

Information You Should Know about COVID

Dr. Lon Jones, DO

Even though COVID-19 is a three stage illness, the CDC has only given treatment guidelines for Stage 3. However, treatment should begin as soon as people test positive, even if they are only in Stages 1 or 2. With 90% of viral load in the nose, people should treat the illness in its early stages with a nasal spray like Xlear to help defend against the virus and regain their health faster.

Treatment through the nose isn't a novel or unproven method. Here are a few studies, articles, and links that will help you understand the most common sense way to treat COVID-19.

University of Tennessee Anti-Viral Study

Iota-carrageenan and Xylitol Inhibit Sars-CoV-2 in Cell Culture

Shruti Bansal, Colleen B. Jonsson, Shannon L. Taylor, et. al. BioRxiv. August 21, 2020.

Overview:

At University of Tennessee, researchers tested to see if iota-carrageenan had an anti-viral effects 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.

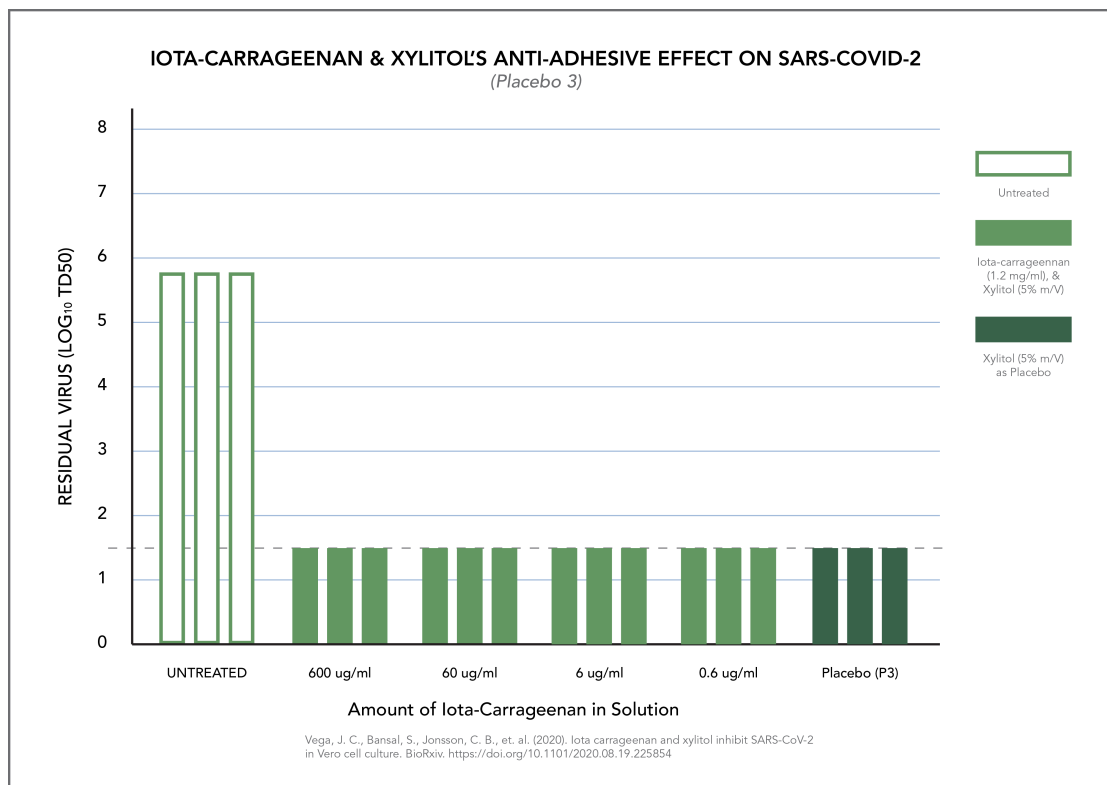
Results:

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.

Why Is this Important?

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.

[Read the study](#)



IOTA CARRAGEENAN P3 2

Study Published Journal of American Medical Association (JAMA)

In Vitro Efficacy of a Povidone-Iodine Nasal Antiseptic for Rapid Inactivation of SARS-CoV-2

Samantha Frank, MD; Seth M. Brown, MD, MBA; Joseph A. Capriotti, MD; Jonna B. Westover, PhD., September 17, 2020.

Overview:

Researchers wanted to know if a povidone-iodine nasal antiseptic would affect SARS-CoV-2 virus in the nose, and if so how quickly.

Results:

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 virus then spreads via the nasal-oro-pharyngeal axis to the lungs through microaspiration, leading to the damaging respiratory infections seen in COVID-19. 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. Povidone-iodine nasal irrigation may be beneficial for the population at large as an adjunct to mask usage as a means of virus mitigation.”

Why Is this Important?

This study proves that preventing and treating COVID-2 through the nose is a viable and strong option. If something kills the virus (see the Utah State University study below) in the nose, then it can be an effective solution to COVID-19. If we can kill/destroy/deactivate/block adhesion 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.

Read the Study

Utah State University COVID-19 Study

Virucidal Activity of Xlear Compounds vs SARS-CoV-2 Virus and Rhinovirus-16

Jonna B. Westover, Ph.D., Utah State University, Institute for Antiviral Research

Overview:

At Utah State University's Institute of Antiviral Research, Dr. Jonna Westover, Ph.D., and her team performed various studies to identify if Xlear Nasal Spray had any effect on COVID-19.

Results:

The study compared the possible effect of two Xlear nasal sprays, Chlorhexidine, and ethanol, on the COVID-19 virus. Water was used as a control. The two Xlear Sprays were: original Xlear Nasal Spray (saline and xylitol alone) and Xlear Rescue (saline and xylitol with added essential oils). The results were outstanding. Each of the Xlear nasal sprays reduced the virus to an undetectable amount. Chlorhexidine had a negligible effect on the virus.

Why Is this Important?

With government agencies and pharmaceutical companies pumping so much money and energy into finding a solution for COVID-19, this study shows a simple, safe, and cost-effective option that could help people be healthy amidst the pandemic.

Efficacy of Xlear Compounds as a Virucide Against SARS-CoV-2 (25-minute incubation with virus at 22 ± 2°C)

	Concentration	Incubation	Virus Titer ^a	LRV ^b
Xlear Nasal Spray	90%	25-min	<0.67	3.33
Xlear Rescue Spray	90%	25-min	<0.67	3.33
Chlorhexidine 0.03%	90%	25-min	<3.67	0.33
Ethanol	67.5%	25-min	<0.67	3.33
Virus Control	NA	25-min	4.0	NA

^a Log₁₀ CCID₅₀ of virus per mL. The assay lower limit of deviation is 0.67 Log₁₀ CCID₅₀/mL.

^b LRV (log reduction value) is the reduction of virus compared with that of the virus control.

Efficiency of Xlear Against CoV 2b 1

COVID-19's Three Stages and Possible Long-Lasting Effects A Pathophysiological Perspective on COVID-19's Lethal Complication: From Viremia to Hypersensitivity Pneumonitis-like Immune Dysregulation Marcos A. Sanchez-Gonzalez, Dave Moskowitz, Priya D. Issuree George Yatzkan, Syed A. A. Rizvi, and Kenneth Day; *Infect Chemother.* 2020; 52:e31. Published online Jul 15, 2020.

Overview:

In this paper, researchers argue for the need to treat COVID-19 in its early stages to mitigate potential damage to the lungs.

Synopsis:

Researchers have observed similarities between COVID-19 and hypersensitivity pneumonitis (HP), a disease that affects the lungs. HP causes inflammation in lung tissue, difficulty breathing, and irreversible lung scarring if left unchecked. The medical community has seen these same symptoms with COVID-19. Both illnesses also have three stages of progression. The authors of this article highlight the need to treat COVID-19 early on, like one would for HP.

Why Is this Important?:

The CDC guidelines provide little direction for treatment in the early stages of COVID-19. However, this is a very important time to have treatment in order to reduce serious, long-lasting effects. Washing the nose with Xlear Nasal Spray is a crucial step in staying healthy and curbing COVID-19's progression into later stages.

Read the Study

Three Stages of COVID-19

	Infected Area	Bodily Response	Recommended Treatment
Prevention			- Masks - Distancing - Handwashing - Washing Nose with Antiviral or Virucidal
Stage 1 Initial Infection	- Sinuses - Throat	IMMUNE SYSTEM ACTIVATED Common cold/flu symptoms	- Tylenol - Washing Nose with Antiviral or virucidal
Stage 2 Pulmonary Response	- Sinuses - Throat - Lungs	IMMUNE SYSTEM STRONGLY AFFECTED - Persistent Cough - Shortness of Breath - Low Oxygen Levels	- Tylenol - Washing Nose with Antiviral or virucidal
Stage 3 Hyperinflation Response	- Sinuses - Throat - Lungs	IMMUNE SYSTEM COMPROMISED Possible Damage to: - Heart - Lungs - Kidneys & other organs	- Hospital - Washing Nose with Antiviral or Virucidal

COVID Stages Chart_3 01

UNC Chapel Hill Study – Mapping COVID-19

SARS-CoV-2 Reverse Genetics Reveals a Variable Infection Gradient in the Respiratory Tract

Yixuan J. Hou, Kenichi Okuda, Caitlin E. Edwards, Scott H. Randell, Richard C. Boucher, Ralph S. Baric, et. al; *Cell*. Volume 182, Issue 2; published online May 26, 2020.

Overview:

Through this study, researchers wanted to have a clearer idea of how one contracts COVID-19, and how the infection progresses through the body. They were able to map how the COVID-19 infection travels through the body.

Results:

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.

Why Is this Important?:

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.

Read the Study³⁰⁶⁷⁵⁻⁹) Read the Article about the Study

New England Journal of Medicine Correspondence – Viral Load in the Nose

SARS-CoV-2 Viral Load in Upper Respiratory Specimens of Infected Patients

Lirong Zou, M.Sc., Feng Ruan, M.Med., Mingxing Huang, Ph.D., et. al, N Engl J Med 2020; 382:1177-1179; March 19, 2020.

Overview:

In this correspondence, researchers shared their findings about where the highest viral load is in the body with people suffering from COVID-19.

Results:

After analyzing swabs taken from participants' throats and noses, researchers found that there was a higher viral load in the nose.

Why Is this Important?:

These findings support the idea that initial treatment should take place in the nose, since that is where the virus resides and establishes itself.

Read the Correspondence

Interview with Dr. Gustavo Ferrer Former WHO Researcher, Founder of the Cleveland Cough Clinic, and Head of Two ICUs in Florida



Ferrer Photo

Gustavo Ferrer, MD, is leading the charge to find a simple, cost-effective way to treat COVID-19. He helped conduct the study at Utah State University researching if Xlear would affect the COVID-19 virus. The researchers found that the virus was reduced to an undetectable amount in 15 minutes. This study was also replicated at Geneva University. Dr. Ferrer is now rolling out clinical trials in a multi-channel, international study. He has been interviewed on nationally syndicated news networks about his research and protocols regarding COVID-19.

Watch His Interview

Other Support for Treating COVID-19 through the Nose Here is a list of other nasal sprays, or nasally applied options that are being developed. We are following the progress of these products, and as they advance, we will share any info on them that we can.

Pittsburgh Health Sciences Research University of St. Andrews Research SaNOTize Research and Development Corp. of Vancouver Research WebMD Article <https://www.amazon.com/Asthma-Allergy-Solution-works-COVID-19/dp/1893910261/ref=sr11?dchild=1&keywords=covid+lon+jones&qid=1601563680&sr=8-1> noopener

Care to learn more? Read

Asthma and Allergy Solution that Works for COVID-19
