

Nasal Irrigations

(www.natlallergy.com)

How Does The Nose Trap Particles?

Your nose is designed to filter air as you breathe. The areas in and around the nose are lined with a delicate tissue called mucosa that contains tiny hairs called cilia. Nationally-renowned ENT specialist and nasal irrigation expert Dr. Murray Grossan explains that "these wonderful machines [cilia] act like oars, moving 16 strokes each second to propel bacteria, dirt, and cancer-causing poisons out of the nose and chest, before they have a chance to enter the body." Instead, these particles are pushed by mucosa to the back of the throat where they are swallowed and destroyed by the acids in the stomach. Problems can occur when this system becomes impaired, either because nasal and sinus secretions stagnate, or because the nose produces too much mucous as a result of bacteria, dirt or allergens impeding the cilia movement.

What Is Nasal Irrigation?

While it sounds like an intimidating or uncomfortable process, nasal irrigation is really as simple as running a gentle saline solution through your nasal passages and sinuses. While it takes a little getting used to, most people find that in a short time they are comfortable with the twice-daily nasal irrigation regimen. Often compared to cleaning your body's "ducts" or "filters", nasal irrigation cleans the passages of your nose where particles get trapped, helping to wash them away. In addition, nasal rinsing will help stimulate cilia movement and healthy secretions, keeping the mucosa moist and trapping unwanted particles like bacteria, dirt, and allergens.

Why Use Nasal Irrigation?

We'll simply let this question be answered by a recent study published in a well known ENT medical journal:

"The objective of this study was to determine the efficacy of the use of pulsatile hypertonic saline nasal irrigation in the treatment of sinonasal disease... Results: Patients who used nasal irrigation for the treatment of sinonasal disease experienced statistically significant improvements in 23 of the 30 nasal symptoms queried... Conclusions: Nasal irrigation is effective in improving symptoms and the health status of patients with sinonasal disease." Lance T. Tomooka, MSIV; Claire Murphy, PhD; Terence M. Davidson, MD. "Clinical Study and Literature Review of Nasal Irrigation" LARYNGOSCOPE 2000; 110:1189-1193

Numerous articles and studies like this one are singing the praises of nasal irrigation. Between 30 and 50 million people suffer from sinusitis and allergic rhinitis, not to mention the millions with air quality sensitivity and unexplained chronic runny noses. That means there are a lot of people looking for relief - you may be one of them. So keep reading to discover the many benefits of nasal irrigation.

What Are Sinusitis And Rhinitis?

Allergic rhinitis is an inflammation of the mucosa in the nose. Common symptoms include a stuffy, runny or drippy nose, scratchy throat, and dry cough. Sinusitis is inflammation of the sinus cavities and can cause nasal congestion, runny nose, pain in the upper jaw or teeth, loss of sense of smell or taste, headaches, night time cough, persistent fatigue or fever. Your allergy doctor or an ear, nose

and throat specialist should be able to diagnose these conditions if your symptoms match those listed.

What Can Be Done To Treat Symptoms?

Your first line of defense against most allergic and nasal irritation is to control the allergens in your home: the less dust mite allergen, mold, dander and pollen that are in your environment, the less chance you have of breathing them in! To read more, check our <u>article about allergies</u>, a two part series guest authored by <u>Lois Turley</u>, an Allergy/ENT nurse, June & July 2003.

For sufferers of sinusitis, antibiotics may be prescribed. Nasal decongestants like Sudafed also can help, provided they are not taken late in the day because they can disrupt sleep. For rhinitis, antihistamines are sometimes recommended; but for those who have bacterial sinusitis or are suffering from a common cold, they may do more harm than good. Many agree that nasal drops and sprays such as Afrin or Neosynephrine should not be used. While they may afford the user temporary symptom relief, they are known to be addictive.

If your sinus or nasal irritation is aggravated in dry, wintry conditions, you should try to keep your throat and nose moist. Prescription nasal steroids may reduce the nasal response to cold temperatures. If you are performing an outdoor activity, wear a special mask or scarf to keep your nose and throat protected. Also, there are a number of helpful nasal gels on the market which can soothe a dry or chafed nose. Finally, as stated above, more and more doctors now recommend nasal irrigation as an effective way to wash out pollutants and thick secretions, while stimulating dry noses to produce enough mucus to keep cilia moving properly.

What Other Conditions Can Benefit From Nasal Irrigation?

Many people who have surgery on their sinuses or nose experience post-operative dryness in the nasal cavities. Irrigation can be an integral part of keeping the nasal passages moist. In cases of irritative rhinitis, a condition where the nose is irritated by a chemical or other airborne irritant, nasal irrigation is commonly recommended as a remedy. Anyone who works in environments with poor air quality or potentially irritating particles can reduce their susceptibility to sickness by cleaning out their nasal passages after a long day.

"Aging Nose" happens when the nose increases its secretions, usually due to hormone changes, particularly in women. Nasal irrigation is a great way to consistently clean out those nasal passages of the excess mucus. Cystic Fibrosis (CF) patients can also find relief by using nasal irrigation to clean the thick nasal secretions so often associated with the disease. Studies show that rinsing the nasal passages can also improve sense of smell and reduce bad breath in some cases. Some of our customers suggest that irrigation can even be a cure for snoring!

When Should Nasal Irrigation NOT Be Used?

Sinus irrigation is not recommended if you are fighting an ear infection. Neither should you rinse your nasal passages if either nostril is completely plugged or hard to breathe through. If this is the case, you could create pressure and retention of the solution inside the nasal or sinus cavities, causing adverse symptoms in the ears. Consult your physician if you have questions or concerns about whether or not you should irrigate.

What Types Of Nasal Irrigation Products Are Available?

Nasal irrigation has been used for centuries through a wide variety of methods - everything from sniffing salt water from the cupped hand to the use of infant bulb syringes (which we do not recommend as mold can and probably will grow in the bulb). Many more options are available for those serious about obtaining the benefits of regular irrigation. A recent study took a look at three methods of irrigation, and concluded that the "distribution of contrast solution was more uniform using **positive-pressure irrigation**". This simply means that the irrigation solution is gently propelled into the nose rather than sniffed or poured in. <u>The Nasaline Irrigator</u> is a unique, syringe style delivery system that offers portable, positive-pressure irrigation.

There are several products on the market that utilize a squeeze-bottle method of generating this positive pressure such as the physician developed Nasopure Organic Nasal Wash Kit or the SaltAire® Sinus Relief product. A special attachment called an irrigation tip has been developed that can be used with an oral hygiene device like the WaterPik®. Used on a very low setting, this can be a fine way to irrigate. Also available, and still rather new on the market, is a device designed specifically for irrigation called the Hydro Pulse® Nasal/Sinus Irrigation System. Invented by a board-certified ENT, this uses both positive-pressure and pulsatile irrigation. In other words, the flow of water pulses and matches the natural movement of the nasal cilia, providing the most effective cleaning mechanism. Because it is FDA registered and designed only for nasal irrigation, your insurance company may reimburse the purchase of a Hydro Pulse.

What Solution Should I Use For Nasal Irrigation?

Taking a several-hour walk along the beach everyday breathing in that moist saltwater spray would be a great way to irrigate; however, not everyone is afforded that luxury and use of time (plus it probably wouldn't bring true relief for more serious sinus sufferers since it's best to use at least 4 ounces of solution per side). When mixing saline solution at home, you should use warm tap water that has first been boiled, or bottled water stored in a clean container. We recommend dissolving a combination of 1/4 teaspoon of non-iodized table salt and 1/8 teaspoon of baking soda (optional) per 1 cup (8 ounces) of water. For best results, use kosher, canning or refined sea salt. Also be sure that if you pre-mix a larger quantity of solution to store, it is used within three days. When it comes time to use the saline solution, the water temperature should be comfortably warm for you - not too cool and definitely not too hot, so be sure to test it first.

Several of the <u>aforementioned products</u> come with pre-measured packets of saline in powder form that make preparation simple and delivery more consistent. Pre-mixed saline powder, such as <u>Breathe-ease® XL</u>, can also be purchased in a larger, more economical quantity. Pre-mixed saline can also be obtained in ready-to-use liquid form.

Finding the right balance of salt is also very important because using too much tends to cause a burning sensation when using a nasal rinse. While some doctors suggest that their patients use hypertonic solutions (those with a higher salt concentration), we have found most doctors recommend isotonic solutions because they most resemble the salt concentration of body fluids. Most of the pre-mixed saline products on the market today are isotonic and quite gentle. When mixing at home, if you find that a 1/4 teaspoon of salt per cup is too much, simply cut the solution with more water or adjust the amount of salt the next time until you find a comfortable level.

How Do I Use Nasal Irrigation?

Different nasal irrigation products may have slightly different protocols for how best to use them, but here are some general guidelines for how to irrigate. Please be sure to read the manufacturers instructions carefully if you've purchased a product designed for irrigation.

Bend forward over a sink and tilt your head down and a little to the left so your left nostril is pointed down toward the sink. Apply the irrigation tip or bottle snugly against the right nostril. It is not necessary to insert anything into your nose. Keep your mouth open and breathe through it the entire time. As you begin to irrigate the solution will drain out of the left nostril and should not go down your throat. Stop irrigating and let any remaining solution drain from your nose. Next, very gently blow your nose to clear out any remaining solution. Blowing too hard could force the solution toward the ear and cause pressure. Now repeat this process in the other nostril.

What If I Have Further Questions on Nasal Irrigation?

We hope this question and answer format has addressed some of your inquiries about nasal irrigation, and perhaps given you some tools to combat that constant stuffy nose or sinus problem. Again, please consult your doctor to address your specific needs or concerns. And, of course, should you have questions about any of the issues mentioned in this article, our staff will do their best to help you to get on the road to wellness!