

# The universe at your fingertips.

# TouchWhite® Laser Assisted Tooth Whitening

# A perfect white smile now faster and safer than ever before

- Up to 10 times shorter treatment times
- Permanent, natural looking results after one single treatment
- Safer no unnecessary thermal burden on the tooth
- Extreme patient satisfaction and confidence boost



ww.fotona.com

www.lightwalkerlaser.com



Before (A3 VITA Shade Guide)



Bleaching gel is applied to the teeth



Immediately after (A1 VITA Shade Guide)

### What is TouchWhite<sup>®</sup> Tooth Whitening?

TouchWhite<sup>®</sup> is the fastest, most gentle and minimally invasive laser assisted tooth whitening treatment utilizing the unique laser tissue interaction of the Er:YAG laser wavelength.

## How Does TouchWhite<sup>®</sup> Work?

Fotona's TouchWhite<sup>®</sup> patent-pending tooth whitening makes use of the fact that the Er:YAG laser wavelength has an absorption peak in water which is the major component of aqueous bleaching gels. This eliminates the need for any additional absorbing particles in the bleaching gels.

Due to its high absorption in bleaching gels, the Er:YAG laser beam is fully absorbed in the gel and does not penetrate to the hard tissue or the pulp, as is the case with other laser-assisted whitening methods (Fig. 1).

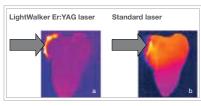


Fig. 1: With TouchWhite<sup>®</sup> whitening only the gel is heated (a) while with standard laser whitening the entire tooth is heated (b).

# Why is wavelength important?

Since the Er:YAG wavelength is fully absorbed in the gel, there is no direct

heating of the underlying tooth. The diode wavelength, on the other hand, is relatively weakly absorbed in the gel, and the transmitted light directly heats up the whole tooth. That is why the Er:YAG laser power in the TouchWhite® technique, is utilized more effectively, and the gel can be heated to higher temperatures without compromising the safety of the tooth or pulp. As a consequence, the TouchWhite® procedure can be performed with a minimal undesirable thermal burden on the tooth, and the tooth whitening speed can be safely increased by 5–10 times (Fig. 2).

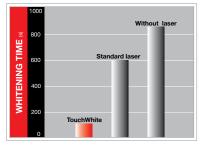


Fig. 2: TouchWhite® Tooth Whitening substantially shortens the whitening time.

### Why is LightWalker Perfect for TouchWhite<sup>®</sup>?

Because of the absorption characteristics of the Er:YAG wavelength, the TouchWhite® technique, available only with LightWalker, allows dentists to give their patients faster, safer treatments and provide great, natural looking results after one single treatment.

Additionally, LightWalker features the ultimate in convenience and ergonomics. Its easy-to-use touch screen offers a simple menu of pre-programmed tooth whitening treatments. Pick the treatment and the laser automatically sets the optimum starting parameters.

### Exclusive Advantages of TouchWhite<sup>®</sup> for You and Your Patients

TouchWhite<sup>®</sup> is the most effective and least invasive laser-assisted tooth whitening method possible. In comparison with diode and Nd:YAG bleaching, the TouchWhite<sup>®</sup> Er:YAG whitening method has proven to be more comfortable for patients while achieving the same or better whitening efficacy. Also, because the bleaching agent stays on the tooth less time, patient safety and comfort increase.

### Getting Started with TouchWhite®

The LightWalker training program is organized in cooperation with The Laser and Health Academy. During an intensive two-day workshop participants cover basic laser physics and gain an in-depth understanding of laser-tissue interaction. Hands-on sessions under guidance of laser dentistry experts help participants gain insight in the effects of Er:YAG and Nd:YAG on different tissues. Presentations and discussions are led by Laser and Health Academy Lecturers and cover multiple dental therapies.