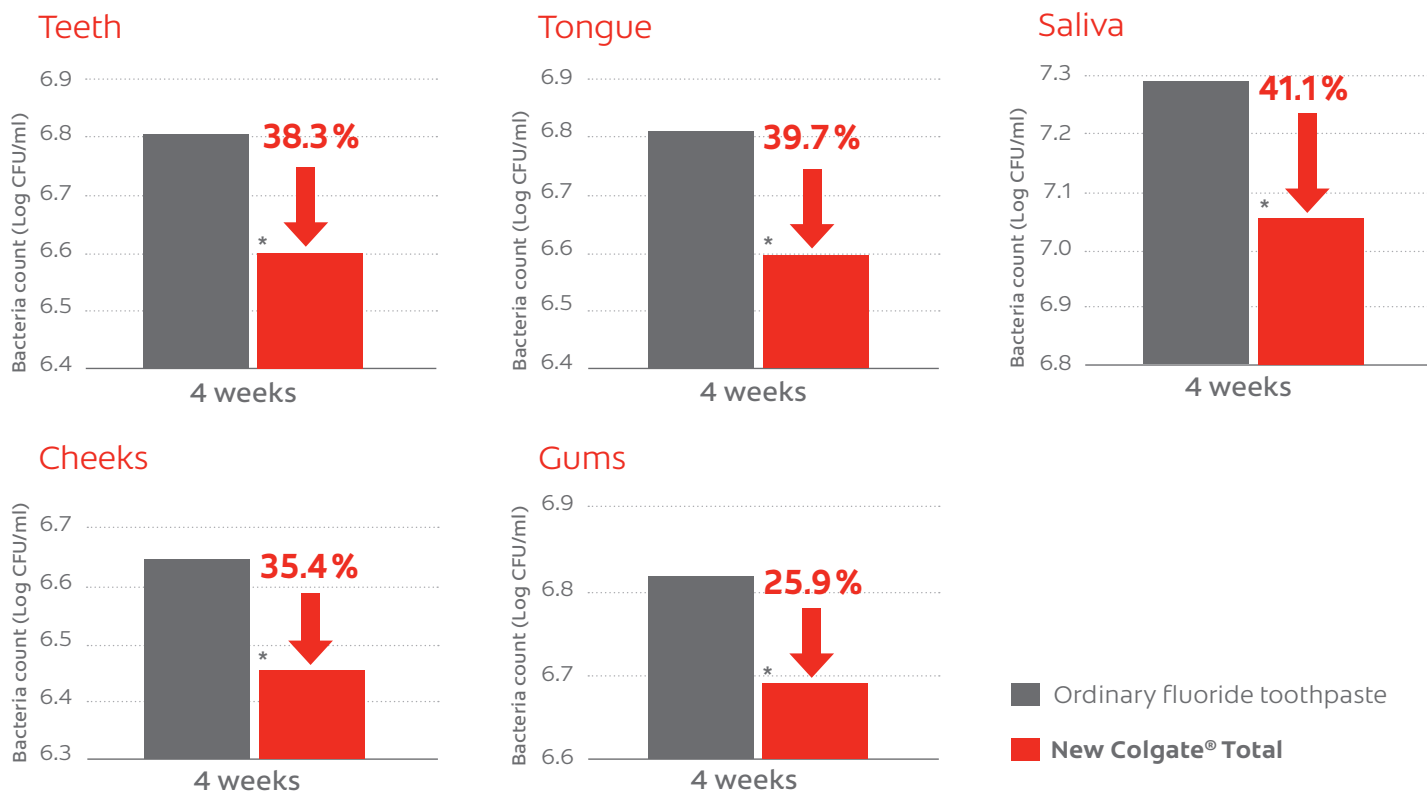


Colgate® Total reduces oral bacteria in multiple locations: 12-Hour Whole Mouth Antibacterial Protection for Whole Mouth Health

Results

Superior reductions in bacteria 12 hours after brushing*



*Statistically significant greater reduction of cultivable bacteria on teeth, tongue, cheeks, and gums with Colgate® Total vs non-antibacterial fluoride toothpaste at 4 weeks, 12 hrs after brushing. Only relevant data shown.

- Colgate® Total toothpaste significantly reduces bacterial load in diverse oral sites after 12 hours, following 4 weeks of use
- Colgate® Total toothpaste provides a significantly greater antimicrobial effect compared to sodium fluoride (NaF) toothpaste.

Clinical study essentials

- Double-blind, parallel, 3-cell, single site study
- 173 participants completed the study
- 29 days study duration
- Performed at Colgate-Palmolive Technology Center, Piscataway, NJ, USA and College of Dental Sciences and Hospital, Karnataka, India
- Accepted for publication in Journal of Clinical Dentistry, 2018. Prasad et al, The effects of two new Dual Zinc plus Arginine toothpastes in reducing oral bacteria in multiple locations in the mouth: 12-hour whole mouth antibacterial protection for whole mouth health

Implication for practice

Colgate® Total toothpaste with Dual Zinc and Arginine demonstrates greater control of oral bacteria on the teeth, tongue, cheek and gingival mucosa and in saliva compared to regular fluoride toothpaste, even after 12 hours, providing your patients with effective whole mouth antibacterial protection.

Supplementary Study Information



Products under Investigation

- Test toothpaste 1: zinc (zinc oxide, zinc citrate) 0.96%, 1.5% Arginine and 1450 ppm fluoride (Dual Zinc plus Arginine; Colgate-Palmolive Company, New York, NY)
- Test toothpaste 2: zinc (zinc oxide, zinc citrate) 0.96%, 1.5% Arginine and 1000 ppm fluoride (Dual Zinc plus Arginine; Colgate-Palmolive Company, New York, NY)
- Control toothpaste: regular fluoride toothpaste containing 1450 ppm fluoride (Colgate® toothpaste; Colgate-Palmolive Company, New York, NY)



Study participants

180 male and female participants recruited (aged 18-70 years) in India with at least 20 uncrowned natural teeth and an initial Gingival Index score (Löe-Silness) of at least 1.0 and an initial Plaque Index score (Turesky Modification of Quigley-Hein) of at least 1.5 were entered into the study.



Methods

Samples from 5 different oral sites were collected: supragingival plaque, saliva and scrapings from the tongue, the buccal and the gingival mucosa. The samples were plated in different dilutions and in duplicates on agar plates with the media specific for the growth of different bacterial strains. After inoculation of 5 - 7 days, colony forming units (CFU) were calculated.



Trial Procedure



Conclusion

Colgate® Total toothpaste containing zinc (zinc oxide, zinc citrate) 0.96%, 1.5% Arginine and fluoride provides statistically significant reductions in oral bacteria on the teeth, tongue, cheek and gingival mucosa, as well as in saliva, compared to toothpaste with fluoride alone, 12-hours after 29-days of twice daily tooth brushing. The results demonstrate that this new toothpaste provide 12-hour antibacterial protection for whole mouth health.

Further published studies with these products:

1. Delgado 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