

Plaque Removal

in vivo study

Comparison of plaque removal by Sonicare Xtreme e3000 Series and a manual toothbrush in preteens and teens aged 9-17 years

Master A, DeLaurenti M, Souza S, Sturm D, Hefti A. Plaque Removal by a Sonic Toothbrush in Preteens and Teens. *J Dent Res* 85 (spec Iss B): 1305, 2006

- Objective** To compare the plaque removal efficacy of the Sonicare Xtreme and manual toothbrush in subjects aged 9-17 years.
- Methodology** Thirty-nine healthy subjects, aged 9-17 years, participated in an IRB-approved single-blind, randomized, parallel-design study assessing plaque removal ability of Sonicare Xtreme and manual toothbrush. Each toothbrush was used for one week at home for familiarization. Subjects presented with 24 hours of plaque accumulation. Before and after a two-minute supervised brushing, plaque was assessed using the Turesky-Modified Quigley-Hein Plaque Index. In addition, measurements of toothbrush safety on oral tissues were performed by documenting the presence or absence of spontaneous bleeding and by using Miller's Tooth Mobility Index to assess teeth mobility.
- Results** Preteens and teens removed more overall plaque using Sonicare Xtreme than with manual toothbrush ($p=0.0044$). Both toothbrushes were safe and gentle on oral tissues when assessed for spontaneous bleeding and teeth mobility.
- Conclusion** Sonicare Xtreme was found to remove significantly more plaque than manual toothbrush in preteens and teens. It is also proven safe and gentle on oral tissues.

