

WHY DENTISTS SHOULD CHOOSE PROFESSIONAL WHITENING PRODUCTS FOR THEIR PATIENTS

Over-the-counter (OTC) dental bleaching products have undergone a fascinating evolution, reflecting both advancements in dental science and the changing demands of consumers seeking brighter smiles. This evolution has also been highly impacted by social media and influencers presenting and promoting those products intended to reflect consumer preferences: faster, cheaper, more effective, and with minimal adverse effects on oral health. However, being able to keep a proper ideal balance between those four pillars is not possible even if the OTC products available today give the illusion that it is. An ideal aesthetic treatment should be (1) efficient (2) safe (3) and customized.

EFFICIENCY:

There are many types of OTC products for dental bleaching in the market such as toothpastes, strips, gels, mouthwash rinses, tray-based systems. Depending on the product, they will have a mechanical or chemical action. Dental professional bleaching treatments work by chemical means with a direct action against the pigments responsible for tooth coloration. The usage of hydrogen peroxide or carbamide peroxide will provide a deep, efficient, and lasting bleaching of teeth. The result is directly related to the known concentration of active solution and the time of application. Manufacturers have guidelines to keep the balance between a pleasant experience and an efficient result for the patient. OTC products may not deliver the same level of whitening due to lower concentrations of bleaching agents. This can result in less noticeable or slower results, especially for tougher

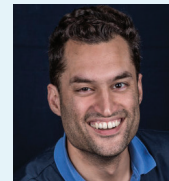
stains (**Figure 1**). Therefore, this could lead to overuse or misuse in order to compensate the lack of result which would in turn increase tooth sensitivity.

SAFETY:

In the case of professional treatment, whether in office or at home, a lot of care is taken to make sure that the gum is properly protected (**Figure 2 and 3**). This is not the case with OTC products that can lead to gum irritation or even chemical burns when bleaching agents come into contact with the gums for an extended period of time. Other OTC products use a mechanical approach to make teeth look whiter. They contain mild abrasives or chemicals to help remove surface stains. Enamel is a major protective tissue, and a regular use of such abrasive products will also lead to damaging it, making the tooth weaker and increasing its sensitivity over time.

CUSTOMIZATION:

A specificity of professional dental bleaching is customization. Each patient would have a procedure specific to their need that would consider individual variability and make sure all teeth are properly treated (**Figure 4**). OTC products might not cater to individual oral health conditions or different types of stains, leading to varied results among users. In addition, the whitening might not be properly delivered resulting in less noticeable, slower and/or uneven results. OTC products are generally designed for mass use, lacking the customization that professional treatments offer to address specific dental needs.



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ABOUT THE AUTHOR

Dr. Ali Salehi graduated in 2008 with a Bachelor of Dental Surgery from the Faculty of Dental Medicine of the Strasbourg University (France). During his Master course, he has also been trained at the dental clinic of the Johannes Gutenberg University in Mainz (Germany). In 2007, he also got a Master of Biological and Medical Sciences from the University of Strasbourg Medical School. From 2008 until 2015, he worked as a clinical faculty at the Department of Prosthodontics of the University of Strasbourg. From December 2015 until December 2019, he then became a part-time Assistant Professor in the same department, parallel to working in his own private practice from 2011 until 2021.

Dr Salehi has written many articles in French and international peer reviewed journals and contributed to a book focusing on different subjects such as dental photography, smile analysis, dental ceramics and cementation procedures (Restaurations esthétiques encéramique collée - O. Etienne, L. Anckenmann - 2016). He has also been teaching for the master of smile aesthetics of the Strasbourg University until 2021 and has been involved with many companies such as Ivoclar, GC, DMG, 3M, SDI on different educational projects. He has also been teaching about direct and indirect restorations, cementation procedures, dental bleaching, dental photography and smile design analysis in various countries such as Germany, Switzerland, Belgium, North Africa, Vietnam, etc.

Since 2023, Dr Salehi is an Advanced Standing Student at NYU college of dentistry in the process of getting his DDS in order to get licensed to practice in the United States and be able to accomplish what he was doing back in Europe but this time on this side of the pond.

WHITENING SOLUTIONS:

Even if the use of OTC products can be appealing for all sorts of reasons, and mainly financial, when compared to professional dental bleaching, it is not as efficient and safe and without professional guidance, there's a risk of improper use, leading to potential problems. Professional dental bleaching can be considered as a comprehensive way of bleaching teeth as it takes in consideration all aspects of the patient's oral health condition. That is why the term medicalized dental bleaching is sometimes used.

The ideal aesthetic approach should always be as harmless as possible and in order to insure this for our patients, our responsibility as professional oral health care provider requires that we care about the differences between professional dental bleaching and OTC products to help individuals make well-informed decisions based on their specific oral health needs.



Figure 1:
Example of a tougher discoloration that would be hard to manage with simple OTC products.



Figure 2:
To prevent gingival irritation due to hydrogen peroxide, the tray needs to be trimmed appropriately with a line of cut that will depend on whether reservoirs have been placed or not.

Images courtesy of Dr François Reitzer



Figure 3:
In case of in office procedure a combination of liquid dam, gauze and cotton rolls are placed to protect the gum before applying the bleaching product.



Figure 4
Before and after result obtained with Pola Night 10% Carbamide Peroxide 2-3h per night during 3 weeks with a customized tray specifically designed for this patient.

PROFESSIONAL WHITENING SOLUTIONS FROM SDI

Pola Day and Pola Night
10 x 1.3g Syringe Kits



7700170 (9.5% HP)
7700212 (10% CP)
7700174 (16% CP)
7700177 (22% CP)

Pola Day and Pola Night
4 x 1.3g Mini Kits



7700172 (9.5% HP)
7700213 (10% CP)
7700176 (16% CP)
7700179 (22% CP)
7700173 (35% CP)

Pola Day and Pola Night
50 x 3g Dispenser Kit



7700171 (9.5% HP)
7700214 (10% CP)
7700175 (16% CP)
7700178 (22% CP)

Pola Light
4 x 3g Syringes



7700986 (9.5% HP)
7700987 (22% CP)