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# Clinical evaluation of a dentifrice containing calcium sodium phosphosilicate (NovaMin) for the treatment of dentin hypersensitivity.

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**ABSTRACT: Purpose:** To evaluate the efficacy of a dentifrice containing calcium sodium phosphosilicate (NovaMin) study *versus* a placebo and a commercially-available SrCl2 containing dentifrice for the treatment of dentin hyper-sensitivity.

**Methods:** This was a 6-week, randomized, parallel-arm, double-blind clinical study. 71 subjects ranging in age from 21 to 56 years old completed the study. Evaporative and thermal stimuli were used to measure pain using a VAS scale. Measurements were obtained at baseline, 2 weeks and 6 weeks.

**Results:** The placebo and the NovaMin groups showed a statistically significant decrease in sensitivity by both measures after 6 weeks ($P < 0.05$). The SrCl2 group showed a statistically significant decrease from baseline at the 2-week time point, but not at the 6-week time point for the evaporative stimulus. The percent reduction in sensitivity at 6 weeks for the NovaMin test group was 35% for air and 39% for cold water stimulus, *versus* 11% for air and 22% for cold water for the SrCl2 paste. The reductions for the placebo paste were 21% for the air stimulus and 18% for water. A cross tabulation measure of the reduction in sensitivity at each time point for all three treatments showed that the NovaMin product was more effective than either of the other products. For the air stimulus in the NovaMin group, 58% of subjects improved at each time point compared with 26% for the SrCl2 group and 20% for the placebo group. These results demonstrate that the NovaMin dentifrice was more effective at reducing sensitivity compared with a commercial dentifrice and placebo control. (*Am J Dent*2008; 21:210-214).

**CLINICAL SIGNIFICANCE:** The randomized controlled trial showed that a calcium sodium phosphosilicate (NovaMin) desensitizing agent in a non-fluoride, non-aqueous dentifrice was more effective at relieving dentin hypersensitivity than a commercially-available SrCl2 dentifrice and minus active (placebo) control dentifrice after 6 weeks of twice daily use.