



Position statement: Teeth whitening

Teeth Whitening has become a popular dental treatment to improve dental appearance. Teeth Whitening is a bleaching process. The whitening gel contains either hydrogen peroxide or carbamide peroxide. These ions penetrate the tooth's enamel layer and will oxidise and break down the stain when it comes into contact.

As whitening can have variable results and products contribute to tissue damage ADOHTA highly recommends that anyone considering teeth whitening have a consultation with their dental professional first.

Products

Teeth whitening treatment options can be divided into 2 main categories, those provided by dental professionals and those which can be purchased over the counter. Dental Professional applications include In-office dental treatments and Take home tooth whitening systems with custom made trays. Professionally applied whitening may include heat, laser or a blue spectrum light to accelerate the process time but there are differing opinions on a light's benefits.

Over the counter options include Take home tooth whitening systems with prefilled trays, Whitening coated strips, Whitening pens, Whitening toothpastes, gels and rinses. Generally strips, pen, paste, gel and rinses have much lower concentrations of the active ingredient. Whilst this provides greater safety it reduces the effectiveness of these products and increases the usage time needed to notice a result. Ill-fitting prefilled trays may lead to irritation on the gums or leakage of the whitening solution.

It is important to use teeth whitening products that have been approved by the Therapeutic Goods Administration (TGA) in Australia. The TGA is responsible for evaluating the safety, quality and efficacy of therapeutic goods, including teeth whitening products, to ensure they meet certain standards before they can be made available to the public. By using TGA-approved teeth whitening products, individuals can be confident that they are safe to use and have been proven to be effective in achieving the desired results. Using products that are not TGA-approved may pose a risk to the health and well-being of the individual, as they may not have undergone the same level of testing and evaluation. Therefore, it is recommended to only use teeth whitening products that have been approved by the TGA.

The efficacy and evidence of tooth colour correcting products is not well established. These products are relatively new in the market and there is limited research on their effectiveness and safety. These products are typically a purple solution that claims to neutralize tooth colour by counteracting yellow and brown discoloration. However, there is limited scientific evidence to support the effectiveness of these products. Many of the claims made by manufacturers of these products are based on anecdotal evidence or small-scale studies. More rigorous scientific research is needed to establish the safety and effectiveness of these products.

Additionally, it is important to note that the cause of tooth discoloration can be complex and may have multiple factors such as external staining from food and drinks, internal staining from medications, developmental defects or tooth trauma, or intrinsic staining from poor oral hygiene or tooth decay. Therefore, it is important to consult a dental professional to determine the cause of discoloration and the best course of action.

Professional consultation

A dental professional will assess your suitability for whitening and discuss the options available and the most suitable for your particular needs. It is the position of ADOHTA that non-dental professionals should not perform teeth whitening treatments. The rationale behind this position is that teeth whitening is a dental procedure that requires a certain level of knowledge, skill, and expertise to perform safely and effectively.

Dental professionals, have received specialized training in the field of dentistry and have the necessary knowledge and skill to perform teeth whitening treatments safely and effectively. They are also able to assess the suitability of a patient for teeth whitening, and can identify and address any potential risks or complications associated with the treatment. Non-dental professionals may not be able to accurately assess the suitability of a patient for teeth whitening, or identify and address any potential risks or complications associated with the treatment.

Teeth may appear discoloured from:

- The aging process
- Stains from foods and drinks
- Smoking
- Chlorhexidine mouthwash
- Traumatized teeth
- Root treated teeth
- Medications
- Developmental defects of the tooth
- Discoloured fillings
- Decay
- Pre decay lesions

A dental professional can discuss the benefits, risks, advantages, disadvantages and the perceived final outcomes. Tooth whitening results may be varied depending on the cause of the discoloration. Fillings, crowns and veneers will not respond to the whitening process and therefore may result in disappointing outcomes.

In some cases, surface staining is from poor oral hygiene, smoking or discoloration from foods or drinks and can be removed by a professional scale and clean. A dental assessment will determine any gingival (gum) conditions, sensitivity issues and decayed teeth that require treatment before commencing Teeth whitening.

Teeth whitening by a dental professional allows for better control of the whitening gel, better protection of the soft tissues (lips, gums) and the option of a professional quality product within a comfortable environment. You can also be assured of the quality of infection control practices when treatment is provided by a registered Dental Practitioner.

Risks from Teeth Whitening

Teeth Whitening is generally a simple, safe and relatively inexpensive option to improve the appearance of the mouth but if applied incorrectly problems or side effects may occur such as

- Blistered lips/gums
- Gum irritation
- Teeth sensitivity
- Unexpected colour outcome
- Ingestion of peroxide gel causing oesophagus/stomach trauma

Precautions

Teeth Whitening is not recommended for everyone, which is why a consultation with a registered Dental Practitioner is essential to determine if it will work for you. Generally Teeth Whitening is not recommended in children under the age of 16. This is because the pulp chamber, or nerve of the tooth, is enlarged until this age. Teeth whitening at this time can irritate the pulp or cause it to become sensitive. Teeth whitening is also not recommended in pregnant or lactating women. Anyone allergic to peroxide (the whitening agent) should not use a teeth whitening product. Individuals who expect their teeth to be a new "blinding white" may be disappointed with their results. Smokers need to be aware that their results will be limited unless they refrain from continued smoking, particularly during the whitening process. A healthy guide is to achieve a shade slightly whiter than the whites of your eyes. Individuals with sensitive teeth and gums, receding gums, and/or defective restorations should consult with their Dental professional prior to using a tooth-whitening system. It should be noted that whitening procedures will not work on exposed tooth roots, because they do not have an enamel layer.

Various media reports of injuries and adverse effects prompted the Australian Competition and Consumer Council (ACCC) restrictions which have deemed DIY whitening treatments with active ingredients over 6% hydrogen peroxide or 18 % carbamide peroxide unsafe for self administration home use and prohibits sale to consumers. Consumers should avoid purchasing products online as they may exceed these safe limits.

The ADOHTA supports the positions of the Australian Dental Association regarding teeth whitening.

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References

Australian Government. Department of Health National Industrial Chemicals Notification and Assessment Scheme. www.nicnas.gov.au

Australian Competition and Consumer Council. <https://www.accc.gov.au/publications/safety-of-do-it-yourself-teeth-whitening-products>

Australian Dental Association. www.toothwhiteningfacts.com.au

Safe Work Australia <http://www.safeworkaustralia.gov.au/sites/swa/pages/default>