


TEETH



BLEACHING

By:
Dr.Esraa Ahmed
Dr.Ekhlās Kalamī
Dr.Retaj EL-musrati

What is teeth bleaching



is a cosmetic dental procedure that uses chemical agents to lighten the color of natural teeth. It works by breaking down stain molecules within the tooth structure.

Bleaching is a **form of whitening**, but not **all whitening is bleaching**.



According to an **accepted definition** :

Whitening: restores natural tooth color by removing surface stains (like polishing) ,

Bleaching: whitens beyond the natural color .

(although the two words are most of the time interchangeable).

Types of tooth stains

Extrinsic Stains (on the surface).

Caused by: Coffee, tea, Tobacco (smoking or chewing), Colored foods and soft drinks.

Treatment: Easily removed with polishing or mild bleaching

Intrinsic Stains (within the tooth).

Caused by: Trauma to the tooth, Root canal treated tooth, Certain medications (e.g. tetracycline during tooth development), Fluorosis (due to excessive fluoride administration), Natural aging.

Treatment: Needs stronger bleaching, may require veneers in severe cases, or crowns.

Or its can be combination of both.



Fluorosis stains



Tetracycline stains



Extrinsic stains (smoking)

Materials Used for Teeth Bleaching:

- **1. Hydrogen Peroxide (H_2O_2)** (concentrations: 25–40%)

Used in: In-office bleaching.



e.g. Power Whitening (40% H_2O_2)

- **2. Carbamide Peroxide** (concentrations: 10–20%)
- **Used in:** At-home bleaching.



e.g. Opalescence (10% carbamid peroxide)

In-office and at-home (alone or with Dentist-Supervised) Bleaching.

- **In-Office Bleaching (Professional Whitening):**
 - Done by a dentist in a clinical setting.
 - Before starting treatment, dentists use a **shade guide** to:
Assess the current tooth color ,**Set realistic expectations** with the patient ,**Track the improvement**.
 - Use **high-concentration hydrogen peroxide (25–40%)**.
 - May involve **light or laser activation** to enhance the effect.



In-office and at-home (alone or with Dentist-Supervised) Bleaching.

- **At-home bleaching (alone or with Dentist-Supervised)**
- carbamide peroxide is used or lower concentrations of hydrogen peroxide.
- Results can take longer.
- Common methods :Toothpastes, Whitening strips ,Whitening pens brushed directly onto teeth.
- **Custom-fitted trays:** for this one **dentist-supervision is needed** ...the tray is filled with **gel**, worn for a few hours.



e.g. Vitis whitening toothpaste.



e.g. Opalescence gel

In-office and at-home (alone or with Dentist-Supervised) Bleaching.

- **At-home bleaching (alone or with Dentist-Supervised)**
- One of the most Communist methods is Toothpastes To remove external stains, but this depends on the quality of the product.

For best example of quality (VITIS Whitening) With its formula that combine 5 action:

1. Removes and prevents stains – Polyvinylpyrrolidone (PVP)
2. Prevents calculus using a triple phosphate system – Tetrapotassium pyrophosphate, Sodium tripolyphosphate, Sodium hexametaphosphate
3. Reinforces enamel – Fluoride, Low abrasity (RDA 48)
4. Polishing action – Perlite
5. Repairing and whitening action – Hydroxyapatite nanoparticles, Natural tooth element that integrates and forms a protective, wash-resistant coating..



Side effect of bleaching ✨💬

- Bleaching agents temporarily increase tooth permeability causing it to be more sensitive that's why its advisable to use sensitive teeth toothpaste.



- Temporarily gum whitening due to Bleaching gel contacts soft tissue.



Side effect of bleaching

- Uneven Whitening in case of presenting of crowns, veneers, or fillings and Replacing the old restorations after bleaching may be desired.
- Overuse or Abuse of Whitening Products can lead to permeant Enamel damage, translucent teeth, chronic sensitivity that's why Always dentist-supervision is necessary and **don't overuse** Over-The-Counter products.

Why Dentists Are Essential in Your Bleaching Journey !!!

1. Accurate Diagnosis

- Due to the verity of causes of stains Dentists identify whether stains are **extrinsic**, **intrinsic**, or **combination** of both.
- They rule out hidden problems like tooth decay, gum disease before bleaching.

2. Personalized Treatment plan

Recommend the method that fits **your goals, budget, and dental condition.**

3. They Use Shade Guides to Set Realistic Goals

Dentists use a **shade guide** to: Measure your starting tooth color ,Show what's achievable ,Track your whitening progress.



Why Dentists Are Essential in Your Bleaching Journey !!!

4. They Keep You Safe During the Process

- In-office bleaching protects your **gums and lips**.
- Custom trays prevent gel from leaking and **irritating your mouth**.
- They help manage **sensitivity** if it appears.

5. They Guide You After Bleaching

Replacing old fillings/crowns so they match the new color for example ,and follow up.





Thanks!

