

# RISIO®

professional whitening · low sensitivity

## **Clinical protocol for effective deep bleaching**

**The whitest smile**  
without the sensitivity

## What is deep bleaching?

Using a combination of Hydrogen and Carbamide peroxides over a sustained period. The tooth is prepared for whitening using HP (Hydrogen peroxide), this works by revitalizing the tooth's ability to absorb oxygen and be extensively bleached by CP (Carbamide peroxide).

### 6% HP

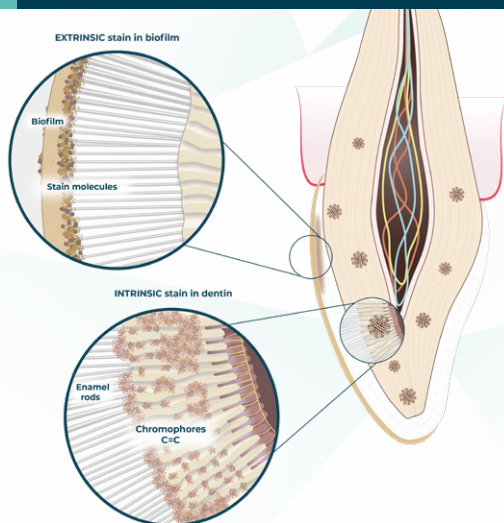
Hydrogen peroxide breaks down into water and peroxide ions. These peroxide ions then bind to the chromophores which breaks the double bond. The single bonded chromophores absorb less light giving a whiter appearance preparing the tooth for treatment and familiarising the tooth with the process.

### 16% CP

Carbamide peroxide breaks down into hydrogen peroxide, urea and ammonia. The longer wear time allows the ingredient to penetrate the tooth microstructure deeper than that of HP resulting in better longer lasting results. Combination whitening has proven to be more effective over time than individual 1 hour or overnight whitening completed independently.

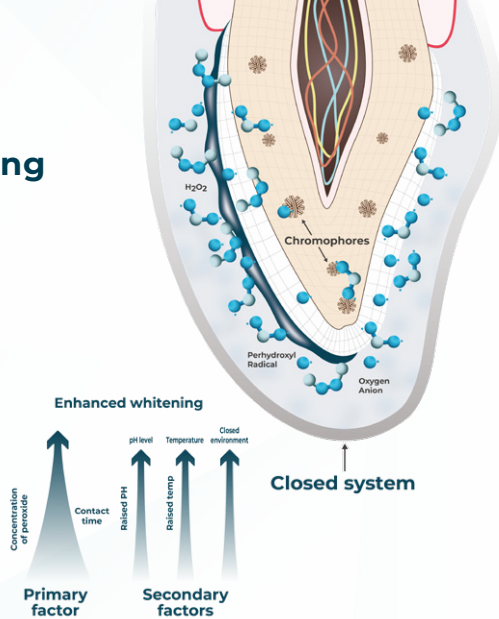
## Extrinsic and Intrinsic Stains

Colour molecules called chromophores bond together causing the tooth to look darker and darker. The colour molecules collect on the surface of the teeth (extrinsic stains) and the inside of the teeth (intrinsic stains).



## Primary and Secondary Factors of Teeth Whitening

The primary factors of teeth whitening are the concentration of the peroxide and the amount of time it is left on the teeth for absorption and breaking down the stain. The secondary factors increase the efficacy of the whitening oxygen with pH, temperature increase and preventing the escape of the whitening oxygen within a closed environment.



## Strength

Using the strongest available concentrations, we are ensuring that not only is your treatment as effective as possible but results will be long lasting. Historically, denser concentration coincides with more adverse effects. However, we take all necessary measures to ensure that adverse effects are minimised by the products of this treatment.

## Refrigeration

Lower sensitivity via refrigeration stabilisation is achieved as we have removed the need for chemical stabilisers thus dentinal tubule smear plugs are not removed by acid. This reduces the risk of patient sensitivity. Additionally, dentinal tubule orifices are not enlarged and not flared, this helps form and maintain dentinal tubular smear plugs. Refrigeration from the manufacturing stage suspends the gel allowing 100% activation on treatment commencement.

## Neutral pH

Our gels maintain a pH level of around 6 or slightly above. This stability ensures a highly effective yet comfortable treatment. Most companies have a whitening gel pH neutral on manufacture but quickly degrades in transit. Our gels are continually pH neutral due to constant refrigeration and are regularly examined for efficacy. We only want the gel activating on the tooth surface.

## Treatment Protocol

1

Preparing the teeth is vital for a comfortable treatment, the patient should use the sensitivity relief serum before whitening. This will protect the teeth from adverse effects without affecting the treatment outcome. This can be used on demand.

3

Teeth are now prepared and ready for a longer denser treatment. Wearing the 16% CP overnight for 13 consecutive days results in substantial shade improvement.

2

On day one apply the 6% HP application for one hour. This will not only prepare the teeth for treatment but sets it for longer and deeper applications of 16% CP.

4

On final day of treatment, the 6% HP is used for one hour. This finalises results and ensures an ultimate shade increase. There is assured treatment left for top ups going forward. At this point, we should be at shade B1. If not, we will provide additional gel free of charge.





Using continual refrigeration and a deep bleaching protocol including our relief serum, your patients are guaranteed to dramatically improve tooth shade without adverse sensitivity.

Taking into consideration all factors involved in good whitening practice, we have developed the RISIO system. With zero preservatives/stabilisers and continual refrigeration, we allow for a pH neutral and comfortable treatment.

To order or for further information contact your local ALS Laboratory.

# RISIO<sup>®</sup>

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