

# Gingival Health

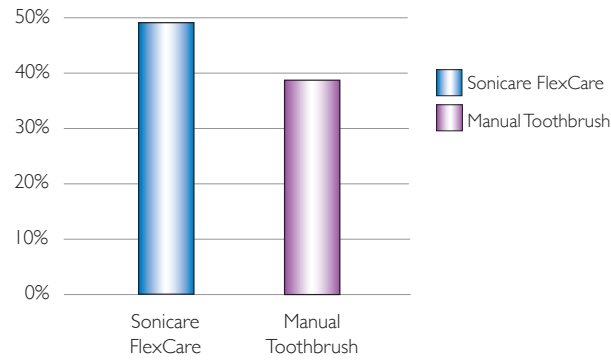
in vivo study

## Effect of power brushing on clinical indices in periodontitis patients

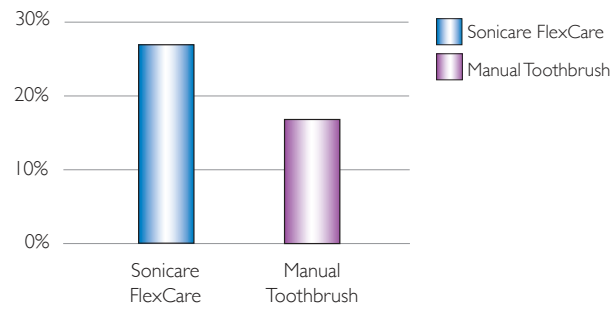
Offenbacher S, Barros SP, Aspiras M, De Jager MI Dent Res90 (Spec Iss A):0807, 2011

<b>Objective</b>	To determine the clinical benefits of Sonicare FlexCare powered toothbrush following experimental induction of biofilm overgrowth in subjects with <b>mild, moderate and severe periodontitis</b> .
<b>Methodology</b>	<b>97 healthy adults, 18-75 years of age, completed a single-blind randomized study assessing changes in clinical indices indicative of the biofilm-induced gingival inflammation in 3 groups of patients with mild, moderate or severe periodontitis (32-35 patients in each group). To qualify, all subjects had at least one site with probing pocket depth &gt;3mm. The 3 groups were defined according to the extent of gingival bleeding on probing: ≤10% (mild), 10-50% (moderate), &gt;50% (severe). For 21 days, subjects received an experimentally induced gingivitis challenge using oral stents. Subjects were then randomized in equal allocation to receive either a manual toothbrush or a Sonicare FlexCare powered toothbrush with the compact ProResults brush head to use for a four week resolution phase. During the induction and resolution phases, plaque index (PI), gingival index (GI), bleeding on probing (BOP), pocket depth (PD) and clinical attachment loss (CAL) were recorded at days 0, 7, 14, 21 (end of induction phase, beginning of resolution phase), 35 and 49 (end of resolution phase).</b>
<b>Results</b>	During the induction phase, PI, GI and BOP increased 1.8, 1.2 and 1.4 fold, respectively, for all 3 periodontitis groups, though no significant changes <b>were observed for PD and CAL. After 4 weeks of resolution, Sonicare FlexCare resulted in significantly greater improvements (p&lt;0.05) in interproximal scores for all indices, except CAL, for all 3 groups. In particular, Sonicare FlexCare resulted in a significantly greater reduction (p&lt;0.01) in the prevalence of deep pockets (PD4mm) with 35.8% compared to 2.8% for the manual toothbrush. Consequently, Sonicare FlexCare significantly reduced mean probing pocket depth by 6.5% compared to 1.0% for the manual toothbrush (p&lt;0.01).</b>
<b>Conclusion</b>	<b>Sonicare FlexCare significantly reduced interproximal plaque, gingivitis and pocket depths in patients with mild, moderate and severe periodontal disease within 4 weeks of regular use when compared to a manual toothbrush.</b>

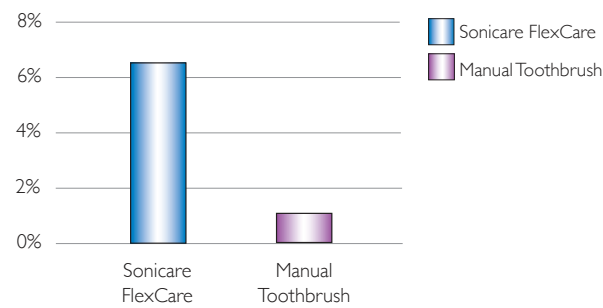
### Plaque Reduction



### Gingival Inflammation Reduction



### Pocket Depth Reduction



Reduction of Prevalence of Deep Pockets

