

## GoodHealth

By **MARIANNE  
POWER**

# The titanium toothbrush that could kill off toothpaste

**A** HIGH-TECH toothbrush from Japan could mark the end of toothpaste — and plaque. The device, already used by millions, looks like an ordinary toothbrush, but contains a titanium rod in the handle.

This, when exposed to artificial or natural light, releases special ions — particles charged with electricity — which attack plaque on the teeth without the need for toothpaste.

Plaque is the sticky layer of bacteria which forms on the teeth after eating.

When we eat sugary foods the plaque bacteria produce acid which attacks the teeth, causing tooth decay. Saliva helps to wash away and neutralise this acid, but it is harder for saliva to work the more plaque has built up and the more sugary foods we eat.

The main purpose of toothpaste is to clean the teeth of plaque using mild abrasive detergents, as well as being an important source of fluoride which has been proven to protect teeth against attack from bacteria.

But toothpaste is not needed with the new device because it needs only saliva to clean the teeth.

The light-sensitive titanium rod inside the Soladey-2 toothbrush uses light to produce negatively-charged particles called ions.

The rod releases these ions, which blend with saliva and pull positive hydrogen ions from the acid in the plaque, neutralising its acidity.

Plaque — which traditionally has to be brushed off with a toothbrush — is said to disintegrate.

A study of 60 women by the Department of Preventive and Community Dentistry in Tokyo found that after three weeks using the toothbrush the group had significant improvement in inflamed gums and oral cleanliness compared to a control group.

A clinical trial carried out by the College of Dentistry, in Saskatchewan, Canada, on 80 children, compared the Soladey toothbrush's effectiveness with one of identical appearance, but without the titanium.

The results showed that over three weeks the Soladey was better at removing plaque — especially on the outer surfaces of the teeth. Studies have also shown that titanium exposed to a light source is



Eireen Pearson's Soladey-2

effective at destroying the bacteria found in the mouth related to decay — called *Streptococcus mutans*.

To use the device you simply moisten the brush and rod with water or saliva then brush your teeth lightly with your mouth wide open so light can reach your teeth.

Your saliva foams lightly when the toothbrush is working effectively. You can also use it with a small amount of toothpaste.

The three independent studies carried out have found an

effect but have all been for very short periods of time — and dentists here remain sceptical.

There have been no clinical trials carried out or published in Europe and because of this no dental associations recommend the product.

However in Japan, where it has been used for over ten years, two million brushes and five million replacement heads are sold every year.

The brush has also been sold in some British health food shops for the last two years. Last year five thousand replacement heads were sold — which suggests that people who buy the brush keep using it.

London dentist Dr Michael Carling believes much more research into the device is needed before he would recommend it.

'The theory behind it is plausible, but the research done so far is not clinically significant,' he says.

'Until there is more independent research in properly controlled trials over several months, published in reputable journals, comparing this brush with normal and electric toothbrushes, we just don't know.'

Dr Andrea Ubhi, a private dentist from Yorkshire, says: 'There are always new gizmos coming out, but I have to say I've never heard of this one and I won't be rushing out to buy it.'

'I would worry about not getting fluoride from toothpaste to strengthen teeth. It

also can't remove the plaque in between the teeth, which can only be removed with flossing.'

Eireen Pearson, 59, a retired cashier from Perthshire, Scotland, says: 'I've been using this for two years and I couldn't be happier. I read about it in a magazine which said lots of Japanese people use it.'

'I was curious to try one — and through research on the internet I found that a couple of health-food shops were selling them here.'

'At first it was a bit strange to brush my teeth without toothpaste, but I soon got used to it and now I don't miss it at all. My husband says my breath is fresh so I'm not worried.'

'More importantly, I used to always have tartar, which builds up when plaque hardens, scraped off during my six-monthly dental visits, which I hated.'

'But since using this I haven't had any scraping and in fact haven't had to go the hygienist at all.'

'My dentist says my teeth are perfect. I haven't had any fillings or decay.'

'And a bonus you buy one brush, then simply replace the little heads a few times a year — which works out quite economically.'

■ *THE Soladey-2 is available mail order at PitRok, [www.pitrok.co.uk](http://www.pitrok.co.uk), 0870 444 840. The brush costs £12.49, and four replacement heads cost £11.95.*

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