpful to know what's in your mouth naturally. Here are a few of the elements:

### \* Saliva

Your mouth and teeth are constantly bathed in saliva. Although we never give much thought to our "spit," this simple fluid is remarkable for what it does to help protect our oral health. Saliva keeps teeth and other oral tissues moist and lubricated, washes away some of the food particles left behind after we eat, keeps acid levels in the mouth low, and protects against some viruses and bacteria.

### \* Pellicle

Certain proteins in saliva (glycoproteins) are absorbed by the surface of our teeth, creating a microscopically thin, clear coating on the teeth called the "acquired pellicle." The pellicle starts forming immediately after you brush your teeth; within a few minutes, you can feel the slippery, moist coating on your teeth. The pellicle helps shield the teeth against acid that can cause decay. However, the pellicle also is a prime surface for bacteria and other microorganisms to collect and lead to the development of plaque.

### \* Plaque

Plaque is also known as biofilm. Plaque appears as a soft, gooey substance that sticks to the teeth a bit like jam sticks to a spoon. It is, in fact, colonies of bacteria, protozoa, mycoplasmas, yeasts and viruses clumping together in a gel-like organic material. Also in the mix are bacteria byproducts, white blood cells, food debris and body tissue. Plaque grows when bacteria attach to the pellicle and begin multiplying. Plaque starts forming six to seven hours after a tooth is cleaned; it takes about an hour for plaque to build up to measurable levels. As time goes on, different types of microorganisms appear, and the plaque thickens and can begin to cause disease.

### \* Calculus

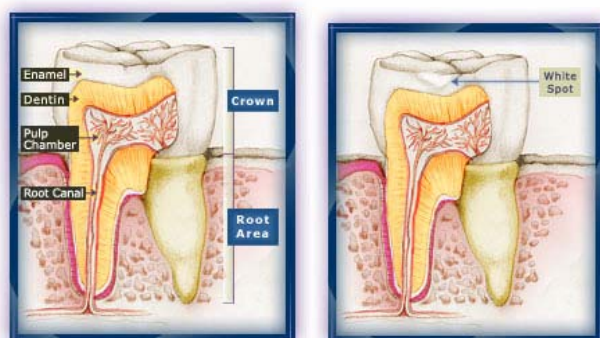
If left alone long enough, plaque begins to mineralize and harden into calculus or tartar. Calcium, phosphorus and other minerals from saliva become incorporated into the plaque; they form crystals and harden the plaque structure. Plaque begins to mineralize within 24 to 72 hours, and it is fully hardened and transformed to calculus within 12 to 20 days. New plaque forms on top of existing calculus and this new layer can also become calcified.

## \* Bacteria

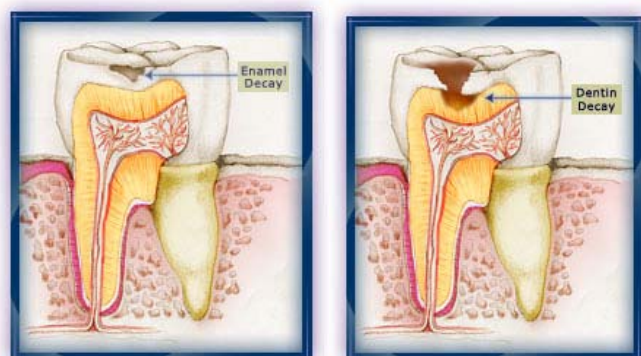
We have many different strains of bacteria in our mouths. Some bacteria are good; they help control destructive bacteria. When it comes to decay, *Streptococcus mutans* is the bacterial strain that does the most damage. It attaches easily to teeth and produces acid. Another common acid-producing bacteria, *Lactobacillus*, is less destructive because it can attach only to plaque, not to the tooth itself. A third type of bacteria, *Actinomyces*, also plays a role in tooth decay. Other bacteria cause periodontal disease, including *Porphyromonas gingivalis*, *Prevotella intermedia* and *Bacteroides forsythus*.

## \* Cavities

Dental decay, also known as dental caries, begins first inside the tooth; a white spot appears on the enamel where the tooth has started to weaken inside. This is a result of pH lower than 5,5 due to acid from the bacteria. At this stage, the tooth can remineralize and repair the weakened area with the help of fluoride and minerals in saliva and if the number of bacteria are reduced. This means better cleaning and **especially better interdental cleaning since most cavities are found between the teeth.**



If the decay continues and breaks through the the enamel, the damage is permanent. The decay must be cleaned out and the cavity filled by a dentist. Left untreated, the decay will worsen and destroy a tooth all the way through the outer enamel layer, through the inside dentin layer and down to the pulp or nerve of the tooth.





## \* Periodontal Diseases (Gum Disease)

Gum disease is caused by build up of plaque on your teeth that remains in contact with your gums. The plaque causes a reaction in your gums that in its early stages is called Gingivitis. It is characterized by gums that bleed easily when touched or flossed. Most people have some degree of gingivitis. Gingivitis, if left unchecked, leads to a more severe disease called Periodontitis

Periodontitis or periodontal diseases involve inflammation and destruction of the tissues supporting and surrounding the teeth, including the gums and supporting bone. Periodontitis destroys the periodontal ligaments or connective tissue fibers that attach the tooth to the bone causing resorption of the alveolar bone (tooth socket). Consequently, the gums swell, redden, change shape, bleed, teeth loosen and pus forms. With the loss of soft tissue and bony support, deep periodontal pockets may form that foster bacterial growth.

Prevention is worth its weight in gold. By far the most important step that can be taken is to brush and floss regularly. It is advisable to discuss proper brushing and flossing techniques with your dental team. A good Oral hygiene regime can halt or reverse gum disease.

### \* How to Floss

- Break off about 18 inches / 45cm of floss and wind most of it around the middle finger of one hand and the rest around the other middle finger. If the floss is hard to get between your teeth, try using dental tape, which is thinner.
- Holding the floss between your thumbs and forefingers, guide it between two teeth by gently rubbing it back and forth.
- When the floss reaches the gum line, curve it around one of the teeth and gently slide it back and forth in the crevice between the tooth and the gum.
- Holding the floss tightly against the side of the tooth, rub gently up and down.
- Repeat for each tooth, including the backside of your last teeth, changing to a different part of the floss as you go along.

It is normal for your gums to bleed slightly when you start flossing, this should stop after a few weeks of regular flossing. If bleeding persists consult your dentist.