

# Plaque Removal

*in vitro study*

## Comparison of plaque removal by Sonicare HydroClean and a manual toothbrush

DeLaurenti M, Putt M, Milleman J, Wei J, Jenkins W, Strate J. Plaque Removal Ability of Sonic Battery Toothbrushes Versus Manual Toothbrush. *J Dent Res* 88 (spec Iss A): 2581, 2009

Objective	To compare the plaque removal efficacy of the Sonicare HydroClean battery-power toothbrush and a manual toothbrush over time.
Methodology	One hundred and seventy-nine healthy adults, aged 18-67 years, participated in a single-blind, randomized, parallel group clinical study assessing the plaque removal efficacy of the Sonicare HydroClean battery-power toothbrush and the Oral-B P-40® manual toothbrush. Each toothbrush was used for two minutes, twice daily for two weeks at home. At the end of this period, subjects presented with three to six hours of plaque accumulation and had a plaque assessment using Turesky-Modified Quigley-Hein Plaque Index. Safety was assessed in oral soft tissue examinations prior to all assessments of plaque.
Results	Sonicare HydroClean removed significantly more plaque than a manual toothbrush from the dentition overall ( $p=0.0002$ ) as well as in hard-to-reach areas, i.e., the posterior teeth ( $p=0.0002$ ) and the interproximal spaces over two weeks ( $p<0.0001$ ).
Conclusion	Sonicare HydroClean was found to remove significantly more plaque than a manual toothbrush when assessed over the entire dentition (overall) as well as in the hard-to-reach areas over two weeks. Both products were safe on oral tissues.

