

# Is it safe to use a £3 paste for whitening your teeth? GOOD HEALTH assesses the performance of a range of DIY treatments

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A whiter smile is seen as healthy, but with professional tooth-whitening treatments costing a minimum of £200, many people turn to over-the-counter products. But some DIY treatments have been shown to damage tooth enamel, burn gums and cause painful sensitivity. Here, dentist Richard Guyver, who runs practices in Emsworth, Hampshire, and Chichester, West Sussex, assesses the latest offerings; we then rated them for whitening performance and their effect on oral health.

What's the best DIY teeth-whitening treatment? We put a selection to the test.

## 1) Blanx White Shock toothpaste with LED – £7.49/50ml

**Claims:** Contains Actilux, a patented, self-cleaning ingredient that reacts with light to break down dirt and bacteria and help whiten teeth naturally. An LED light in the neck of the toothpaste tube activates the formula as it passes through it.

The LED light can boost the formula if held in front of your mouth for one minute every day. Actilux reacts to daylight, too.

**EXPERT OPINION:** Actilux is claimed to be a light-activated tooth whitener, but I cannot find any sound scientific evidence to confirm it works. This paste contains isopropyl alcohol and benzyl alcohol – alcohol has traditionally been used in oral hygiene products to give a fresh sensation, but most manufacturers are removing it because of possible links with oral cancer.

But this paste also contains fluoride and xylitol, both proven to reduce decay. Fluoride strengthens tooth enamel and xylitol helps prevent bacteria sticking to teeth.

3/10

## 2) Rapid White Express Max Effect 5 minute dissolving tooth-whitening strips

*£22.99 for one week's supply (14 treatments)*

**Claims:** Whiter teeth in seven days. These ultra-thin, flexible strips start to whiten teeth and remove stains the minute they are applied to your teeth. The strip dissolves in five minutes.

**EXPERT OPINION:** This treatment releases chlorine dioxide, a proven dental bleaching agent, which, although it will whiten teeth, is extremely acidic.

In high concentrations, chlorine dioxide can strip enamel from teeth, leave them permanently discoloured and sensitive to temperature. These strips' ingredients could give you a sore mouth.

It's not clear how much chlorine dioxide is released in these, but if it's very small, I question how efficient their whitening effect can be.

These strips also contain citric acid, which softens enamel, leaving teeth more vulnerable to damage and decay. I'm not sure how you can use these without your lip touching them, so there's a risk the ingredients could give you a sore mouth.

1/10

## 3) Pearl Drops Beauty Sleep – £3.49/20ml

**Claims:** Active oxygen boosts whiteness of your teeth. Patented Liquid Calcium technology restores and strengthens enamel. Vitamin E helps nourish and preserve healthy gums. After brushing your teeth in the evening, massage serum onto teeth and gums.

**EXPERT OPINION:** The oxygen infused in this 'serum' is proven to remove pigmentation from teeth and is the active ingredient in most professional teeth-whitening treatments.

It seeps through enamel and dentine (the hard surface of the tooth), clearing discoloration as it goes. This product has the potential to whiten teeth rather than simply remove superficial stains like most toothpastes, because of the time it stays on the teeth.

Unfortunately, the active ingredient is likely to be diluted by saliva fairly quickly.

This paste also has calcium and phosphate – found naturally in saliva, and which protects tooth enamel from erosion – in the Liquid Calcium, a patented ingredient, but I can't find sound evidence to prove this helps strengthen teeth.

However, vitamin E is often used to help heal gums damaged by misused professional tooth-whitening products – which sometimes happens at beauty salons and whitening booths in shopping malls. The sodium fluoride in this helps harden teeth and protect against decay.

8/10

#### **4) Dr Oliver Whitening Wands – £45/4ml**

**Claims:** Helps gently whiten teeth using hydrogen peroxide. Allow gel to activate for up to 30 minutes and use twice daily.

**EXPERT OPINION:** Hydrogen peroxide releases oxygen into the teeth to remove deep-seated discoloration.

This whitening agent is found in professional treatments but as this is an over-the-counter product, the percentage must be 0.1 per cent or lower, compared with up to 6 per cent in a professional product. There's no real evidence hydrogen peroxide levels below 0.1 per cent are effective. Saliva will dilute the gel as it sits on the teeth.

This pricey product also contains alcohol, which has a slight drying effect on the teeth, which immediately makes them look whiter, if only for a short time.

1/10

#### **5) Beverly Hills Dentist's Choice Gum and Whitening Expert – £3.49/75ml**

**Claims:** Removes stains in one minute and helps prevent the signs and effects of gum disease. Contains a unique gum-protection system, including vitamin E to invigorate and strengthen the gums, fluoride to protect the exposed root area, and permethol to help reduce and stop bleeding gums.

This toothpaste also includes panthenol, Q10 and folic acid to help promote healthy gum tissues. Restores your teeth to a natural, white colour without using harsh abrasives or bleach.

**EXPERT OPINION:** I can't find any whitening ingredients in this formula. However, the hydrated silica and sodium bicarbonate are efficient superficial stain removers – they work by gentle abrasion.

So if teeth are stained they will appear cleaner but the underlying colour will remain the same. There is some evidence that panthenol reduces the bleeding caused by gum inflammation, and vitamin E can help to heal damaged gums; Q10 also has some anecdotal but unproven support for improving gum health. That said, there's no substitute for good brushing and flossing techniques to keep gum disease at bay. But the fluoride here will harden up teeth against decay.

3/10

#### **6) Arm & Hammer Advance White Max Booster – £3.79/50ml**

**Claims:** Give your regular toothpaste a concentrated baking soda whitening boost. Advance White Max Booster (which you add to your usual toothpaste) includes extreme levels of nature's cleaning ingredient, baking soda, and the innovative enamel surface restorer, Liquid Calcium.

Together they act as a catalyst to your toothpaste and the naturally occurring minerals in saliva, restoring your enamel surface for whiter teeth.

**EXPERT OPINION:** Bicarbonate of soda (baking soda) will remove stains – but it won't whiten them. Because baking soda is an abrasive, some experts say there's a risk of permanently damaging the white enamel and increasing sensitivity if used too often.

It's advisable to avoid using anything that might wear your teeth down unnecessarily. For this reason, I'd err on the side of caution and use this once a week, rather than daily.

The Liquid Calcium may be to counteract potential damage from over-brushing, which can erode the surface of the teeth – but I've not seen any evidence to prove it does restore enamel. This also contains protective fluoride.

4/10