

# Plaque Removal

*in vivo study*

## Comparison of plaque removal by Sonicare For Kids and a Crest battery-powered Spinbrush® for Kids in children aged 7–10 years

Millleman J, Putt M, Olson M, Master A, Jenkins W, Schmitt P, Strate J. *International J Pediatric Dent.* 2009; 19:s1

Objective	To compare the plaque removal efficacy of Sonicare For Kids at “high” setting and Crest battery-powered Spinbrush for Kids (“dolphin” and “ice cream cone” handle shapes) in children aged 7–10 years.
Methodology	Fifty-nine healthy children (mean age 8.5 years) participated in an IRB-approved single-blind, randomized, parallel-design study. Informed consent/assent (with parent) was obtained. Subjects abstained from brushing for $26 \pm 6$ hours prior to examination visits. At Visit 1, subjects were screened for eligibility (Turesky-Modified Quigley-Hein Plaque Index (TPI) $> 1.8$ ). They were instructed on use of both devices (Sonicare For Kids and Crest Spinbrush for Kids) in alternating manner at home (twice daily for two minutes) for a one-week familiarization period. At Visit 2, baseline TPI was scored followed by randomization and a supervised two-minute brushing session with the assigned device. Post-brushing TPI scores were then obtained. Safety was assessed in oral soft tissue examinations at Visit 2. ANOVA was used for the primary statistical analysis.
Results	Sonicare For Kids removed significantly more plaque than Crest Spinbrush for Kids (“dolphin” and “ice cream cone” handle shapes) from the dentition overall ( $p < 0.0001$ ) as well as in hard-to-reach areas, i.e., the posterior teeth ( $p = 0.0001$ ) and the interproximal spaces ( $p < 0.0001$ ) of children aged 7–10 years. Both toothbrushes were safe to use.
Conclusion	Sonicare For Kids was found to remove significantly more plaque than Crest Spinbrush for Kids in children aged 7–10 years. It is also proven safe and gentle on oral tissues.

