

# EXHIBIT F

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## Studies Show the Importance of Nasal Sprays Like Xlear During This Time

**D**ue to current outbreaks and health concerns, many researchers are looking for a good vaccine or treatment to use for COVID-19. Many of these are extremely expensive. However, there are options that are inexpensive and also effective against Sars-CoV-2. This article reviews three studies that support the idea of using a simple nasal spray like Xlear with xylitol to combat illness.

In a study performed at UNC Chapel Hill,<sup>1</sup> researchers wanted to have a clearer idea of how one contracts COVID-19, and how the infection progresses through the body. Researchers found that the COVID-19 virus first infects the nasal cavity and firmly establishes itself there before moving to the respiratory system in later stages. As one of the senior co-authors stated, "If the nose is the dominant initial site from which lung infections are seeded...therapeutic strategies that reduce virus in the nose, such as nasal irrigation or antiviral nasal sprays, could be beneficial." This study shows that administering treatment through the nose is the best way to treat COVID-19, especially in its early stages.

In a recent study published in the reputable *Journal of American Medical Association (JAMA)*,<sup>2</sup> researchers wanted to know if a povidone-iodine nasal antiseptic would affect SARS-CoV-2 virus in the nose, and if so, how quickly. The study "demonstrated that SARS-CoV-2 initially infects ciliary cells



of the nasal mucosa and that this may represent the dominant initial site for infection... The variable severity witnessed during the COVID-19 pandemic may be due to variable transmission of SARS-CoV-2 from the nasal cavity to the lungs in patients who test positive for the virus. Therefore, **transnasal viral inactivation may not only prevent person-to-person spread of SARS-CoV-2, but may also diminish the severity of disease in patients by limiting spread and decreasing viral load delivered to the lungs.**"

This study proves that preventing and treating COVID-2 through the nose is a viable and strong option. If something kills the virus in the nose, then it can be an effective solution to COVID-19. If we can kill/destroy/deactivate/block adhesion (pick your term) of the SARS-CoV-2 virus (and really most viruses and bacteria) in the nose, then we don't get as sick and it should slow the spread of the virus.

At University of Tennessee,<sup>3</sup> researchers tested to see if iota-carrageenan had an anti-viral effect against SARS-CoV-2, the virus that causes COVID-19. While performing their study, in one test they included

xylitol in the samples, including the placebo, which yielded unexpected results. Researchers found that iota-carrageenan had anti-viral properties against SARS-CoV-2 by inhibiting viral adhesion. More interesting though was that xylitol also displayed the same anti-adhesive effect against the virus. Previous studies have shown that xylitol has an anti-adhesive effect on bacteria. This study shows that it also has the same effect on viruses, specifically SARS-CoV-2.

University of Utah and University of Geneva both performed studies with SARS-CoV-2 and Xlear Nasal Spray with promising results. All of these studies come together to support the use of Xlear during this time. There are no drawbacks or side effects from Xlear, and yet the benefits are astronomical.

#### References:

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- 2 Frank, S., Brown, S. M., Capriotti, J. A., Westover, J. B., Pelletier, J. S., & Tessema, B. (2020). In Vitro Efficacy of a Povidone-Iodine Nasal Antiseptic for Rapid Inactivation of SARS-CoV-2. *JAMA Otolaryngology-- Head & Neck Surgery*. <https://doi.org/10.1001/jamaoto.2020.305>.
- 3 Vega, J. C., Bansal, S., Jonsson, C. B., Taylor, S. L., Figueroa, J. M., Dugour, A. V., & Palacios, C. (2020). Iota carrageenan and xylitol inhibit SARS-CoV-2 in Vero cell culture. *BioRxiv*. <https://doi.org/10.1101/2020.08.19.225854>.