**Stannous Fluoride Effects on Plaque Vitality**

**CONCLUSION**
- Stannous fluoride dentifrice is effective in reducing viability of dental plaque. These results also support the modeling of antimicrobial activity with plaque vitality assessments in this panel design.

**OBJECTIVE**
Stannous fluoride is an effective decay preventive ingredient which has unique antibacterial properties. The biofilm mode of dental plaque growth in the oral cavity offers protection against chemotherapeutic control. The degree of effectiveness provided by topical antimicrobials can be assessed in part by assessments in bacterial vitality changes in treated biofilms enabled by Confocal Scanning Laser Microscopy (CSLM). The aim of this study is to assess effects of stannous fluoride dentifrice on the average viability of plaque in vivo.

**MATERIALS AND METHODS**
- Subjects carried out standard oral hygiene with Crest® Cavity Protection Regular dentifrice to establish a treatment and washout baseline and then continued hygiene using Crest® Pro-Health™ (stannous fluoride - hexametaphosphate) dentifrice.
- After one week applications, the four dentition quadrants were sampled for plaque after refraining from all oral hygiene during 24h.
- Plaque was dispersed by sonication and immediately analyzed after Baclight® fluorescent staining with specialized dispersion and CSLM analysis.*

**RESULTS**
- During use of standard ‘non-antimicrobial’ dentifrice, the percentage of non-vital plaque averaged 57 ± 7%. Use of stannous fluoride increased non-vital plaque levels to 71 ±7.1% (sig. vs. Crest Cavity Protection Regular p < 0.05) respectively.


Baclight® is a registered trademark of Molecular Probes, Inc.

---

**Comparative Clinical Effectiveness of Stannous Fluoride Dentifrice in Treating Gingivitis**

**CONCLUSION**
- In a general population, 3-month use of 0.454% stannous fluoride/sodium hexametaphosphate dentifrice for the treatment of gingivitis resulted in significant reductions in gingival bleeding relative to baseline and a regular dentifrice control.

**OBJECTIVE**
A randomized, double-blind, controlled clinical trial was conducted to evaluate the clinical effectiveness and tolerability of 0.454% stannous fluoride/sodium hexametaphosphate dentifrice on established gingivitis.

**MATERIALS AND METHODS**
- 80 healthy adults with mild-to-moderate gingivitis were randomized to a 0.454% stannous fluoride/sodium hexametaphosphate dentifrice (Crest® Pro-Health™) or a regular anticavity control (Crest® Cavity Protection).
- Treatment was unsupervised, and outcomes were measured over a 3-month period. Efficacy was measured clinically via whole mouth gingival bleeding sites, while safety was assessed from examination and interview.

**RESULTS**
- Mean (SD) age was 44.3 (9.2) years, 69% were female, and the study population averaged 17 bleeding sites, with groups balanced on pertinent demographic, behavioral characteristics and disease.
- The 0.454% stannous fluoride group had 13.3, 14.0 and 13.3 bleeding sites at months 1, 2 and 3, respectively, compared to 15.4, 17.2 and 16.4 for the control. Relative to baseline, the stannous fluoride group exhibited significant (p<0.05) reductions in bleeding at all timepoints.

© P&G
Comparative Clinical Effectiveness of Stannous Fluoride Dentifrice in Treating Gingivitis

RESULTS (continued)

• Between-group comparisons showed significant (p < 0.05) end-of-treatment reductions in bleeding for the stannous fluoride dentifrice.
• Both dentifrices were well-tolerated, and no subject discontinued dentifrice use early because of a treatment-related adverse event.

Incremental Clinical Plaque Effects with CPC and Essential Oils Rinses

Conclusions
• Use of therapeutic rinses yielded incremental 19-20% reductions in post-prophylaxis plaque above that seen with therapeutic dentifrices.

Objective
This clinical trial evaluated the incremental effects of therapeutic mouthrinses used in combination with therapeutic dentifrices.

Materials and Methods
• Four groups in a multi-leg clinical trial evaluated the effects of post-prophylaxis daily oral hygiene with or without a therapeutic rinse.
• The groups were 0.3% triclosan copolymer dentifrice (Colgate® Total®) and a manual brush (Colgate® Wave) with or without an essential oils rinse (Listerine®), or 0.454% stannous fluoride sodium hexametaphosphate dentifrice (Crest® Pro-Health™) and a different manual brush (Oral-B® CrossAction®) with or without a 0.07% cetylpyridinium chloride rinse (Crest® Pro-Health™ Rinse).
• Disclosed plaque was measured on 9 surfaces using a standard index (Navy) over an 8 week treatment period, while safety was assessed from interview and clinical examination.

Results
• A total of 115 subjects completed the 8 week study. Groups were balanced (p > 0.38) on pre-prophylaxis plaque, with mean scores ranging from 0.39 to 0.41.
• End-of-treatment mean plaque scores were 0.26 in the triclosan group, 0.21 in the triclosan + rinse group, 0.21 in the stannous fluoride group, and 0.17 in the stannous fluoride + rinse group.