



# Triple Action for Healthy Teeth and Gum: Inhibiting Gingivitis Bacteria, Reducing Plaque, Neutralizing Acidity

## Bacterial Imbalance

Bacteria living in the oral cavity and adhere to the teeth



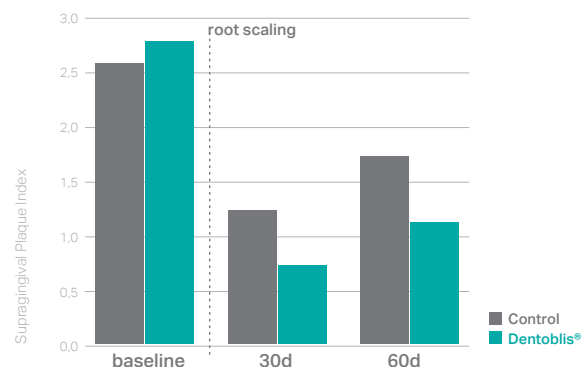
### Gingivitis

Bacteria, e.g. *Porphyromonas gingivalis*, building plaque and inducing gum inflammation

### Dental Caries

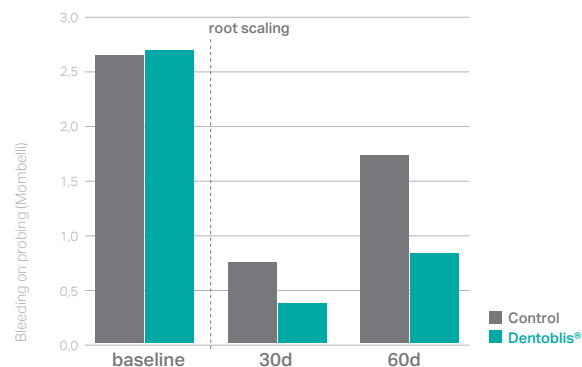
Bacteria, e.g. *Streptococcus mutans*, producing acids from dietary sugars

Reducing plaque after deep scaling and root planning



Source Scariya et al. (2015)  
Int J Pharm Bio Sci

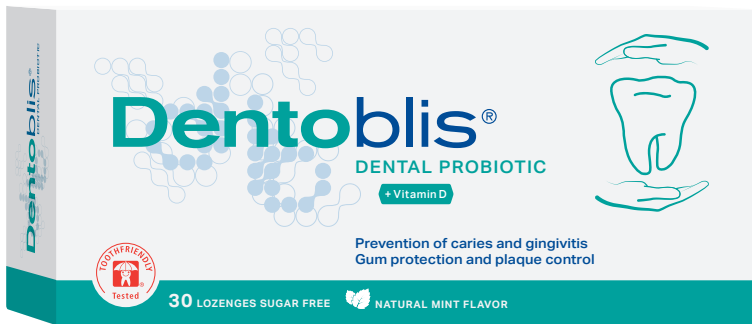
Reducing gum bleeding after deep scaling and root planning



Source Scariya et al. (2015)  
Int J Pharm Bio Sci 6(1):242-250

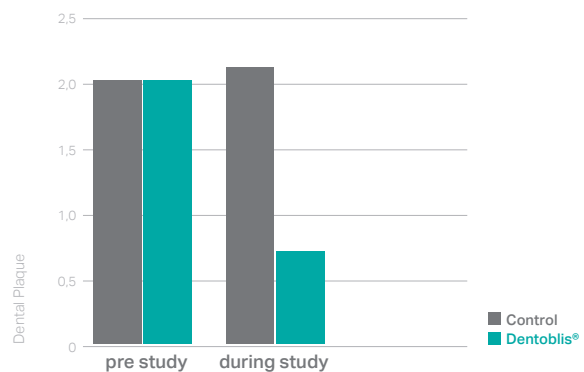
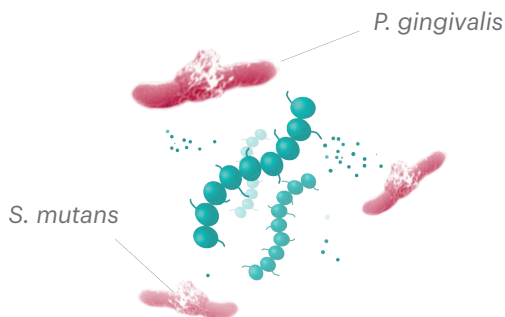
## Key marketing aspects

- > containing the world's first dental probiotic strain patented for tooth health
- > protecting against gingivitis, periodontal disease and caries
- > reducing plaque, inhibiting pathogenic bacteria and neutralizing acidity
- > supporting a healthy and protective oral microflora
- > proprietary finished product formula
  - > lozenges with exceptional acceptance in children and adults
  - > with vitamin D contributing to the maintenance of normal teeth (compliant with Regulation (EU) No 432/2012)
- > clinically tested in children and adults



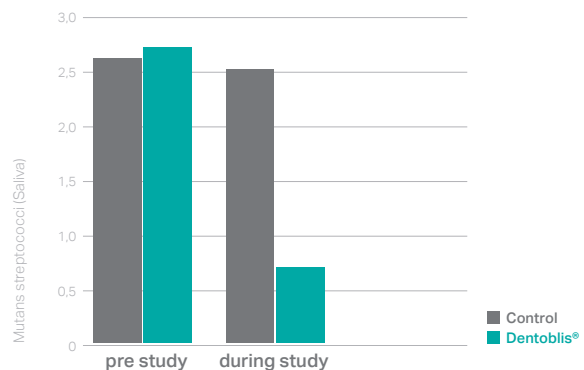
## Facts

- > contains the most protective natural human oral probiotic species<sup>1</sup>
- > effectively colonizes the oral cavity<sup>2</sup>
- > produces unique antimicrobial substances (e.g., *Salivaricin M*) inhibiting the key dental pathogens (e.g., *Streptococcus mutans*, *Porphyromonas gingivalis*, and *Aggregatibacter actinomycetemcomitans*)<sup>1, 3</sup>
- > provides enzymatic activity breaking down plaque (dextranase) and neutralizing acidity (urease)<sup>4</sup>
- > reduces plaques and key pathogens causing caries in children<sup>5, 6</sup>
- > reduces pro-inflammatory cytokines (IL-6 and IL-8)<sup>7</sup>
- > reduces key pathogens causing caries and gingivitis in adults (e.g., *Streptococcus mutans* and *Porphyromonas gingivalis*)<sup>8</sup>
- > reduces plaque and gum inflammation in adults<sup>9</sup>



Source: Di Pierro et al. (2015)  
Clin Cosmet Investig Dent 7:107-113

## Reducing caries bacteria in children



Source: Di Pierro et al. (2015)  
Clin Cosmet Investig Dent 7:107-113

## When to use

- > to reduce caries and gingivitis
- > to restore a healthy and protective microflora
- > after professional dental cleaning
- > after antibiotic use
- > as daily oral hygiene praxis

## How to use

- > lozenges
  - > for children (3+ years and adults)
  - > once a day
  - > to dissolve slowly in the mouth after tooth brushing

## References

- 1) Wescombe et al., Future Microbiol (2012), 2) Burton et al., Plos (2013), 3) Internal Report (2016a), 4) Heng et al., J Bacteriol (2011), 5) Burton et al., J Med Microbiol (2013), 6) Di Pierro et al. Clin Cosmet Investig Dent (2015), 7) Adam et al., IADR/AADR/CADR 89th General Session and Exhibition (2011), 8) Internal report (2016b), 9) Scariya et al., Int J Pharm Bio Sci (2015)