



Everything You Should Know about Tooth Brushing but Didn't Know to Ask

We've all been brushing our teeth since we were little children, and most adults were *told* as children to brush their teeth but not actually *taught how* to brush and floss. Nowadays, in the dental office, we give "oral hygiene instructions" to children and adults alike, regarding brushing and flossing techniques. In our office, we are often asked by patients which toothpaste they should use. We feel that the type of toothbrush is important, and the *way* in which you use your toothpaste is much more important than the *type* of toothpaste you use! Here are our thoughts and some information of which you may not be aware.

Toothpaste is made up of several ingredients, each of which has a purpose. It has detergents (surfactants) for cleaning and foaming, thickeners for staying on the toothbrush, water softeners to make the detergents work better, flavorings and sweeteners to hide the taste of other ingredients, abrasives to help in removal of plaque and the tiny beginnings of tartar, and (usually) fluoride to strengthen teeth against decay-causing bacteria. Many toothpastes also have "tartar control," "whitening," and/or plaque bacteria-killing ingredients.

It's easy to forget, considering how slick advertisements can be, that ads can be misleading, including toothpaste ads.

Tartar occurs when dissolved minerals in the saliva precipitate (come out) and become incorporated into the soft plaque that's on the teeth. The minerals harden the plaque into tartar, which sticks to the teeth very tenaciously, like cement. That's why you can brush or floss to remove plaque but not tartar; tartar has to be removed by instruments at the dentist's office. "Tartar control" toothpaste has an ingredient like tetrasodium pyrophosphate, which removes calcium and magnesium from the saliva, so they can't contribute to tartar formation. *It won't remove tartar that already exists!!* It simply helps to decrease the amount of tartar that forms.

"Whitening" toothpastes tend to be especially misleading in their advertisements, in our opinion. Whitening toothpastes usually have something like sodium carbonate peroxide, which breaks down into hydrogen peroxide. Hydrogen peroxide does have some bleaching properties, but the concentration is very weak, and the amount of time the toothpaste stays on the teeth probably won't cause any bleaching that you will notice. If you look at the "fine print" on the TV commercial or the toothpaste box, you will usually see it says something like "whitens by removing surface stains."

Toothpaste seems to have become a lot more expensive recently. You are wasting a lot of money each year if you (or your kids) use the amount of toothpaste they show in commercials. Of course they show that much—the more you use (waste), the more money

the manufacturers make! If there is “unused” toothpaste that you’ve spit into your sink when you’re finished brushing, you’re wasting it!

We find that most people need to work on their brushing techniques. If you “scrub” when you brush, you will cause the gums to recede (move up the root of the tooth), which will tend to lead to sensitivity of the exposed root surfaces of the teeth (like when you drink something cold or get your teeth cleaned). Most of the time, recession is permanent. The worse news is—if the gums have receded, that is an area where bone has been lost. The body won’t allow you to strip the gums off and leave the bone exposed, so it will cause the bone to be “dissolved” away as the scrubbing pressure causes the gums to recede. That bone loss is permanent damage.

Brushing should be a very gentle motion. Remember, teeth aren’t flat. The harder you scrub a flat surface, the cleaner it tends to be. *But teeth are round* in shape on the cheek and tongue sides, and they have delicate gum tissue next to them. The motion to use when brushing is SLOW, GENTLE CIRCLES, aiming toward the gums but NEVER SCRUBBING. We tend to brush too fast, usually because we’re thinking of the million other things we need to do. We suggest training yourself to think *only about brushing while you’re brushing*. You will do a better job and not take any more time, if you are mindful of your technique. We know it makes you *feel* as if you’re doing a better job when you’re scrubbing, but actually, you’re doing a worse job! When you scrub, you don’t give time for the bristles to “walk” around and follow the rounded surfaces of the teeth, so you’re missing some of the surface area. Not only that, but when you place pressure on the toothbrush, you are “laying” the bristles down onto the teeth, so the *sides* of the bristles rub against the teeth and gums. If gentle pressure is used, the *tips* of the bristles are being used, which are the part of the bristles that do the cleaning! That’s why toothbrushes are recommended to be changed every three months—the tips of the bristles become frayed and don’t do as good a job of cleaning after that amount of use. We recommend using toothbrushes of the “soft” variety—this actually means that the bristles bend easier and can therefore move well around the shape of the teeth. The “harder” the bristles, the stiffer they are. Again, it feels as if they clean better, but they’re actually doing a worse job. If you’re used to using a medium or hard toothbrush, using a soft brush will take a little getting used to, but we think it’s worth it. Or better yet, get a sonic brush.

It’s been proven with studies that sonic toothbrushes are better at cleaning than manual toothbrushes. They’ve been around for several years, and we highly recommend them for two reasons. First, *they really do clean better* than a manual toothbrush, because of the technology in the brush. (We were skeptical, until we tried one for ourselves!) Sonic (sound) waves come out of the brush head and travel through whatever liquid (water, toothpaste, saliva) is on your teeth and “blast away” whatever bacteria the waves touch. Your teeth feel cleaner after you use it than when using a manual toothbrush because *the sonic vibrations go farther under the gums and actually in between the teeth*, where regular toothbrush bristles can’t reach. Sonic brushes have been shown in studies to help reduce teeth staining (which is actually a thin layer of tartar that becomes stained from foods or cigarette smoke) and to help in decreasing the severity of periodontal (gum) disease. Second, we prefer the sonic toothbrush because it can’t damage the teeth or cause gum recession, like improper manual brushing can. If you already have areas of recession (or

abfractions—“dug-out” areas of the root surfaces on the cheek sides of the teeth), it is very important to prevent any further damage. A friendly warning: sonic toothbrushes tickle (a lot!!) when you first use them—don’t give up; it should only take a few times of using it for the tickle to go away. DO NOT confuse *sonic* toothbrushes with *electric* toothbrushes. Most electric toothbrushes, in our opinion, have bristles that are too stiff and could therefore cause damage (see above).

For using a manual toothbrush, here is a recommendation for brushing your teeth to help prevent abfraction areas from becoming more damaged from toothpaste. Following these steps will help you prevent any (or further) damage to the roots of your teeth:

- 1) Place a green pea-sized amount (not more!) of toothpaste on your soft toothbrush.
- 2) Brush the chewing sides and the tongue/palate sides of your upper and lower teeth.
- 3) Brush your tongue well.
- 4) Rinse your mouth, brush your tongue with water a few times, and rinse all the toothpaste off of your brush.
- 5) With your wet toothbrush, GENTLY AND SLOWLY brush the cheek sides of the teeth (with water only), using small circles aimed at the gums.
- 6) Rinse your toothbrush well.