

Sore throats suck. Do throat lozenges help at all?

July 14 2022, by David King



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It's hard to get through a winter without suffering sore throat, but luckily

they normally get better within a [few days](#).

Sore throat is a common symptom of COVID and its [newer variants](#). And of course, many [sore throats](#) are caused by viral colds or flu, so they can be treated at home.

The most common treatment is probably throat lozenges—but do they really work any better than sucking on a hard lolly?

Why does my throat hurt so much?

A [sore throat](#) can fall anywhere between slight discomfort to a sensation of "swallowing razor blades." Occasionally it hurts so much to swallow that people dribble saliva from their mouths, rather than swallowing it.

Bacteria and viruses can invade the thin moist skin (mucosa) lining the throat. This kills many lining cells and triggers [inflammation](#), which appears as redness, swelling and increased secretions.

Infections in the nose also cause thick mucus to travel down the back of the throat and cause further irritation. This is referred to as "post-nasal drip." A blocked nose causes reliance on mouth breathing, which tends to dehydrate the already inflamed throat. Ouch.

What do lozenges do?

Lozenges are a solid medication intended to be dissolved or disintegrated slowly in the mouth. They consist of one or more active ingredients and are flavored and sweetened to make them pleasant tasting. Hard [lozenges](#) are generally formed using sucrose or other sugars similar to the process for hard candy confections.

There are many active ingredients added to lozenges, including antiseptics; [pain relievers](#); menthol and eucalyptus oil; cough suppressants such as [dextromethorphan](#) and soothing compounds. "Cough drops" and sore throat lozenges are [almost identical](#) but may contain different proportions of these ingredients.

Different brands of lozenges advertise a confusing choice of formulations. It is more common now to see brands with "triple action" ingredients that promise to be anesthetic (to numb pain), antiseptic (to kill germs) and anti-inflammatory (to reduce redness).

Unfortunately, clinical trials directly comparing the benefit of different medication types for most common conditions (head to head trials) are rarely undertaken. This is likely due to the added complexity of such trials compared with placebo controlled trials, and medication research often being [funded by the pharmaceutical manufacturer](#) of the products. So, we have to rely on indirect comparisons instead.

The traditional approach to treating sore throat is to assume lozenges or gargling with antiseptics will reduce sore throat by treating the infection causing it.

However, a limited number of trials of antiseptic lozenges (such as Strepsils and Betadine lozenges) produced only a [small reduction](#) in sore throat pain (a difference of one unit in a ten-point pain scale compared with placebo). So they do seem to provide [a small degree of relief](#), and continue to be sold.

More and more brands are including other medications beyond antiseptics in their range of throat lozenges

Checking the effects

There are some other explanations for the apparent effectiveness of any treatment for a self-limiting infection. How do we know if the symptom or infection would have lasted longer if we hadn't used that treatment? To tell, we'd need a [control group](#) who didn't receive the treatment, and a large sample size to overcome the role of chance causing the difference.

Relief might come from something other than the active ingredient. After all, sucking on a sweet, hard [lozenge](#) could soothe a dry throat by increasing saliva release. To test this effect, we'd need a true placebo medication—identical in every respect apart from the active ingredient.

Several well-designed and well-conducted controlled [clinical trials](#) show some active ingredients provide significantly better pain relief than placebo lozenges. These medications fall into two main groups: local anesthetics (such as benzocaine) and anti-inflammatory agents (flurbiprofen).

A [study](#) comparing benzocaine lozenges, (now offered in many brands of lozenges) to placebo lozenges found quicker pain relief (20 minutes for benzocaine compared to more than 45 minutes for the placebo). More study participants felt relief using the medication, though very few reported complete pain relief.

A systematic [research review](#) found nine studies that supported the benefit of flurbiprofen lozenges (available in Australia in Strepfen Intensive lozenges) for a range of sore throat conditions. In [one of the reviewed studies](#), flurbiprofen produced greater reductions in sore throat pain (47%) as well as difficulty swallowing (66%) and swollen throat (40%) over the first 24 hours compared with placebo.

One of the common sore throat treatments sold in Australia is Difflam, which contains the anti-inflammatory medication benzydamine. One [clinical trial](#) found a greater than two point reduction in the ten point

pain scale by day three in those using benzydamine versus placebo.

Are lozenges better than sore throat sprays?

A [study](#) using radioactive labeled medication demonstrated more prolonged and complete delivery of [medication](#) in the mouth for lozenges compared to spray and gargle. This seems to be the basis for the claim that sprays are less effective than lozenges.

However, drawing conclusions from such evidence is less accurate than a study that directly compares the effectiveness of the various modes of delivery on actual pain. One [study](#) compared flurbiprofen and found similar pain relief benefit between lozenges and spray.

So the choice of delivery method can be based on personal preference, including the taste of the product.

The takeaway

Sore throat lozenges and sprays provide some additional relief for the [pain](#) of sore throat, particularly those with anti-inflammatory or local anesthetic ingredients. They are often combined with an antiseptic agent, which may or may not add any significant benefit.

Used as directed, these agents seem safe and have negligible adverse effects. They are also affordable and readily available.

But this shouldn't stop us using other treatments we know also soothe sore throats, such as a small [spoonful of honey](#).

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Provided by The Conversation

Citation: Sore throats suck. Do throat lozenges help at all? (2022, July 14) retrieved 21 June 2024 from <https://medicalxpress.com/news/2022-07-sore-throats-throat-lozenges.html>

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