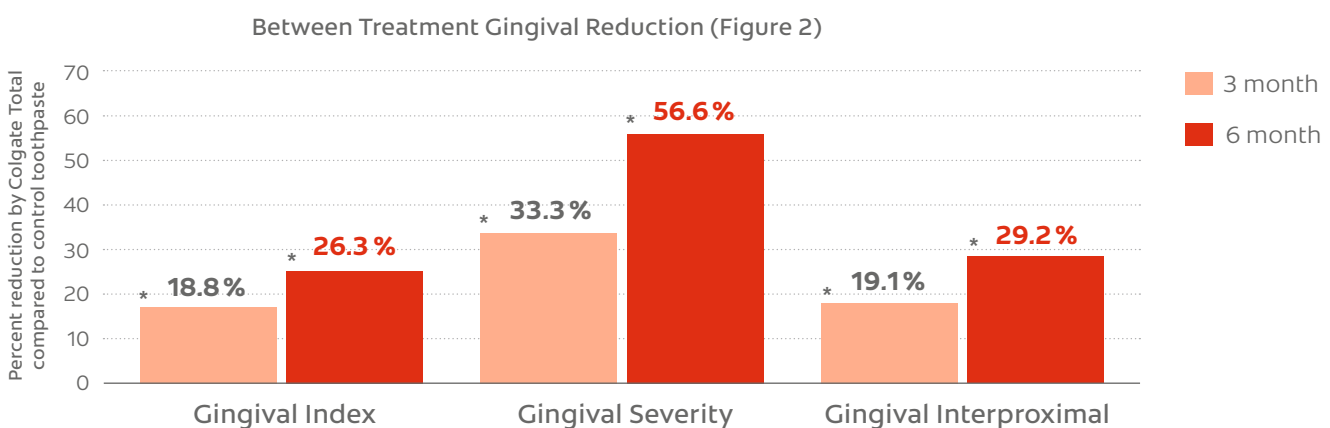
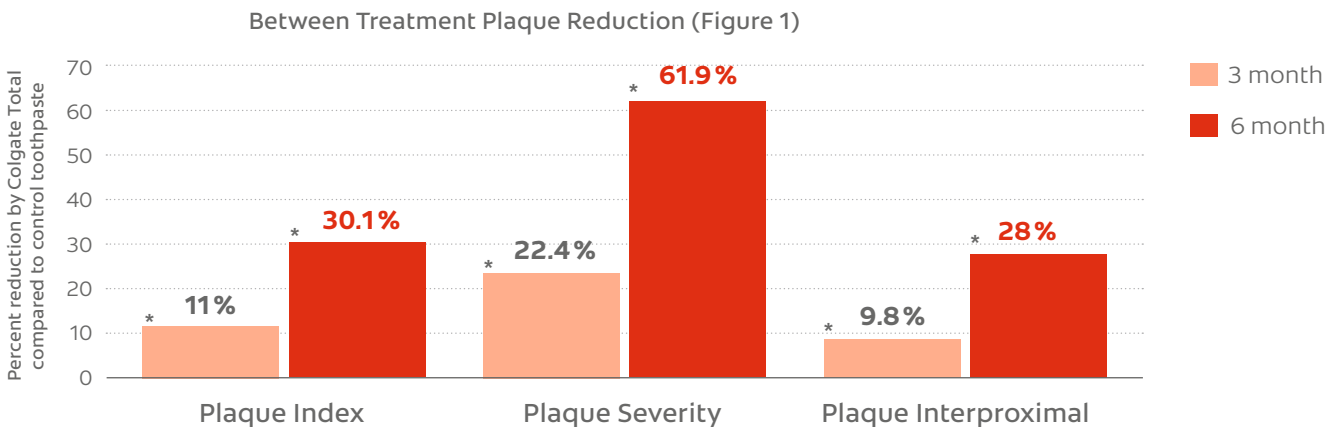


# Colgate® Total with Dual Zinc plus Arginine significantly reduces plaque and gingivitis after 3 and 6 months

## Results



\*statistically significant ( $p < 0.001$ ) differences between treatment groups with respect to base-line adjusted scores (ANCOVAs)

In this 6-months clinical study the clinical efficacy of Colgate® Total with Dual Zinc plus Arginine was compared to regular fluoride toothpaste in reducing established dental plaque and gingivitis.

- After 3 and 6 months of brushing twice daily, Colgate® Total with Dual Zinc plus Arginine demonstrated significant reductions for Plaque, Plaque Severity, and Plaque Interproximal reductions (Figure 1)
- After 3 and 6 months of brushing twice daily, Colgate® Total with Dual Zinc plus Arginine demonstrated significant reductions for Gingival Index, Gingival Severity and Gingival Interproximal measures (Figure 2)

## Clinical study essentials

- Randomized, double-blind, parallel, clinical study
- 96 patients (38 male and 58 female) completed the study
- 6 months study duration
- Performed at Clinical site in Santo Domingo, Dominican Republic
- Accepted for publication in Journal of Clinical Dentistry, 2018. Delgado et al, A clinical investigation of a Dual Zinc plus Arginine toothpaste in reducing established dental plaque and gingivitis over a 6-month period of product use



# Supplementary Study Information



## Products under Investigation

- Test toothpaste: zinc (zinc oxide, zinc citrate) 0.96%, 1.5% Arginine and 1450 ppm fluoride (Colgate® Total; Colgate-Palmolive Company, New York, NY)
- Control toothpaste: regular fluoride toothpaste containing 1450 ppm fluoride (Colgate-Palmolive Company, New York, NY)



## Study participants

100 recruited adult participants with gingival index (Loe-Silness) of at least 1.0 and plaque index of at least 1.5 based on Turesky modification of the Quigley-Hein Plaque Index.



## Methods

Three gingival parameters (Gingival Index, Gingival Severity Index, Gingival Interproximal Index) and three plaque parameters (Plaque Index, Plaque Severity Index, Plaque Interproximal Index) were measured at baseline, after 3 months, and after 6 months to determine gingivitis and plaque.



## Trial Procedure



## Conclusion

Colgate® Total with Dual Zinc plus Arginine provides significantly greater reduction in dental plaque and gingivitis parameters as compared to a regular fluoride toothpaste after 3 month and 6 months of product use.

Further published studies with these products:

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