

# Plaque Removal

*in vivo study*

## Comparison of plaque removal by Sonicare FlexCare, Ultreo® and Ultreo with ultrasonic function disabled

Master A, Jenkins W, Wei J, Strate J. Comparative Efficacy of Two High Frequency Power Toothbrushes on Plaque. *J Dent Res* 87 (spec Iss A): 1152, 2008

Objective	To compare the plaque removal efficacy of the Sonicare FlexCare and Ultreo power toothbrush with the ultrasonic function active and disabled.
Methodology	Thirty five healthy adults, aged 21-51 years, participated in a single-blind, randomized, crossover-design study assessing the plaque removal efficacy and safety of the Sonicare FlexCare and Ultreo power toothbrushes. The Ultreo power toothbrush was tested with and without a functioning ultrasonic feature while still maintaining the bristle motion. Each toothbrush was used for one week at home for familiarization. At the end of each period, subjects presented with 24 hours of plaque accumulation and then had an assessment of plaque using the Turesky-Modified Quigley-Hein Plaque Index before and after a two-minute supervised brushing with the assigned toothbrush. Safety was assessed in oral soft tissue examinations prior to all assessments of plaque.
Results	Sonicare FlexCare removed significantly more plaque than Ultreo in either mode from the dentition overall ( $p < 0.0001$ ) as well as in all sub-regions of the mouth ( $p < 0.0001$ ), i.e., the posterior teeth ( $p < 0.0001$ ) and the interproximal spaces ( $p < 0.0001$ ). There was no significant difference in plaque removal from the dentition overall ( $p = 0.52$ ) between the Ultreo with ultrasonic function enabled or disabled. Both brushes were safe to use.
Conclusion	Sonicare FlexCare was found to remove significantly more plaque than Ultreo power toothbrushes with and without the ultrasonic function when assessed over the entire dentition (overall) as well as in hard-to-reach areas.

