



Nasal Saline Irrigation

Ingredients

- 1 quart of warm water (distilled is preferred but boiled and then cooled in a covered, clean container is OK)
- 1 teaspoon of baking soda (pure bicarbonate)
- 2 to 3 heaping teaspoons of salt (**not** table salt as it contains a large number of additives, including iodine, preservatives and sugar; use canning, pickling or sea salt as these have fewer additives)

Warm saltwater is preferred as it is much more comfortable. The amount of salt added will depend on your child's tolerance. However, the more salt added, the greater the decongestant effect. The bicarbonate is a buffer and will allow the saltwater to be less irritating.

Methods

The nose may be rinsed in several ways. Some methods include:

- **Sniffing method.** Fill a glass with the solution and close one nostril with a finger while sniffing the solution in through the open nostril. Then, spit the liquid out the mouth.
- **Bulb syringe method.** Stand over a sink and gently squirt the saltwater into the nose in such a fashion that your child is able to spit some of the saline out of his or her mouth. This suggests that you are doing an adequate job of irrigating the entire nasal cavity. Aim the stream of saline as though you are trying to squirt the back of the head, **not** the top of the head.
- **Waterpik® method.** Use the Waterpik® at the lowest setting. Purchase a nasal irrigator tip for comfort and ease of use.

You can also use an over-the-counter system, such as the NeilMed® squeeze bottle, etc.

How Often

Rinse the nasal cavity on each side two to three times per day.

Benefits

- **It decongests the nose.** Because of the high salt concentration, fluid is pulled out of the membranes. This shrinks the nasal membranes temporarily, which improves nasal airflow and opens sinus passages.
- **It is a solvent.** It cleans mucus, crusts and other debris from the nasal passages.
- **It improves nasal drainage.** Studies show that saltwater cleansing of the nasal membranes improves ciliary beating so that normal mucus is transported better from the sinuses through the nose and into the throat.

If your child is using a nasal steroid spray (e.g., Nasonex, Rhinocort, Flonase, Vancenase, etc.), you should always cleanse the nose first with the saltwater before using the nasal steroid spray. The nasal steroid is more effective when sprayed on clean nasal membranes, and it reaches deeper into the nose after cleansing and decongestion.



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References

1. Tomooka LT. Murphy C. Davidson TM. Clinical study and literature review of nasal irrigation. Laryngoscope. 110(7):1189-93, 2000 Jul
2. Talbot AR. Herr TM. Parsons DS. Mucociliary clearance and buffered hypertonic saline solution. Laryngoscope. 107(4):500-3, 1997 Apr
3. Parsons DS. Chronic sinusitis: a medical or surgical disease?. Otolaryngologic Clinics of North America. 29(1):1-9, 1996 Feb

Ear, Nose & Throat

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