

## What determines tooth colour?

Tooth colour is genetically determined, like hair colour, though – unlike hair – teeth tend to darken naturally with age.

Teeth can also become stained either superficially by coffee, tea, tobacco and similar substances, or intrinsically as a result of illness or the use of certain medications while teeth are forming.

Bright white teeth are not a “natural” shade.

## What does ‘tooth whitening’ mean?

Dentists can ‘whiten’ teeth either externally (on the visible surface of the tooth) or internally:

- By applying a whitening gel to the teeth.
- We make a tray from an impression taken of your teeth, so that the whitening gel can be applied very precisely on the teeth needing treatment, without touching the gums.
- These whitening products are used at home, under our direction.
- If only a single tooth is discoloured, e.g. a root filled tooth, we can apply the gel internally.

From a dental health viewpoint, tooth whiteners are useful products because they can lighten teeth and improve appearance **without the destruction** of natural tooth tissue and use of veneers or other treatment.

## Who can whiten teeth?

The General Dental Council considers tooth whitening to be the practice of dentistry. Therefore only dentists are legally permitted to undertake this procedure.

## What is used?

Whitening products used by us are a clear gel that contains Carbamide Peroxide. This breaks down and releases hydrogen peroxide, the active ingredient.

## What concentrations of hydrogen peroxide are used?

10% Carbamide Peroxide gel is used and this produces 3.5% hydrogen peroxide. (16% can also be used)

The higher the concentration of hydrogen peroxide, the more chance there is of irritation to the gums.

We consider 16% (Carbamide) the highest safe concentration and is perfectly adequate for dental whitening whilst not giving too many side effects.

## How long does it take?

The speed of the result depends on several factors such as the thickness of teeth, the time used and the degree of staining.

Usually it takes about 2 weeks, wearing the trays for at least several hours a day, many people wear these overnight for convenience.

## How successful is whitening?

There is good research evidence on the effectiveness of whitening using custom made trays. Haywood (1997) reported that tooth colour was stable for 74% of patients after 18 months without touch-up and for 62% of patients after three years. Repeat treatment is possible, the interval between treatments varying according to lifestyle whether patients drink coffee or smoke, for example.

Some people will touch up every 6 months or so with one or two applications.

(Reference: Van B Haywood, ‘Nightguard vital bleaching – current concepts and research’, in *Journal of the American Dental Association*, 1997, 128, 19S–25S.)

## How “white” will they go?

It is impossible to predict the final shade. Whitening can be continued until you are happy with the result or the teeth will not whiten further. Most teeth will “bleach”.

We generally recommend an initial 2 week course and then a break before whitening further if a lighter shade is desired.

## Can all teeth be whitened?

- Only natural tooth can be whitened.
- Sensitive teeth may not be suitable, we can advise.
- Fillings or crowns will not change shade.
- If these need to be changed, this can be done at additional charge. You will have to wait at least four weeks for the shade to stabilise.
- If you have crowns, veneers or large fillings that are unsightly, we can provide some fantastic new ceramic crowns or aesthetic fillings.

## Is dentist whitening safe and legal?

Whitening is safe when directed by a dentist.

A dentist is able to examine your mouth and determine whether it is suitable for whitening.

We only offer whitening to over 18’s. This is because the teeth are too immature before this age.

It may not be advisable if you have sensitive teeth as this can be worsened.

Up until the October 2011, the use of Hydrogen Peroxide above 0.1% for tooth whitening was

illegal in accordance with the European Cosmetics Directive. This is why we have not offered whitening.

In October 2011, this directive was amended (at last!) to allow the use of 6% Hydrogen Peroxide. (10% Carbamide Peroxide is equivalent to 3.5% Hydrogen Peroxide, well within the guidelines.)

This came into effect in UK law in October 2012. As this is the case we are now happy to once again resume whitening treatments.

### Are there any side effects?

All whitening gels can occasionally make the gums sore and make the teeth sensitive to heat and cold. Such symptoms are usually temporary. If they cause concern, treatment should be discontinued.

Whitening will not alter the structure of the teeth or damage them but a few people may find the sensitivity too much to continue.

### Are whitening toothpastes any good?

Whitening toothpastes do not contain hydrogen peroxide and are relying on abrasives and other chemicals with little evidence for effect. In our opinion they do not work.

### What about over the counter whitening?

Many over the counter products from chemists or Ebay etc, in our opinion, are not safe. They often are based on citric acid and this will dissolve stains but also dissolve tooth substance therefore damaging the teeth. As they cannot contain an appropriate concentration of hydrogen peroxide they will not "whiten" the teeth.

If they are based on trays, they will not fit well enough to protect the gums.

## Summary

Whitening is carried out at home using custom made trays.

- We use 10-16% Carbamide Peroxide in lab made custom trays.
- The main side effect is sensitivity but this is usually temporary.
- Crowns, veneers and fillings cannot be whitened.
- The teeth will almost always lighten but the end result is impossible to predict.
- It may be necessary to "top up" every 6 months to maintain the result.
- It is not available to under 18's.

## Cost

Tooth whitening is not available on the NHS. Our fee includes assessment, lab made custom trays and fitting and 2 weeks supply of gel. Extra gel for top ups and longer treatment can be supplied at extra charge. Replacement of fillings or crowns will incur additional charges.

**COST: £230**

## Agreement

I have taken this leaflet away, read and understood the information.

Name: (Caps).....

Signed: ..... Date: .....

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# Tooth Whitening



 **Addison Dental Practice**  
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