

# The effect of different interdental cleaning devices on plaque biofilm and gingival bleeding.

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The present study aims at testing whether the Waterpik® DWJ with a new jet tip has a potential to improve gingival health and plaque inhibition as compared to the Waterpik® DWJ with a standard jet tip or use of standard waxed floss over a period of...

|                             |                       |
|-----------------------------|-----------------------|
| <b>Ethische beoordeling</b> | Positief advies       |
| <b>Status</b>               | Werving gestart       |
| <b>Type aandoening</b>      | -                     |
| <b>Onderzoekstype</b>       | Interventie onderzoek |

## Samenvatting

### ID

NL-OMON24169

### Bron

Nationaal Trial Register

### Verkorte titel

N/A

### Aandoening

Gingivitis

### Ondersteuning

**Primaire sponsor:** Water Pik Technologies, Inc.

6000 Condor Dr  
Moorpark, CA  
USA

**Overige ondersteuning:** Water Pik Technologies, Inc.

6000 Condor Dr  
Moorpark, CA  
USA

GlaxoSmithKline

## Onderzoeksproduct en/of interventie

### Uitkomstmaten

#### Primaire uitkomstmaten

PLAQUE (Quigley & Hein, 1962) This score will be scored at baseline, after 2 weeks and at the final examination (after 4weeks). Plaque is assessed after disclosing with Mira-2-Ton® (Hager & Werken GmbH & Co. KG. Duisburg, Germany), using the Turesky (Turesky et al.1970) modification of the index (Quigley & Hein 1962) scored at six sites per tooth as suggested by Lobene et al. (1982) where the absence or presence of plaque is recorded on a scale 0-5 (0=no plaque, 5=plaque covered more than two-thirds of the tooth surface).

## Toelichting onderzoek

### Achtergrond van het onderzoek

Background of the study:

As gingivitis and periodontitis are usually more pronounced in the interdental areas than on the oral or facial surfaces in susceptible patients, the removal of plaque from these surfaces is very important. Therefore various adjuncts to plaque control have been developed such as dental floss, toothpicks and interdental brushes. However, daily interproximal plaque control is not a regular behavior. A common problem with all interdental cleaning aids is patient dexterity and motivation. Additional oral hygiene aids have been developed in an attempt to augment the effect of toothbrushing on reducing interdental plaque. A dental water jet or oral irrigator is an electric device which aims at the removal of plaque, both interdentally and along the gumline, to increase the performance of the oral hygiene and thus to improve the gingival health.

Objective of the study:

The present study aims at testing the adjunctive effect to toothbrushing of the Waterpik® dental water jet (DWJ) with a new jet tip in the potential to remove plaque biofilm and improve gingival health as compared to the Waterpik® dental water jet with a regular jet tip, and to the use of dental floss.

Study design:

The study is randomized, single blind, 3-group parallel, 30 day home use model combined with the use of a regular flat trimmed manual toothbrush (ADA) together with a standard dentifrice. Subjects will be randomly assigned to one of 3 groups according to a randomization list. During the 30-day experimental phase subjects in the test group will use the Waterpik® dental water jet with a new jet tip (test product) once a day in the evening. Subjects in the control group will use the Waterpik® dental water jet (DWJ) with a standard jet tip once a day in the evening. Subjects in the negative control group will use standard waxed dental floss once a day in the evening. To check for compliance, subjects are asked to register the time of use of the products onto a calendar record chart.

After meeting the inclusion criteria and completing informed consent subjects will be assessed for the first time (S1) for their baseline data for both indices. First gingivitis and secondly plaque according to the above described procedures. Subsequently each subject will receive a demonstration and verbal instruction from the study coordinator immediately following the screening assessment. At this moment subjects will use their allocated product for the first time. At 14 days (S2), subjects return to the clinic for the clinical assessments for both gingivitis and plaque. At 30 days (S3), again subjects return to the clinic for their final assessment for both parameters. Finally, after the last assessment, all subjects will receive a questionnaire using a visual analogue scale (VAS) designed to evaluate their attitudes with regard to the product used.

## **Doel van het onderzoek**

The present study aims at testing whether the Waterpik® DWJ with a new jet tip has a potential to improve gingival health and plaque inhibition as compared to the Waterpik® DWJ with a standard jet tip or use of standard waxed floss over a period of 4 weeks.

## **Onderzoeksopzet**

Week 0, 2 weeks, 4 weeks.

## **Onderzoeksproduct en/of interventie**

At baseline, 2 weeks, 4 weeks:

1. One group will use: Waterpik® DWJ with a new jet tip + ADA toothbrush / regular toothpaste (test);
2. Another group will use: Waterpik® DWJ with a standard jet tip + ADA toothbrush / regular toothpaste (control);
3. A third group will use standard waxed floss + ADA toothbrush / regular toothpaste (control).

## Contactpersonen

### Publiek

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### Wetenschappelijk

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## Deelname eisen

### Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1.  $\geq 18$  years of age;
2. A minimum of 5 evaluable teeth in each quadrant (with no partial dentures, orthodontic banding or wires) and  $\leq 50\%$  bleeding on marginal probing.

### Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Oral lesions and/or periodontal pockets  $> 5$  mm;

2. Pregnancy or systemic diseases such as diabetes.

## Onderzoeksopzet

### Opzet

|                  |                       |
|------------------|-----------------------|
| Type:            | Interventie onderzoek |
| Onderzoeksmodel: | Parallel              |
| Toewijzing:      | Gerandomiseerd        |
| Blinding:        | Enkelblind            |
| Controle:        | Geneesmiddel          |

### Deelname

|                         |                      |
|-------------------------|----------------------|
| Nederland               |                      |
| Status:                 | Werving gestart      |
| (Verwachte) startdatum: | 22-09-2009           |
| Aantal proefpersonen:   | 105                  |
| Type:                   | Verwachte startdatum |

## Ethische beoordeling

|                 |                  |
|-----------------|------------------|
| Positief advies |                  |
| Datum:          | 29-09-2009       |
| Soort:          | Eerste indiening |

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

## Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

## In overige registers

| Register       | ID                                  |
|----------------|-------------------------------------|
| NTR-new        | NL1921                              |
| NTR-old        | NTR2038                             |
| Ander register | MEC : 09/198                        |
| ISRCTN         | ISRCTN wordt niet meer aangevraagd. |

## Resultaten

### Samenvatting resultaten

N/A