



# Efficacy of Amine Fluoride/Stannous Fluoride Mouthrinses on the Reduction of Plaque and Gingival Inflammation



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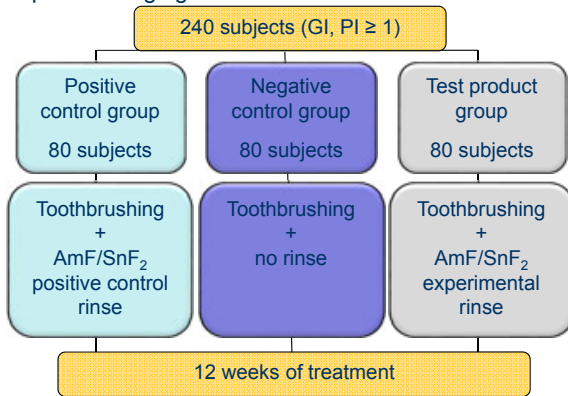
## OBJECTIVES

The primary aim of the present study was to evaluate the efficacy of an experimental amine fluoride/stannous fluoride (AmF/SnF<sub>2</sub>) mouthrinse on plaque during a twelve-week home-use period. Secondary aims were to test the efficacy on gingivitis and the staining potential.

## MATERIAL AND METHODS

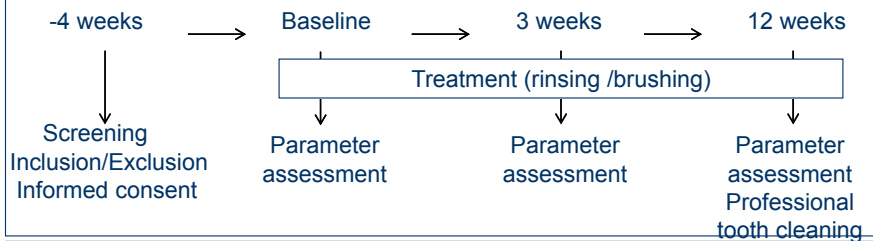
### Design:

For this twelve-week, randomised, investigator-blinded and clinically controlled study in parallel groups, 240 adult participants with gingivitis were recruited.



### Parameters:

- Plaque index (Silness & Loe 1964)
- Gingival index (Loe et al. 1967)
- Discoloration index (Brex et al. 1993)
- Safety



### Statistics:

ANOVA and Bonferroni adjusted post-hoc tests at a significance level of  $\alpha=0.05$  were applied. Statistical analysis was performed on the ITT population.

## RESULTS

### Plaque Index (PI) :

Both mouthrinses led to a statistically significant plaque reduction compared to the control after 3 and 12 weeks. No difference existed between test and positive control groups. (Fig. 1)

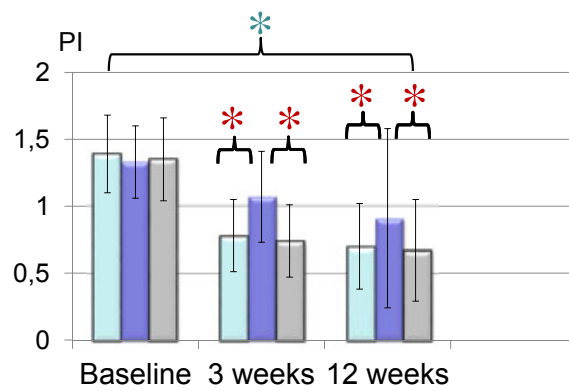


Fig. 1. Plaque index: Mean values, standard deviations

### Gingival Index (GI):

A statistically significant gingivitis reduction was observed between test and control groups after 3 weeks. (Fig. 2)

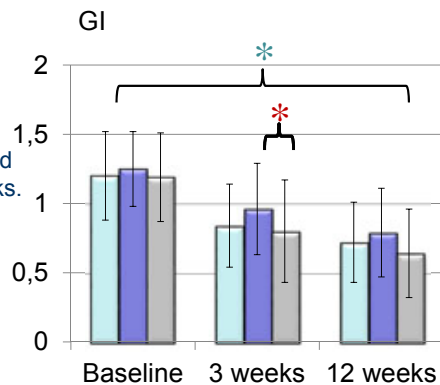


Fig. 2. Gingival index: Means, standard deviations

### Discoloration Index (DI):

Tooth discoloration occurred in all groups but was higher in the rinsing groups. However, the clinical relevance of group differences remains questionable. No difference existed between test and positive control groups. (Fig. 3)

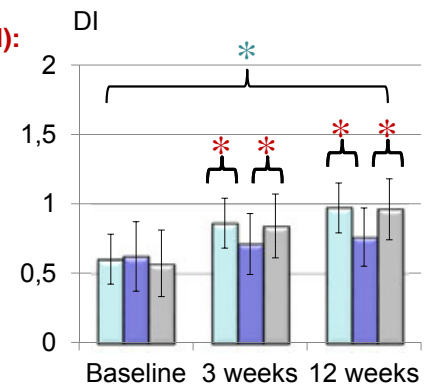


Fig. 3. Discoloration index: Means, standard deviations

## CONCLUSIONS

Rinsing with amine fluoride/stannous fluoride formulations in addition to toothbrushing inhibits plaque to a greater extent in comparison to brushing alone. With the exception of gingivitis reduction up to three weeks, where the experimental formula demonstrated superiority, the two amine fluoride formulas were equally effective with regard to plaque and gingivitis control. In a study population with very good compliance (as can be seen in the PI and GI reductions in the negative control group), it is difficult to see an additional effect of a mouthrinse on top of toothbrushing.

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