

### Three Layers of Tooth...

It is said that events happen in threes. I guess they do...sometimes. If you wait long enough, things happen in fours too. Extend that waiting time and life happens in thirty-sevens. Maybe, just maybe; life just happens.

When it comes to teeth, there is a significance of three. Our teeth are made of three separate layers. An understanding of these three layers helps to explain a lot about how our teeth work.

The outside layer of a tooth is called the enamel. Enamel is the strongest part of the tooth and contains no nerve fibers. Enamel is so strong that its structure has been studied by the United States military to help improve different types of armor. This outside layer is very helpful as it can be bonded to without damage (for braces) and it can be whitened without hurting the tooth. Sealants can be placed in enamel to prevent cavities, with no anesthetic or pain. Finally, the outer layer of the tooth is the layer that we can bond (glue) to the strongest. This is what allows us to place ceramic cosmetic veneers. The only drawback to enamel is that small cavities limited to or just penetrating this outer layer of tooth, rarely cause any pain. On a camping trip, this is a plus, but this little fact often allows patients to ignore small cavities until they start to hurt, and become a larger problem. As a dentist, it would be helpful if small enamel decay was painful or, at least, annoying.

The middle layer of a tooth is called the dentin layer. Dentin is generally a brownish-yellow color. Injuries to teeth that extend into dentin are generally a bit painful. Dentin has no nerves, but it is close enough to garner serious attention. Cavities into dentin are generally sensitive to hot or cold or sweets. This decay is one step away from a root canal and should be treated immediately. Teeth that are cracked or fractured into dentin are also usually painful to biting pressure. Basically, dentin is the safety zone between the strong enamel and the final, inside layer of our teeth.

The inside layer of a tooth is called the pulp. This is where nerves, arteries, and veins reside. Any damage that extends into this layer of tooth is generally extremely painful and can become a serious health problem. If the bacteria that cause cavities get into the pulp, an abscess can form. This can be treated with a root canal that removes the bacteria and sterilizes the pulp or by the removal of the tooth. Either way, our best bet is to prevent problems from reaching into the pulp if at all possible. Nothing hurts like a bad toothache.

Until next week, keep smiling.

-Please send comments to Drs. Parrish at [www.ParrishDental.com](http://www.ParrishDental.com),