

Sanitization

in vitro study

In vitro evaluation of the Sonicare UV sanitizer for various power toothbrush heads

Hix J, Elliott N, De Jager M. Data on file, 2007.

Objective	To evaluate in vitro the ability of the Sonicare UV sanitizer to reduce viability of microorganisms on several types of brush heads of power toothbrushes.
Methodology	Several in vitro studies were executed examining various microorganisms and brush heads. In each study, clinical conditions were mimicked carefully: brush heads were artificially contaminated with a selected microorganism in a two minute "brushing" cycle, then rinsed with tap water and sanitized using the 10-minute cycle of exposure to the germicidal ultraviolet light of the UV Sanitizer. Non-treated brushes served as a control. Commonly observed microorganisms were tested, including Escherichia coli, Streptococcus mutans and Herpes Simplex Virus type 1 (HSV 1). Investigated brush heads included the Sonicare Elite standard brush head, the Sonicare FlexCare regular-sized and small ProResults brush heads, the Oral-B Professional Care FlexiSoft® and FlossAction brush heads, and the National® Doltz EW910 and EW920 brush heads. ^{1,2}
Results	Following this procedure, it was demonstrated that the UV Sanitizer could reduce up to 99% of E. coli, S. mutans and HSV 1 for the brush heads tested in this study.
Conclusion	The Sonicare UV Sanitizer effectively kills up to 99% of select microorganisms on selected toothbrush heads.