

## What is Deep Bleaching and how does it work?

Special customised EVA guards are made to fit your mouth. These guards hold a small amount of Carbamide Peroxide solutions and are worn overnight while you sleep. These guards are thin and flexible and quite comfortable to wear. Tooth enamel is made up of a framework of 95% mineral content. Interspersed within this framework are organic molecules. It is in this organic matter that stain molecules occur. All teeth whitening products contain either hydrogen peroxide or carbamide peroxide in various concentrations. Both forms work by soaking into the enamel and oxidising these stain molecules; essentially breaking them down into tiny colourless pieces.

Hydrogen peroxide is what is used in most in-surgery techniques. Within the enamel it breaks down into oxygen and water. Carbamide peroxide breaks down into hydrogen peroxide and urea, then into oxygen and water. This slower breakdown and release of oxygen maximises the whitening effect, as the oxygen is allowed time to soak deeper into the tooth structure and breaks down more stain molecules. The whitening effect is therefore a lot more durable and long-lasting.

## What results can I expect from Deep Bleaching?

There is no one-visit fast bleaching technique today that makes teeth the very whitest they can be. Everyone's teeth have a natural biological limit of how white they can get. Historically, once you reached this limit, no amount of additional bleaching would whiten your teeth more. However, the Deep Bleaching system will extend this previous limit and allow significantly more whitening.

Do you want "whiter than white" teeth or do you just want to brighten them up a little? Everybody has different expectations for teeth whitening. It is our job as dental professionals to ascertain the results you want and decide whether this is achievable or not. The best and longest-lasting white smile is achieved through patience and perseverance by you, with help from us. This bleaching system is designed for consecutive consistent overnight wear for two weeks or whatever timeframe we recommend for your particular case.

Can teeth get too white? Well.... yes and no. Opaque 'Hollywood white' teeth are usually veneers (very thin porcelain facings cemented to properly prepared teeth) or porcelain crowns. These can look quite fake if made too white. Natural teeth, however, cannot really get too white. With the Deep Bleaching system, you have much more control over the whitening process and you can stop when you have reached your desired shade.

Deep Bleaching is a little like stretching a rubber band really tightly for a period. The degree of stretch correlates to the shade change of teeth after whitening. When the

rubber band is released, it will spring back, but it will never return to its previous shape. This is the same as your whitening. You will gradually see some degree of settling in your colour, but you will never go back to your original shade. If we have reason to believe that you might regress more than few shades, we will implement a maintenance regime which will help 'set' your colour change.

Yellow-based teeth usually have the best result, whereas grey-based teeth are not quite so responsive to whitening, hence will usually take a little longer. Teeth with white/brown 'mottling' from antibiotics, trauma or fluorosis have varying degrees of success. With these teeth, the whitening process may take many weeks or months longer than normal. We will advise you if we believe this could be the case for you.

### Light-activated (laser) in-surgery whitening Versus Deep Bleaching

The light-activated in-surgery whitening is a method which will result in some degree of 'instant' colour change. Unfortunately, much of this is a result of dehydration of the teeth. The colour change therefore does not last very long. There is a high concentration of fast acting hydrogen peroxide. This often causes moderate to severe tooth sensitivity. Light-activated in-surgery is an option if you want fast results for some impending special occasion, but it is not a long-lasting durable change. In order to maintain your colour change, you will need to repeat the treatment up to twice a year with the associated costs.

The Deep Bleaching system is a longer, more time-consuming method, using a lower concentration of slower acting carbamide peroxide. This gradually lightens teeth from the inside out, leaving you with whiter teeth for much longer. This system involves a cost-effective maintenance regime of approximately 2-3 nights of re-bleaching per year (which you do yourself), to maintain the brightness of your new colour change.

### Can Deep Bleaching make my teeth sensitive or harm my existing fillings?

Historically, 'teeth whitening' has resulted in many people experiencing transient sensitivity, which can range in degree from mild and ignorable, to unpleasant. The Deep Bleaching technique has been developed to significantly reduce the occurrence and degree of sensitivity, by use of a lower carbamide peroxide gel and a desensitising liquid. This liquid is rubbed into the teeth before and after each whitening session. Even so, some people will still experience some tooth sensitivity. If you find that you are one of these people, talk to us and we will be able to provide advice and help.

From trial and error we have discovered that the whitening result is much more consistent when the teeth and gums are in healthy tip-top shape. It is a good idea to have a consultation with a Dentist in order to determine the health of your teeth and gums.

Cracks in teeth, cavities, decay, broken fillings, gum disease, gum recession and root exposure can negatively impact on your tooth whitening experience. It is well worth sorting out any of these problems before embarking on tooth whitening. If you have any priority dental work to be done, we are likely to want to complete this before doing the whitening.

Another thing to consider is that dental restorations DO NOT whiten. If you have fillings, crowns or veneers in the teeth in your smile line, you may choose to have these replaced at a later date (at the earliest 3-4 weeks later) so that they match your new colour. Your dentist will advise approximate costs for these treatments during your consultation. You may also be referred to our hygienist to remove any plaque and tartar build-up and to keep your gums in good health.

You may have heard that certain types of over-the-counter bleaching gels have acid in them. These may damage tooth enamel, fillings, crowns and roots of teeth. The deep bleaching gel you will receive from us at Dental Solutions has absolutely no acid and will not damage teeth or restorations. It is pH balanced to be neutral at pH7, which is the same as water.

### **What do I have to commit to in order to get my teeth white?**

The Deep Bleaching system is designed for consistent overnight wear of the trays for 14 consecutive nights, or whatever time-frame we recommend for you. It is really important that you are committed to adhering to this regime in order to achieve the very best results.

We ask you to wear the trays overnight for a very good reason. When you are awake, you are very aware of the trays in your mouth. You salivate more. You swallow more frequently and more strongly, creating a negative pressure (suction) in your mouth while swallowing. This defeats the purpose of having the bleaching gel, in consistent concentration, against your teeth for several hours continuously. Do you know why we wake up with morning breath? It's because the mouth has been drier during the night. We haven't salivated much, and we haven't swallowed as much.

Our Deep Bleaching trays are custom made for you, so they fit and seal well, increasing the amount of active bleaching gel that stays in the trays and against your teeth. This allows extended bleaching times, deeper penetration of the bleaching ions and a more intense colour change that is more durable over time.

### **Maintaining your new teeth colour**

Once you have whitened your teeth, you may be a little startled when you catch sight of yourself in the mirror. You may find that after a couple of weeks you think that your teeth are no longer as white as they were directly after the whitening regime. This is because you have become used to the new shade. There will always be a period of colour stabilisation but you will never go back to your original shade. However, we still continue to age. We continue to eat the things that contributed to the discolouration in the first place (e.g. red wine, coffee etc) and some of us will choose to smoke. All of these things discolour teeth. Therefore you may find that you will need to do regular maintenance in order to keep your teeth nice and white. We offer a maintenance kit which can be used to refresh your colour as you feel the need. Simply add the solutions to your customised trays and use overnight again for 1-2 nights.

### What if I have other questions?

Whitening consultations with Lianne are free and take less than half an hour. All your questions, including those you may not have thought of, will be answered in this session. Your suitability for, and expectations of whitening will be assessed and your options will be discussed.

You may choose to whiten the upper teeth first so that you are able to actually see the change in colour occurring in comparison to the lower teeth. This is called the 'one arch' option and it is slightly cheaper to do it this way initially.

You may choose to go ahead and whiten the lower teeth at a later date.