

GUIDE TO TEETH WHITENING

I must stress that you should get your teeth and gums checked before you even think about whitening.

Get your mouth healthy first and then go get that whiter smile.



This is a fantastic example of bleaching, a very simple way of attaining a stunning smile. No other treatment except bleaching was done here!

INTRODUCTION

Why do teeth get darker?

If you can imagine, anything that will stain a white shirt will stain a tooth. Over many years the actual colour of the tooth changes because the stains embeds itself deep into it and end up forming part of the tooth. Tea, coffee and red wine are the worst culprits. Other causes are discolorations due to staining from Tetracycline (an antibiotic) or from fluorosis (too much fluoride ingestion) or hypomineralisation (tooth is softer and so is stained easily). Not to mention plaque (bacteria) and decay.

How can you improve the colour of your teeth?

There are 2 basic ways to improve the colour of teeth. The first is to use Porcelain Veneers and the second is Bleaching. Both of these are explained below.

PORCELAIN VENEERS

As well as whitening the smile Veneers can be used to correct ugly, crooked or chipped teeth and removing any unsightly gaps. They have the added advantage that patient can literally choose the shade of new smile. Truly astonishing life-changing results can be achieved, such that you can appear many years younger.

Not only does the dentist have to be highly trained in the art of aesthetics but also in bite engineering (occlusion). It is imperative to make sure that your dentist thoroughly examines your whole masticatory system before doing this type of treatment.

TEETH BLEACHING

There's a lot more to Bleaching than you think!

How does bleaching actually whiten teeth?

Oxygen penetrates tooth structure and breaks down the long-chain staining molecules (these are dark), resulting in short chain molecules, which are light in colour.

Whitening is dependant on FOUR factors:

(A) The Permeability of the tooth structure to Oxygen, which can be enhanced with a technique called Deep Bleaching.

(B) The length of time the Bleaching Gel is in contact with the tooth structure (as long as the concentration of Oxygen remains high).

(C) The presence or absence of a Chemical Accelerator in the Bleaching Gel

(D) The Strength of the product, which affects how much Oxygen, is given off.

Of these factors, the most important is the Permeability of the tooth structure to Oxygen. This is itself dependant on the length of time the Bleaching Gel is in contact with the tooth structure, which acts to enhance the tooth's Permeability.

There also needs to be a steady concentration of Oxygen throughout the treatment. This is only every achieved through the use of a Bleaching Tray, which is meant to seal in the gel and keep out any saliva. The only Bleaching Tray in existence that is able to do that is a Deep Bleaching Tray. This was developed over a period of 15 years by U.S. dentist Dr Rod Kurthy, a world authority on bleaching teeth.

The presence or absence of a Chemical Accelerator in the Bleaching Gel is also important. This causes the Oxygen to be given off more rapidly, resulting in an effect equal to a higher concentration of Bleaching Gel. But there is catch. The quicker the Oxygen is given off, the quicker it runs out, reducing the available treatment time.

And finally if the product does not contain any Peroxide, there is no chance of changing the colour of any tooth. The best you can hope for is just to remove any surface stains.

Is bleaching safe?

It is totally safe to the tooth structure. High concentration bleaches can be caustic to the gums, lips, etc. Some whitening systems involve applying protection to these areas. Poorly fitted whitening trays may also lead to the swallowing of bleach and irritation of the gums. Poorly fitting trays are the biggest problem with DIY kits and other techniques not supervised by the dentist.

-- Bleaching must NOT be carried out during pregnancy or if you have large cavities in your teeth. --

What is the difference between hydrogen peroxide and Carbamide peroxide?

Carbamide is the more stable form of peroxide and actually breaks down into hydrogen peroxide which in turn breaks down into the oxygen which as described earlier actually whitens the teeth. 30% Carbamide peroxide is equivalent to 10% hydrogen peroxide.

Is there an age limit to bleaching?

The current consensus is that there are no age limits to Bleaching. Children's teeth are in fact quite permeable, with the internal tooth structure (called Pulp) being quite large and having good circulation. The ideal time to start bleaching a child's teeth is at the age of around 14.

BLEACHING TECHNIQUES

I only offer the 2 most predictable ways of whitening your smile:

- 1) Home whitening with deep bleaching trays only**
- 2) Full deep bleaching system**

Home Whitening

The dentist takes impressions of your teeth and then some deep bleaching trays are made. These trays are loaded with the bleach and you would sleep with them in overnight, usually for 14 nights. You may also be given a regime to assess sensitivity. I would tend to see you half way through the process to see how you are getting on and that there are no problems.

Full Deep Bleaching System

Historically the biggest problem with bleaching teeth was predictability and sensitivity. You could just never predict who was going to whiten and who was going to be in pain. Dr Kurthy's Deep Bleaching has dealt with both these issues.

There are 3 visits to the dentist altogether:

- 1. To take impressions for the Deep Bleaching trays**
- 2. To condition the teeth with strong bleach, after which you would then do 14 nights of home whitening**
- 3. To return to the dentist for the final bleaching session.**

This is only system that will predictably whiten teeth. Tetracycline stained teeth may take a few weeks longer, but great results have been achieved. "I can't believe how white my teeth are", "wow, my teeth!" are just a few comments made by my patients. I have never had this from any other tooth whitening system.

As mentioned because the Deep Bleaching trays seal so well, very little leaks out to give you a problem. Sensitivity has virtually been eliminated with the incorporation of a sealant as part of the Deep Bleaching protocol. Again, I will review you half way through the process.

Other whitening techniques

You may have heard of the 'one visit' whitening often called "laser whitening" etc. Most dentists find that it is too uncomfortable for patients and what is worse is that the effects can sometimes be minimal or not noticeable at all! You must also be aware that the results are not as long lasting as tray based systems.

For further information please email Dr Gill at info@drhapgill.com