

Mouthrinses

July 1997

A wide range of mouthrinses is on the market, from simple breath fresheners to products which make a real contribution to oral health. The British Dental Association's accreditation logo appears on certain mouthrinses, to help consumers identify those which have demonstrated health benefit with scientific evidence. This factfile explains how mouthrinses can help keep gums and teeth healthy and looks at the ingredients of some of the mouthrinses on the market.

How can mouthrinses benefit oral health?

Mouthrinses which contain fluoride can help to prevent dental decay. Fluoride mouthrinses may be recommended for children having orthodontic treatment, especially fixed appliance treatment which makes it more difficult to clean teeth. Fluoride rinses may also be recommended for children identified as at special decay risk, or for patients suffering from dry mouth, or who have undergone radiation therapy. For more information about fluoride, see the BDA's factfile on fluoride toothpastes.

Mouthrinses can also be formulated to counter inflammatory periodontal (gum) diseases, using ingredients such as:

- Chlorhexidine gluconate - one of the most effective anti-plaque agents, but it may stain the teeth if used over a long period of time;
- Triclosan - an anti-plaque agent with anti-inflammatory properties;
- Essential oils - also anti-plaque agents with anti-inflammatory properties;
- Cetylpyridinium chloride - an anti-plaque agent with bactericidal activity;
- Peroxide and perborates (oxygenating agents) - these are also anti-plaque agents;
- Chlorine dioxide - this agent is claimed to eliminate volatile sulphur compounds and reduce bad breath.

Mouthrinses with ingredients such as these may contain fluoride as well. Some mouthrinses have

been the subject of extensive clinical trials, which have shown them to be effective in reducing

gingival inflammation¹. However, many mouthrinses on the market have not been the subject of clinical testing and should be regarded as cosmetic rather than health products.

What about mouthrinses available only from pharmacies or on prescription?

This factfile is about daily use mouthrinses which are on general sale. Some mouthrinses are only available from pharmacies, either as over-the-counter (OTC) products or prescription-only medicines (POM). These products should only be used on dentist advice. Some have side effects such as staining if used for prolonged periods.

How can daily use mouthrinses help people with gum problems?

Effective and regular removal of plaque deposits is an essential part of the treatment and prevention of gum disease. But toothbrushing and periodic professional scaling - 'mechanical oral hygiene' - may not always be enough. This is where antimicrobial mouthrinses can help. They are an adjunct to toothbrushing, helping to make plaque removal more effective and reduce inflammation. Mouthrinses are not a substitute for regular toothbrushing with a fluoride toothpaste, but some have been shown to do a lot more than just freshen breath.

How often should mouthrinses be used?

Product packs normally advise use twice daily, sloshing the rinse round the mouth for half a minute or a minute - the advice varies from product to product. BDA-accredited products will have demonstrated efficacy at the levels shown on packs and efficacy will be reduced if the product is used less often. Equally, products should not be used more often than packs indicate. Check the label for specific instructions on duration of usage and on whether they should be used before or after brushing.

Should children use mouthrinses?

Packs normally show age limits. The minimum age for use varies according to the ingredients - it is normal

higher for rinses containing higher levels of alcohol. But small children should not use any mouthrinses, because they are not able to spit out properly and there is therefore a risk of swallowing². Also, of course, most children have good gum health and do not need to use mouthrinses, unless they are identified as being at special need of a fluoride rinse for orthodontic or other reasons.

Why do mouthrinses contain alcohol?

Most mouthrinses contain some pharmaceutical grade alcohol, as a preservative and as a semi-active ingredient. The amount varies from product to product. The BDA's Accreditation Scheme advises use of child resistant closures for mouthrinses containing a high proportion of alcohol, to minimise the risk of accidental swallowing. Aftershave, perfume, cough mixtures and other household products also contain alcohol, so mouthrinses are not unusual in this respect, but it is important to follow their recommendations for use.

Do mouthrinses have any adverse effects?

It has sometimes been suggested that alcohol-containing mouthrinses might be a cause of oral cancer. Oral cancer is known to be associated with tobacco use and excessive alcohol consumption. People who smoke and drink may also use mouthrinses to conceal the smell, so the epidemiological data can be difficult to interpret.

However, the BDA's Accreditation Panel carried out an independent assessment of mouthrinse safety and concluded that there is no evidence that if used as directed mouthrinses can lead to oral cancer. A further review carried out by a working party of the US Food and Drug Administration in 1996 came to a similar conclusion³.

It has also been suggested that some daily use mouthrinses may be a cause of tooth erosion as a result of their acidity. Some may, but products accredited by the BDA demonstrated non-erosiveness in normal use.

Which mouthrinses are accredited by the BDA?

The BDA Accreditation Scheme helps consumers identify products which have demonstrated 'safety, quality and efficacy' to an independent panel of experts. Generally, these are brands from major manufacturers who are committed to research into the improvement of oral care products. The following rinses have gained BDA accreditation and now carry the BDA logo:

Colgate Total Plax
Listerine

References:

1. Chemical agents for control of plaque and gingivitis, The American Academy of Periodontology, 1994
2. Vogel C, Caraccio T, Mofenson H, Hart, Alcohol intoxication in young children, Clinical Toxicology 1995 33(1): 25-33
3. Food and Drug Administration: Dental products panel, OTC Plaque Products Subcommittee, condensed transcript and concordance, Washington, 1996

July 1997

Mouthrinses