Comparison of salivary fluoride levels following use of Bath and Colgate dentifrices in children.

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Abstract

Purpose: Dental caries is a chronic disease in childhood. The most important way to fight tooth decay is to prevent it. The purpose of this study was to compare the effect of Bath and Colgate dentifrices on salivary fluoride concentrations.

Material and Method: In this cross-over clinical study, 12 children ages 6 to 12 years, were selected. the study was consisted of two steps. All subjects participated in both two tests. For each test the subject brushed with 0.5 gr. test dentifrice (Bath or Colgate) for one minute and then rinsed their mouth. Unstimulated saliva was taken in 5 min intervals in base line and after 15,30,60,90 minutes elapsed. Two days after taking first test, the second had been taken by using the second dentifrice. The content of fluoride was measured by means of an ion specific electrode and data were statistically analyzed by paired t-test, Repeated measure ANOVA.

Results: After use of dentifrices, salivary fluoride increased between baseline to 15 minute and the decreased to 60 minute. Salivary fluoride concentration after use of Colgate dentifrice was statistically higher than the Bath dentifrice at 15, 30, 60 minute (p<0.05). After use of dentifrices, the level of fluoride was zero (0.00) at 90 min.

Conclusion: Colgate dentifrice was better than Bath dentifrice in releasing Fluoride in saliva to 60 minute.

Keywords: fluoride absorbed, Colgate, bath, toothpaste, saliva