

Zinc, Zicam, the Common Cold & Side Effects

In June the FDA advised people not to use Zicam intranasal products that contain zinc, because of the risk of damaging cells in the nose crucial for smell. This damage may cause anosmia (loss of the sense of smell), which may be permanent. Without the sense of smell, people's sense of taste and enjoyment of food dramatically diminishes. Even more ominous, anosmic people can't detect dangers such as gas leaks, smoke and spoiled food.

All of the Zicam products covered in the FDA warning are sold over the counter, contain zinc, and are administered into the nose as a treatment for colds (the sneezing, sore throat, congestion type). The FDA's warning applies to Zicam Cold Remedy Nasal Gel, Zicam Cold Remedy Gel Swabs and Zicam Cold Remedy Swabs, Kids Size. The director of the FDA's Office of Compliance advises consumers to discard any of these products.

While asserting that the FDA's action is unwarranted, Zicam's maker, Matrixx Initiatives, Inc., voluntarily withdrew Zicam Cold Remedy Swabs and Cold Remedy Gel from the market. Consumers may request a refund by calling 877-942-2626 or visiting [Zicam's web site](#).

People have filed more than 130 reports with the FDA of anosmia and a few cases of loss of taste after using those products. The FDA "is aware that Matrixx appears to have more than 800 reports related to loss of sense of smell associated with Zicam Cold Remedy intranasal products." Matrixx Initiatives has yet to share those reports with the FDA.

Matrixx states that "consumer safety is and has always been the company's top priority." Matrixx president William Hemelt says that the company "stands behind the science of its products" and that "there is no reliable scientific evidence that Zicam causes anosmia."

Scientists have done studies of zinc and the common cold since 1984. Swallowing zinc as a tablet doesn't influence cold duration or symptoms. Some zinc lozenges and nasal gels do, but not every zinc product works. The zinc formulation has a huge effect on whether it works or not.

Scientists propose that zinc blocks a virus' ability to attach to and reproduce in cells lining the nose and respiratory tract. Hence the necessity of using a lozenge that bathes the mouth and throat, or a nasal spray that contacts the lining of the nose. If zinc binds to the receptor and the virus can't bind to cells, no infection results.

Only the ionic form of zinc binds to these receptors. Zinc gluconate and zinc acetate release ionic zinc easily, but they taste really bad. Complexing them with plant-derived oils or flavoring agents like citric acid, tartaric acid or sorbitol improves taste, but prevents zinc release, eradicating effectiveness. Using a calcium lactate or dextrose base tastes better without blocking the benefit.

Zinc gluconate or zinc acetate lozenges, containing between 9 and 23 mg of elemental zinc in a sugar base, dissolved in the mouth every 2 hours, shortens symptom duration by about half. You have to start the lozenges within 24 hours of symptom onset to see any benefit.

A nasal gel of ionic zinc in an emulsion, sprayed four times a day, seems to work at least as well as the lozenges. It reduces the number of symptomatic days by as much as two-thirds if started within 24 hours. Zinc sulfate or zinc gluconate gels do not work.

We have no evidence that zinc is effective for colds caused by any virus other than rhinovirus. All the studies were done with rhinovirus and we know that it and zinc bind to the same receptor, but that may not be true for other viruses. It probably doesn't work for Influenza.

Our immune system, which fights off infections, requires zinc for normal function. We can be sure to have an adequate zinc supply by eating zinc-rich foods, like shellfish, cereal bran, Brewers Yeast, wheat germ, pine nuts, pecans, cashews, liver and Parmesan cheese. Someone with adequate zinc status can't boost their cold-fighting arsenal with mega-dose supplements.

We should not take zinc formulations willy-nilly, just in case we might have a deficiency, or for a whole cold season. Sixty mg per day causes adverse effects in children. High dose zinc supplements (300 mg per day) *harm* immune function in healthy adult men, and cause good cholesterol (HDL-C) levels to plummet. Zinc competes with other minerals for absorption in the digestive tract: Prolonged use may induce measurable calcium and copper deficiencies. Copper deficiency can cause iron deficiency and anemia.

Limit zinc lozenges or nasal spray to no more than 7 days – If it hasn't worked by then, it's not going to, so give it up before it causes unintended consequences.