A clinical study to compare the anticalculus efficacy of three dentifrice formulations. Allen DR(1), Battista GW, Petrone DM, Petrone ME, DeVizio W, Volpe AR. Author information: (1) Department of Periodontics, Howard University College of Dentistry, Washington, DC, USA. The objective of this double-blind clinical study, conducted in harmony with the accepted Volpe-Manhold design for studies of dental calculus, was to compare the supragingival anticalculus efficacy of three commercially available dentifrice formulations. The test toothpastes were Colgate Total Plus Whitening Toothpaste with an added high cleaning silica base, Crest Multi-Care Advanced Cleaning Toothpaste, and Colgate Winterfresh Gel. Adult male and female subjects from the northern New Jersey area were entered into the study based on a pre-test (baseline) Volpe-Manhold Calculus Index score of 7.0 or greater, provided a full oral prophylaxis, and stratified into three treatment groups which were balanced for age, sex and baseline calculus scores. Subjects were instructed to brush their teeth twice daily (morning and evening) for one minute with their assigned dentifrice, using a soft-bristled toothbrush. Examinations for dental calculus were again performed after eight weeks' use of the study dentifrices. One hundred (100) subjects complied with the protocol and completed the entire study. At the eight-week examination, subjects using the Colgate Total Plus Whitening Toothpaste and subjects using the Crest Multi-Care Advanced Cleaning Toothpaste exhibited statistically significant (p < 0.05) reductions in mean Volpe-Manhold Calculus Index scores as compared to the negative control dentifrice group (Colgate Winterfresh Gel). There was no statistically significant difference in mean Volpe-Manhold Calculus Index scores between subjects using the Colgate Total Plus Whitening Toothpaste and subjects using the Crest Multi-Care Advanced Cleaning Toothpaste.

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1. J Clin Dent. 2002;13(2):69-72.