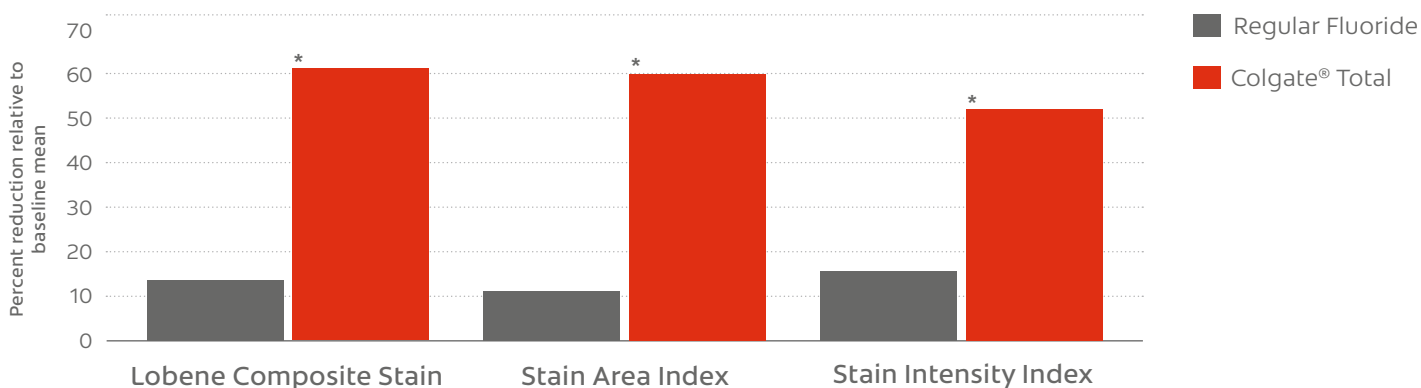


Colgate® Total with Dual Zinc plus Arginine significantly removes Extrinsic Tooth Stain

Results

Within treatment reduction of extrinsic stains after 6 weeks of product use



* statistically significant reductions ($p < 0.001$) of tooth staining indexes between Colgate® Total and regular fluoride toothpastes.

- After 3 weeks of product usage the subjects in the test group using Colgate® Total were examined to have statistically significant ($p < 0.001$) reductions of 35.4% in extrinsic tooth stain (Lobene Composite Stain Index), 36.6% in the area stained (Lobene Stain Area Index), and 24.4% in stain intensity (Lobene Stain Intensity Index) as compared to control.
- At the 6-week examination, subjects assigned to the Test Group exhibited a statistically significant ($p < 0.001$) reduction of 55.9% in extrinsic tooth stain (Lobene Stain Area Index), 54.5% in the area stained (Lobene Composite Stain Index), and 43.5% in stain intensity (Lobene Stain Intensity Index) as compared to control.

Clinical study essentials

- Randomized, single-center, stratified, double-blind, parallel-group study
- 102 subjects completed the study
- 6 weeks duration
- Performed at Clinical Research Center, Santo Domingo, Dominican Republic.
- Data on file, Delgado E et al, Colgate Palmolive Technology Center, Piscataway, USA, February 2017

Implication for practice

Colgate® Total provides patients with significant stain removal after 3 and 6 weeks of continuous use.



Supplementary Study Information



Products under Investigation

- Test toothpaste: zinc (zinc oxide, zinc citrate) 0.96%, 1.5% Arginine, occluding silica, and 1450 ppm fluoride as sodium fluoride (Colgate® Total Whitening with Dual Zinc plus Arginine; Colgate-Palmolive Company, New York, NY)
- Control toothpaste: regular sodium fluoride toothpaste containing 1450 ppm fluoride (Colgate-Palmolive Company, New York, NY)



Study participants

102 male and female participants with a Lobene Composite Stain Index of ≥ 1.5 .



Methods

Subjects were instructed to brush their teeth twice daily for 1 minute with the assigned toothpaste for 6 weeks. The subjects were examined after 3 and after 6 weeks of product usage. Statistical analyses were performed on the Lobene Composite Stain Index, Lobene Stain Area index and Lobene Stain Intensity index scores using analysis of covariance (ANCOVAs). All statistical tests of hypotheses were two sided, and employed a level of significance of $\alpha=0.05$.



Trial Procedure



Conclusion

The results of this study support that Colgate® Total with Dual Zinc plus Arginine provides significantly greater extrinsic tooth stain removal as compared to a regular fluoride toothpaste when used over a period of 6 weeks.

Further published studies with these products:

1. Delgado et al, J Clin Dent, accepted for publication 2018
2. Prasad K et al, J Clin Dent, accepted for publication 2018
3. Manus L et al, J Clin Dent, accepted for publication 2018
4. Lee C et al, J Clin Dent, accepted for publication 2018
5. Hu D et. al, J Clin Dent, accepted for publication 2018