

# **Hypertonic Saline Nasal Irrigation**

#### What is Hypertonic Saline Nasal Irrigation?

Saline is salt water. Hypertonic Saline Nasal Irrigation is the practice of flushing the nose and the sinus spaces around it with saline that has a higher concentration of salt.

### What are the benefits of hypertonic nasal saline?

Although the use is not widespread, several otolaryngologists report beneficial effects using hypertonic nasal saline:

- When you irrigate, the hypertonic saline (salt water) acts as a solvent and washes the mucus crusts and other debris from your nose.
- The higher salt concentration pulls fluid out of the swollen membrane and shrinks them. This decongests and improves the airflow into your nose. The sinus passages begin to open and drain.
- Studies show that high concentration salt water improves cell function (ciliary beat pattern).

## What is the recipe?

- Choose a one-quart glass jar that is thoroughly cleansed.
- Fill it with distilled or bottled water. It should not contain chlorine or other chemicals in high concentrations.
- Add 2-3 heaping teaspoons of pickling/canning salt, not table salt as it contains a large number of additives.
- Add 1 teaspoon Arm & Hammer Baking Soda (pure bicarbonate).
- Mix ingredients together and store them at room temperature. Discard after one week. If you find this solution too strong, you may decrease the

amount of salt to  $1 \text{ to } 1\frac{1}{2}$  teaspoons. With children, it is often best to start with a milder solution and advance slowly.

#### What are the instructions?

Plan to irrigate your nose with hypertonic solution saline 2-3 times per day. You may use a bulb/ear syringe, large medical syringe (30 cc), or Water Pik with irrigation tip. Always pour the amount of fluid you plan to use into a clean bowl. **Do not** put your used syringe back into the quart because it contaminates your stock solution. Many people prefer to warm the solution slightly in a microwave oven—but be sure that the solution is **not hot**.

To irrigate, stand over the sink (some people do this in the shower) and squirt the solution into each side of your nose, aiming the stream toward the back of your head, **not** the top of your head. This allows you to spit the salt water out of your mouth. It will not harm you if you swallow a little.

## How should I give this solution to children?

For younger children, you may want to place the solution into a pump spray container such as an "ocean spray" or "nasal steroid" container and squirt several times into each side of the nose. **Do not force** your child to lie down. It is much easier to do in a sitting or standing position.

#### What will it feel like?

Most people experience a little burning sensation the first few times they use hypertonic saline solution, but this usually goes away within a few days. If someone told you to use a nasal steroid such as flonase®, Beconase®, or Nasacort®, you should always use a hypertonic saline solution first and then use your nasal steroid product. The nasal steroid is much more effective when sprayed onto clean nasal membranes and the steroid medicine will reach deeper into the nose.

Our clinic is very interested in your feedback regarding this treatment. Please call 734-936-5730 if you have any problems or concerns.
cuit 73 1 330 37 30 if you have any problems of concerns.
Disclaimer: This document contains information and/or instructional materials developed by the University of Michigan Health System (UMHS) for the typical patient with your condition. It may include links to online content that was not created by UMHS and for which UMHS does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.
Patient Education by <u>University of Michigan Health System</u> is licensed under a <u>Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License</u> . Last Revised 9/2015