

# The effect of Philips Airfloss Ultra plus Listerine compared to dental floss on gingival bleeding, dental plaque, and gingival abrasion in a healing of experimental gingivitis model, a parallel design

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What is the effect of Philips Airfloss Ultra plus Listerine Cool Mint compared to dental floss after a healing of experimental induced gingivitis as evaluated with the Bleeding on Marginal Probing (BOMP) index in a group of systemically healthy...

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

## Samenvatting

### ID

NL-OMON29183

### Bron

NTR

### Verkorte titel

APPLE: Airfloss Ultra plus Listerine Evaluated

### Aandoening

The main study parameter is the level of Bleeding On Marginal Probing (BOMP) (Van der Weijden et al. 1994)

The secondary outcome is (clinical):

- Level of gingival abrasion ; Gingival Abrasion Score (Van der Weijden et al. 2004).
- Subjects' attitude towards the study products

The secondary outcome is (laboratory):

- Microbial ecology of interdental plaque

- Microbial ecology of tongue dorsum
- Total Candida counts in unstimulated saliva, interdental plaque and tongue dorsum
- Total bacterial counts in saliva, interdental plaque and tongue dorsum?

## Ondersteuning

**Primaire sponsor:** ACTA Dental Research BV

**Overige ondersteuning:** Philips

## Onderzoeksproduct en/of interventie

## Uitkomstmaten

### Primaire uitkomstmaten

What is the effect of Philips Sonicare AirFloss Ultra plus Listerine Cool Mint compared to dental floss after a healing of experimental induced gingivitis as evaluated with the Bleeding on Marginal Probing (BOMP) index in a group of systemically healthy participants without periodontitis?

## Toelichting onderzoek

### Achtergrond van het onderzoek

Oral cleanliness is important for the preservation of oral health as it removes microbial plaque, preventing it from accumulating on teeth and gingivae. Currently, the use of a toothbrush and fluoridated toothpaste in developed countries is almost universal. The efficacy in plaque removal on average following a single brushing exercise is only a reduction from baseline plaque scores of 42%. The interdental space is a sheltered area that is difficult to access when teeth are in their normal positions. Tooth brushing alone does not reach the interproximal areas of teeth, resulting in parts of the teeth that remain unclean. Removal of plaque from these surfaces remains a valid objective because, in patients susceptible to periodontal disease, gingivitis and periodontitis are usually more pronounced in this interdental area than on oral or facial aspects. Good interdental oral hygiene requires a device that can penetrate between adjacent teeth. The oral irrigator has been on the market for decades and research has shown that it is effective in reducing the level of gingivitis. The combination with an antimicrobial mouth rinse has been researched but also abandoned. This is because the cost-effectiveness is not favourable. The new airfloss combines the principles of the oral irrigator with a small amount of water flow. So far research has focused on the use of water with this device. In the present study it will be combined with an anti-microbial fluid to enhance its effect.

## **Doel van het onderzoek**

What is the effect of Philips Airfloss Ultra plus Listerine Cool Mint compared to dental floss after a healing of experimental induced gingivitis as evaluated with the Bleeding on Marginal Probing (BOMP) index in a group of systemically healthy participants without periodontitis?

## **Onderzoeksopzet**

Screening

1. Familiarization phase
2. Experimental gingivitis phase (day 0)
3. Treatment phase (day 21, week 3)
4. Treatment phase (week 4)
5. Treatment phase (week 5)
6. Treatment phase (week 7)

## **Onderzoeksproduct en/of interventie**

Group 1: Philips Sonicare AirFloss Ultra plus Listerine Cool Mint

Group 2: Waxed dental floss, Brand: Johnson & Johnson, Type: Ultraclean®

## **Contactpersonen**

### **Publiek**

Acedemisch Centrum Tandheelkunde Amsterdam (ACTA)<br>Afdeling CPT- Parodontologie<br>Gustav Mahlerlaan 3004  
G.A. Weijden, van der

Amsterdam 1081 LA  
The Netherlands  
+31 (0)20 5188307

## Wetenschappelijk

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## Deelname eisen

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

- Male and female
- Right handed brusher and writer
- Age 18-35 years
- Classified as systemically healthy, assessed by medical questionnaire
- Minimum of 20 natural teeth: at least 5 evaluable in each quadrant of the lower jaw
- Dutch Periodontal Screening Index (DPSI) 0-3- (appendix 14.3) of the periodontium
- $\geq 25\%$  BOMP bleeding on marginal probing in the lower jaw at the moment of clinical screening
- Dental floss should fit interdentally in at least three interdental spaces per quadrant in the lower jaw, excluding the interdental central incisors space. Of these three spaces, at least two spaces should involve molar areas.
- Willing and able to give written informed consent
- Agree to follow the study instructions for the duration of the study
- Agree to refrain from brushing the lower jaw for 21 days in the experimental phase

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

- Overt dental caries
- Usage of (>1 time a week) any interdental device as part of regular daily oral care
- Smokers (Lie et al. 1998, definition non-smoker: <1 cigarette every day for at least one year)
- Removable (partial) dentures  Crowns, bridges and implant supported restorations in the lower jaw
- Overhanging restorations in the lower jaw as assessed with a periodontal probe
- Removable night guard
- Oral and/or peri-oral piercings
- Apparent oral lesions
- Presence of orthodontic banding (except for lingual retention wire)
- Oral surgery within the last 2 months
- Dental student or dental professional
- Participation in a clinical study within the previous 30 days

### General health and use of medication:

- Self-reported pregnancy or breastfeeding
- Use of antibiotics during the last 3 months
- Need of antibiotic prophylaxis prior to dental treatment
- Use of anti-inflammatory drugs on a regular basis
- Show evidence of any (systemic) disease or condition that could be expected to interfere with examination or outcomes of the study
- Adverse medical history or long-term medication

Prescribed medication (except for anti-contraceptives birth control pills)

A cardiac pacemaker or implanted cardiac defibrillator

## Onderzoeksopzet

### Opzet

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

### Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	03-02-2015
Aantal proefpersonen:	80
Type:	Verwachte startdatum

## Ethische beoordeling

Positief advies	
Datum:	29-01-2015
Soort:	Eerste indiening

## Registraties

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

ID: 42140  
Bron: ToetsingOnline  
Titel:

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

Geen registraties gevonden.

## In overige registers

<b>Register</b>	<b>ID</b>
NTR-new	NL4866
NTR-old	NTR4983
CCMO	NL51667.018.14
OMON	NL-OMON42140

## Resultaten

### Samenvatting resultaten

NA