

Tooth Whitening

We are surrounded by bright white Hollywood smiles everyday in the media. Tooth whitening is a growing trend that is sought after by many. A brighter smile can give you a healthy glow and increase confidence. There are numerous different types of whitening kits and products available. You may be familiar with some of the over the counter products such as whitening toothpastes, mouth rinses, pens as well as a variety of whitening kits. This brochure will help educate you on options available to you both in the dental office and in stores.

Types of Tooth Staining/Discoloration

Tooth stain is a discoloured spot or area on a tooth that contrasts with the rest of the tooth colour. There are 2 types of stain: intrinsic and extrinsic. Intrinsic stains are within the tooth structure itself. These stains usually occur as a result of changes within the tooth structure during development. They cannot be removed by surface polishing. Intrinsic stain/coloration may respond to whitening, or in severe cases white fillings or ceramic crowns may be used to mask the dark color.

Extrinsic stain (e.g. from wine, coffee, or irregular cleanings) is located on the surface of the tooth and can be removed by mechanical means such as scaling and polishing during regular cleaning appointments.

Causes of Tooth Staining/Discoloration

Intrinsic Stain

- Antibiotics - ingestion of tetracycline while the tooth is developing
- Acid erosion – can expose yellow dentin under the white enamel
- Fluorosis - consuming too much fluoride intra orally can cause white/yellow/brown stains
- High fever during tooth development
- Sufficient amount of iron in saliva
- Genetic variation – some people naturally have a darker color enamel and dentin

Extrinsic Stain

- Diet - coffee, tea, red wine (drinks high in tannins), soda, dark berries, dried fruits, beets
- Smoking - cigarettes, cigars, chewing tobacco, marijuana
- Plaque stain – plaque or calculus buildup can make teeth appear discolored
- Use of products that contain stannous fluoride

Evaluating **How Whitening Will Work on You**

Depending on your unique dental situation, whitening may or may not be effective. For example, tooth whitening is only effective on natural tooth structure. The chemicals in whitening systems will not whiten artificial dental work such as crowns, bridges, veneers, dentures, or fillings.

Also, keep in mind that there is natural variability in tooth structure between people, and whitening will be more effective in some cases than others. This is often hard to predict before treatment. For the best effect, a thorough dental cleaning is recommended before whitening to ensure that the bleaching agent can reach the tooth structure fully. If you are unsure if you are a good candidate, check with Dr. Foreman.

Tooth whitening (whether at home or in our office) is always temporary and the color will slowly return to teeth over several months or years. To slow this process, we recommend reducing consumption of highly colored foods (e.g. red wine/coffee), and to not consume it for a few days after whitening. For a permanently whiter smile, people sometimes opt for white fillings or ceramic crowns.

Side Effects/Contraindications **to Whitening**

- The only side effect of whitening is temporary tooth and gum sensitivity.
- Use of a product such as Sensodyne or MI paste sold in our office can help to eliminate sensitivity during treatment.
- Long-term whitening can cause a greenish discolouration of natural tooth structure that is close to a silver amalgam filling – this can usually be reversed with a new white filling in place of the amalgam
- Tooth whitening is not indicated for: pregnant women, those with a peroxide allergy, those with decay, pre existing sensitivity, gum disease, erosion, severe recession, and those under 15 whose teeth are still developing.

Over the Counter **Whitening Products**

Whitening Toothpastes/Mouthrinses

These types of products claim to whiten, however contact with the tooth structure is often not long enough to have any real effect. Over the counter tooth pastes are usually abrasive, contain bleach or titanium dioxide that removes extrinsic stains on the surface but does not change the colour of the tooth internally. These products are not recommended for long term use.

Whitening Strips/Trays

Different styles of whitening kits are available over the counter. There are whitening strips, gels, and tray systems. The only concern with using this style of whitening is that some of the products, if used improperly, can spill over onto the gums and cause irritation. While using these products, monitor any material that seeps onto the gums and wipe away with a q-tip. Please be aware the concentration of this over the counter products are not as strong as ones you would find in the dental office, therefore they produce weak to medium results.

In-Office Whitening Products

Take-Home Trays

Our office can make custom-molded whitening trays that you can take home. We also include some whitening gel tubes to get started, and a few other accessories to help you optimize the results. You apply the whitening solution into the trays and wear at home for 5-15 min per session. Usually, one session per day is recommended, although some people are able to do 2-3 sessions a day, depending on sensitivity. This option is great as you can monitor results closely, whiten as needed, and stop when teeth are too sensitive. Refill gel tubes can be purchased at our office as needed.

Chairside Whitening (In-Office Whitening)

This type of whitening seems to produce the best results, as the solution used is the strongest. We isolate the teeth with a dam so no bleach can reach the gums. A special high intensity light is used to enhance the whitening process. If the teeth are too sensitive we may stop after one application. The in-office treatment is the most costly, however it does come with accessories to continue bleaching at home as needed.

Non-Vital Bleaching for Root Canalled Teeth

Non vital tooth bleaching is bleaching of an endodontically treated tooth (tooth that has had a root canal). When bleaching these teeth, a gel of 35% hydrogen peroxide is placed inside the tooth. The patient then returns in 2-5 days time for a post-operative appointment. At this time it will be determined if another application is required. Some people have reported some slight temporary sensitivity from this type of bleaching. This technique can be combined with vital tooth bleaching using one of the other bleaching methods listed above.

