



## The Science Behind Sonicare

**PHILIPS**  
**sonicare**  
sense and simplicity



## Notes from Dr. Joerg Strate

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### **Philips Sonicare has redefined personal oral hygiene once again**

When we decide to launch a new edition of the clinical proof brochure, the document in your hands, you know we must have a significant reason to do so. Launching two new products and introducing breakthrough technology that's likely to change our perspective on interdental cleaning are indeed significant accomplishments.

The clinical and scientific research portfolio summarized in this document provides objective and relevant information about our products, and insights into the way we work. Our clinical credibility and commitment to providing patients and dental professionals with the most advanced solutions for home oral healthcare have resulted in global recognition and professional recommendation of Philips Sonicare products. True innovation at Philips Sonicare follows a simple paradigm that integrates the latest scientific knowledge with an in-depth understanding of today's oral healthcare needs. Adhering to these principles frequently results in solutions and technologies that are ahead of their time, and subsequently lead the industry.

The original Sonicare technology was exactly that type of industry-leading innovation — it defined a new standard for power toothbrushes. Recently, Sonicare For Kids established a unique solution for the specific oral healthcare needs of children. Now the new Sonicare DiamondClean takes our ambition to the next level with the best clinical performance of any Sonicare to date, thanks to its unique brush head and ergonomic handle design.

The requirements for our latest innovation, the entirely new Philips Sonicare AirFloss, could not be matched by existing concepts — we had to invent them. The result is a unique device that impresses equally with its convenience of use and its clinical efficacy, which could not exist without the unprecedented AirFloss microburst technology invented by Philips engineers.

When you read the following pages, I hope you will agree with me that Sonicare DiamondClean and AirFloss represent a significant next step toward even better, more intuitive solutions for daily oral hygiene — exactly what Philips Sonicare is all about.

# Sanitization

*in vitro study\**

## In vitro evaluation of the Sonicare FlexCare integrated UV sanitizer

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

Objective	To evaluate in vitro the ability of the Sonicare FlexCare integrated UV sanitizer to reduce viability of microorganisms on the FlexCare ProResults brush heads.
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 (HSV1). Investigated brush heads included the Sonicare FlexCare regular-sized and small ProResults brush heads.
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 both FlexCare ProResults brush heads.
Conclusion	The Sonicare FlexCare integrated UV sanitizer effectively kills up to 99% of select microorganisms on selected toothbrush heads.

*\*Results will vary with actual use*

## 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. <sup>1,2</sup>
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.

*\*Results will vary with actual use*